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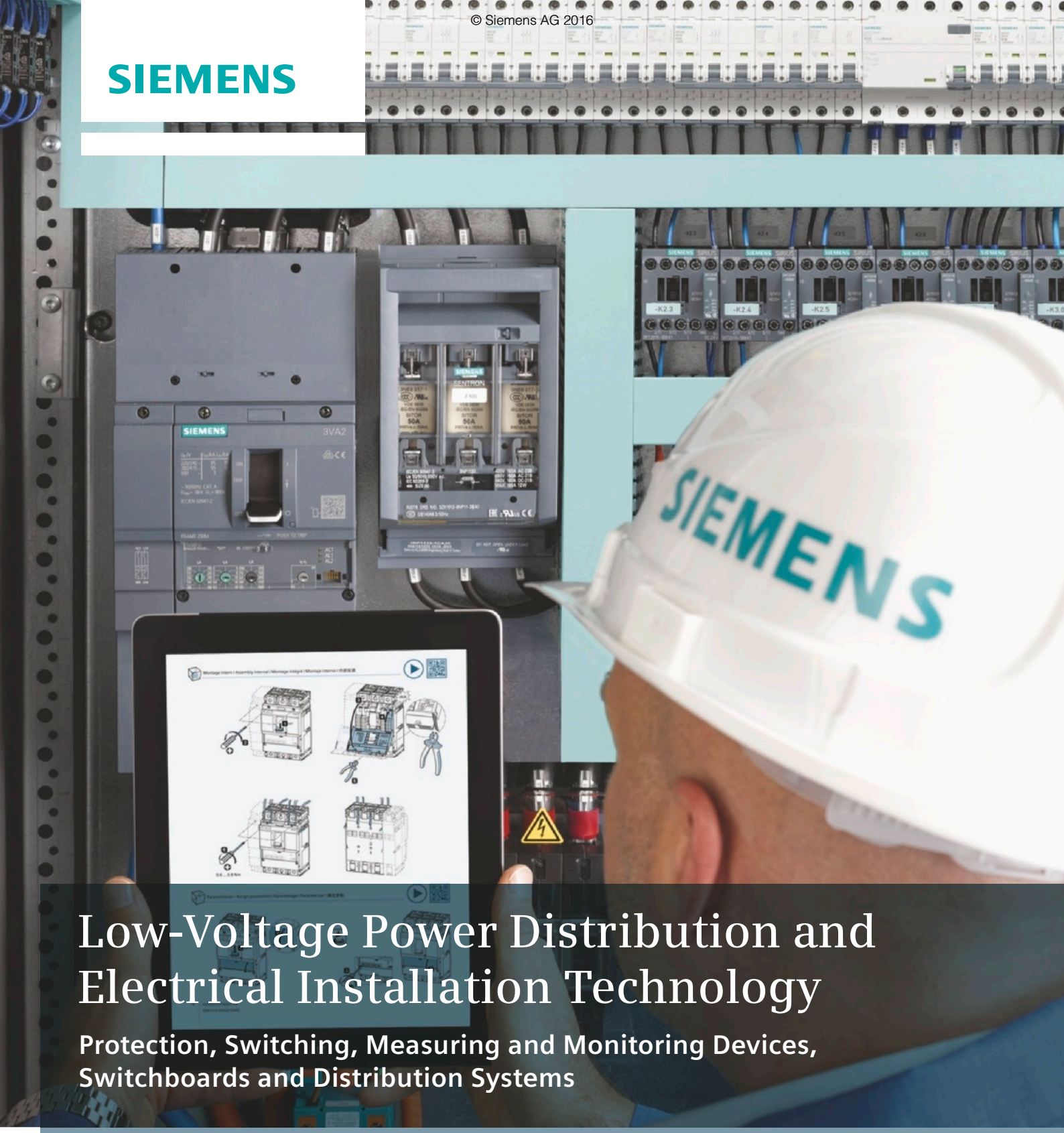

Low-Voltage Power Distribution and Electrical Installation Technology

Protection, Switching, Measuring and Monitoring Devices, Switchboards and Distribution Systems

SENTRON · SIVACON · ALPHA

Catalog
LV 10

Edition
2016/
2017

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Electrical Components for the Railway Industry LV 12
SENTRON • ALPHA • DELTA

print (E86060-K1812-A101-A1-7600)

Components for Industrial Control Panels according to UL Standards LV 16
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DELTA ET D1
Switches and Socket Outlets

PDF

Industrial Controls IC 10
SIRIUS

PDF (E86060-K1010-A101-A6-7600)

Contents

Miniature circuit breakers • Residual current protective devices • Fuse systems • Switch disconnectors • Switching devices • ALPHA FIX terminal blocks • DELTA profil • Medium-Voltage components

Circuit breakers • Air circuit breakers/Molded case switches • Molded case circuit breakers • Miniature circuit breakers • Fuse systems • Switch disconnectors • Switching devices • Socket outlets • Busbar systems • Measuring devices and power monitoring • Molded-plastic distribution systems • Terminal blocks

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Products for Automation and Drives CA 01
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www.siemens.com/lowvoltage/contact

Low-Voltage Power Distribution and Electrical Installation Technology

Protection, Switching, Measuring and Monitoring Devices, Switchboards and Distribution Systems

SENTRON · SIVACON · ALPHA

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Catalog LV 10 · 2016/2017

Supersedes:
Catalog LV 10 · 2015

Refer to the Industry Mall for current updates of this catalog:
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The products in this catalog can also be found in the Interactive Catalog CA 01.
Article No.: E86060-D4001-A510-D6-7600

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The products and systems listed in this catalog are developed and manufactured using a certified quality management system in accordance with EN ISO 9001:2008.

On the inside back cover of this catalog, you will find a fold-out flap with this table of contents.

Protection, Switching, Measuring and Monitoring Devices

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New Developments

The 3VA molded case circuit breaker.
A complete system designed with you in mind.

The 3VA molded case circuit breaker is a well thought-out, modular and highly variable system which is rigorously designed to provide optimum support in every process step – from engineering to daily operation of the electrical power distribution system.

NEW

Besides versions for line protection, versions for motor and starter protection are also now also available.

The 3VA molded case circuit breaker – a complete system designed with you in mind. It offers high flexibility, efficiency and safety – and enables you to:

- Find solutions – independently of individual requirements
- Minimize efforts – from planning to installation and maintenance
- Increase transparency – across all energy-relevant data
- Ensure system availability – preventively and reliably

→ Page 2/2

For further information visit: www.siemens.com/3VA

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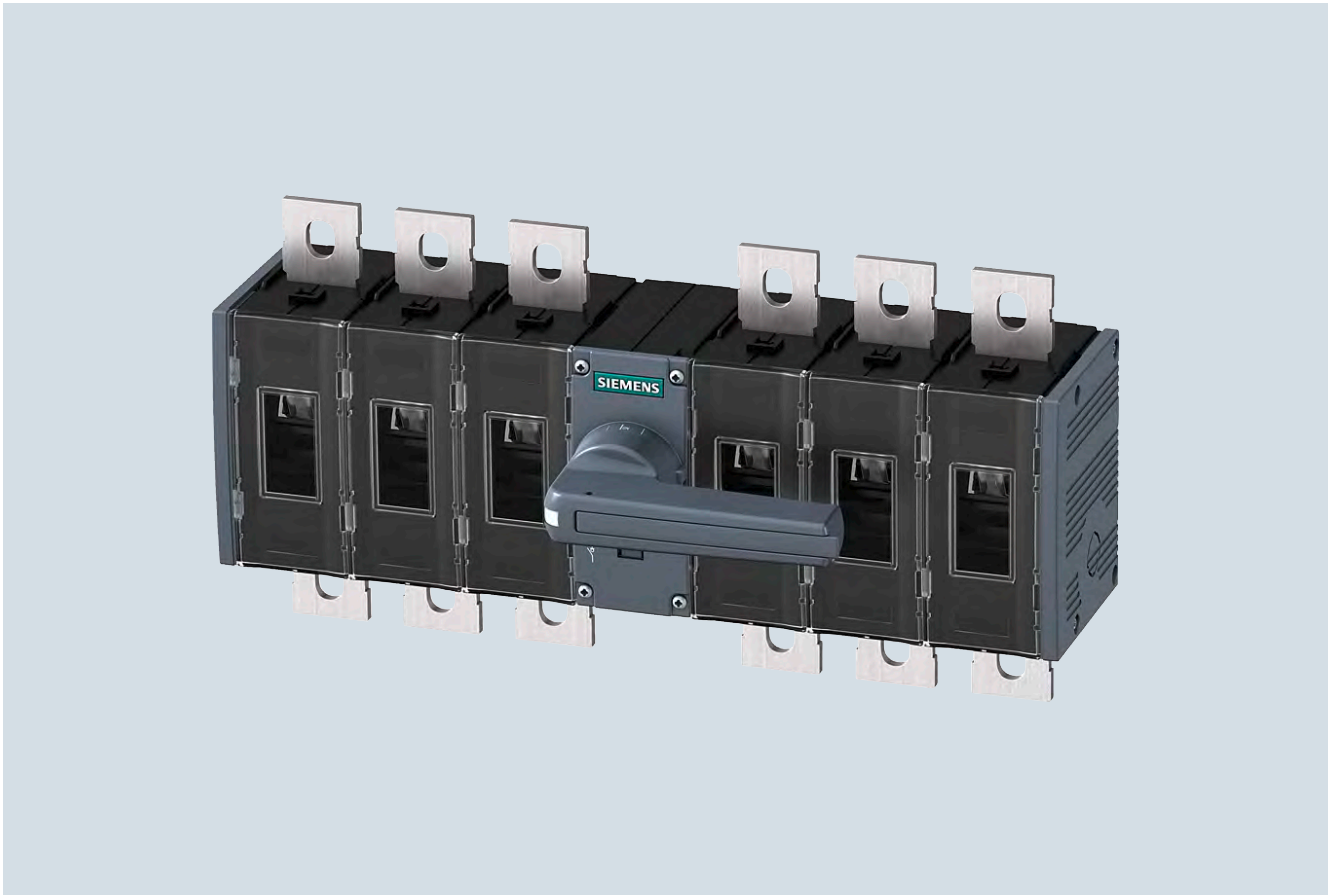
The 3KD switch disconnector up to 1600 A. Reliable safety.



The new 3KD switch disconnectors provide you with reliable protection for personnel and ensure high system availability. They optimally satisfy all requirements in buildings, infrastructure and industrial plants. They enable you to implement your projects more efficiently and thus safeguard your competitiveness on a lasting basis.

NEW

With immediate effect, the three and four-pole 3KD switch disconnectors also meet the high requirements for use in wind power plants. The compact six-pole switch disconnector has been specially designed for safe isolation of your photovoltaic plant.

The new series of 3KD switch disconnectors enables you to:

- Avoid electrical accidents – for example during maintenance work
- Ensure system availability – thanks to long-life technology
- Increase your productivity – during engineering, installation and flexible retrofits
- Satisfy all your requirements – whether as main control switches, EMERGENCY-STOP switches or maintenance switches

→ Page 7/32

For further information visit: www.siemens.com/3KD

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New Developments

NEW Residual current protective devices

5SV RCCB, Type A/AC/F/G/K/SEL

New design

→ Page 4/6

NEW Arc fault detection devices

5SM6 AFD units

For PV applications

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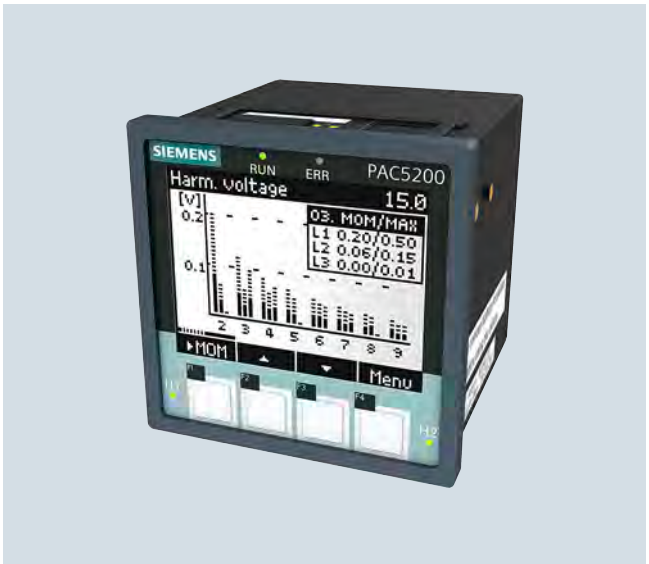
NEW Measuring devices and power monitoring



7KM PAC5100 and 7KM PAC5200 measuring devices

Seamless recording of power supply quality

→ Page 11/19

NEW Monitoring devices

3KC ATC3100 transfer control device

Switching between two power supply systems

→ Page 12/8

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NEW Monitoring devices

CC100A charging cable

New plug versions and charging couplers → Page 12/44

NEW System cubicles, system lighting and system air-conditioning

SIVACON sicube 8MF1 complete cubicles

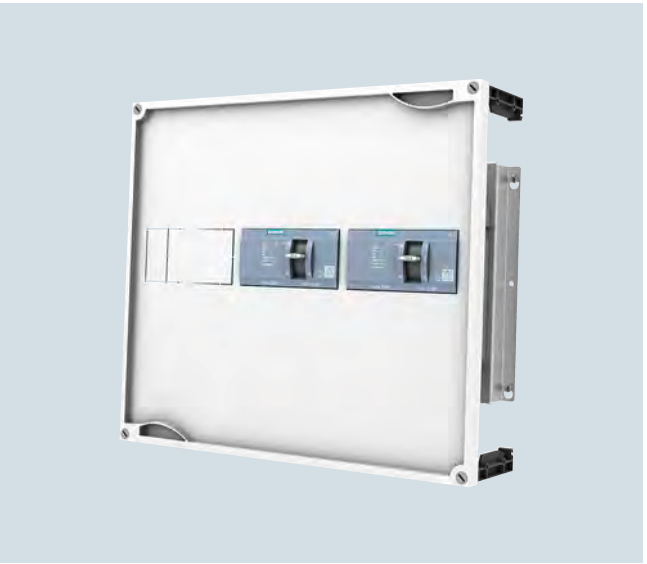
For four typical application areas → Page 16/40

NEW Distribution boards

SIMBOX XL small distribution boards

Especially for multimedia applications → Page 17.1/10

NEW Distribution boards



ALPHA DIN technology distribution boards

More flexibility with the assembly kits for 3VA molded case circuit breakers → Page 17.3/22 and 17.4/15

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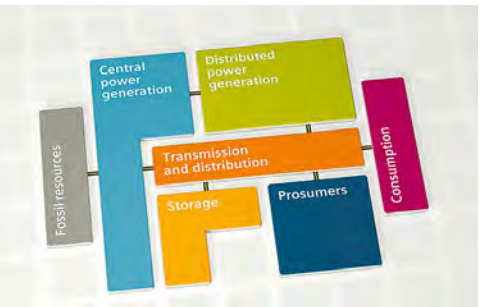
Totally Integrated Power
We bring power to the point – safely and reliably.



Comprehensive solutions for electricity distribution in complex power systems from Siemens

A reliable, highly available and flexible power supply for industries and for buildings and facilities across all voltage levels is the basis for both industrial processes and infrastructure solutions. The solution from Siemens is Totally Integrated Power (TIP), which is linked closely to industrial and building automation systems and into which a company's IT systems can be integrated. This makes it possible to fully exploit the entire optimization potential of an integrated solution. TIP meets even the highest of requirements of systems that are critical in terms of power supply.

TIP is our comprehensive power supply portfolio that contains software and hardware products, systems and solutions for all voltage levels – from the high-voltage power infeed to the low-voltage load. Comprehensive support throughout the lifecycle from planning to maintenance round off our offer.

More information: www.siemens.com/tip

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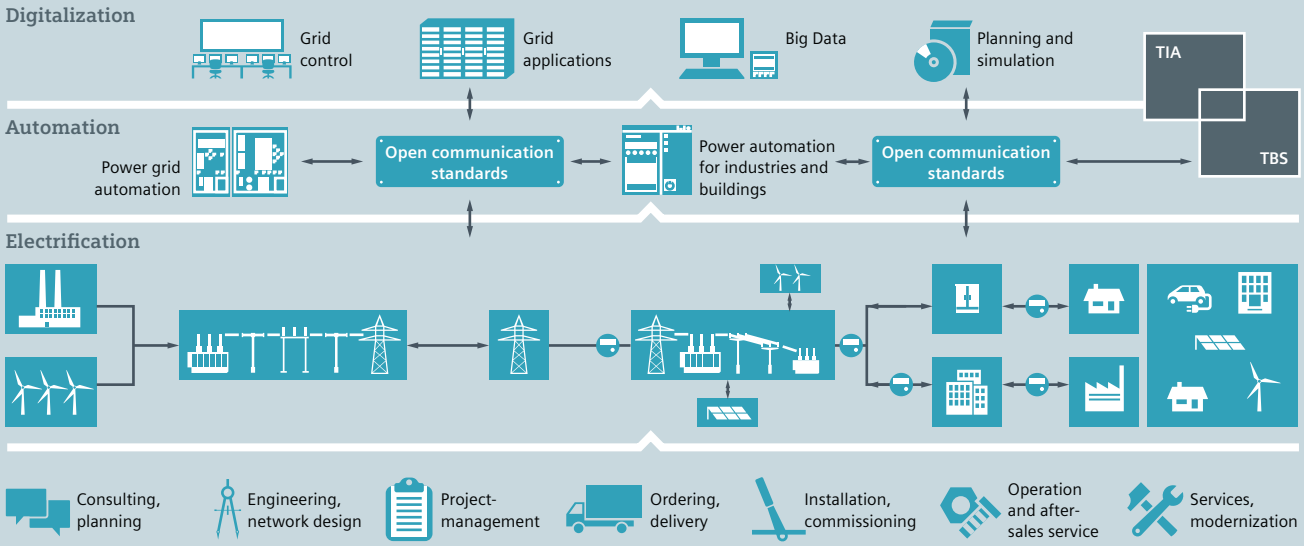
Totally Integrated Power offers more:

- **Consistency**:
  For simplified system planning and commissioning and also easy integration in automation solutions for buildings or production processes
- **Everything from a single source**:
  One reliable partner with a complete portfolio for the entire process and lifecycle – from the first idea to after-sales service
- **Safety**:
  Comprehensive range of protective components for cable, personal and fire protection, safety thanks to design and type tests
- **Reliability**:
  A reliable partner that develops long-lasting solutions with the highest quality standards together with the customer
- **Cost-effectiveness**:
  Bringing power to the point means higher system availability and top energy efficiency in power distribution
- **Flexibility**:
  Consistency and modularity of Totally Integrated Power for any required expandability and adaptation to future requirements
- **Progressive technology**:
  Reliable power supply especially in the case of supply-critical applications, continuous enhancement of technology

Challenges are our strength



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The right one for everyone

Our portfolio includes switchboards, distribution boards, protection, switching, measuring and monitoring devices, switches and socket outlets. All over the world, the universality, modularity and efficiency of our components and systems give you innumerable benefits – all the time they are in use. With products developed according to the respective international standards, we offer forward-looking design with innovative functions while ensuring the highest quality standards worldwide.

Sustainability in focus

As one of the worldwide leaders in the provision of high-quality, standard-compliant products and systems for low-voltage power distribution, we contribute to the sustainable and responsible handling of electrical energy. With our integrated portfolio which ranges from power supply and distribution, through short-circuit and overload protection through to power monitoring, we support the implementation of environmentally friendly energy concepts based on wind power, photovoltaics, intelligent buildings and electromobility.

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Universal, safe and efficient power distribution

Whether in industrial plants, in infrastructure or in buildings: every technical plant depends on the reliable supply of electricity. Our products provide a safe, reliable and efficient electrical infrastructure at the medium and low-voltage levels. Our components reliably protect against accidents, faults and fires caused by electrical installations and allow consumers to utilize electrical power in a sustainable, responsible manner. We are happy to help you with comprehensive support from the initial information stage through to operation.

Everything for power distribution

End-to-end solutions are required for electrical power distribution in buildings. Our answer is Totally Integrated Power (TIP). TIP stands for innovative products, systems and software tools which ensure the safe and reliable distribution of electric power. They are supplemented by circuit breakers and modules with communication capability which connect the power distribution system to the building automation or industrial automation solutions. These in turn can be linked to a comprehensive energy management system which contributes to optimizing the consumption of electricity, hence lowering the costs of operation.

Excellent support

As a competent and reliable partner, we also offer you comprehensive support – from the initial information gathering stage, through planning, configuring and ordering up to commissioning, operation and technical support. We know the needs of your working environment and your daily business. This enables us to offer you flexible and high quality support, allowing you to concentrate on your customers and their needs.

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Planning Efficiency

Overview

With Planning Efficiency, Siemens supplies answers to typical questions that often present themselves in electrical planning:

- What is the appropriate product for my application?
- Where can I find product data?
- How can I make processes more efficient and save more time?

The entire electronic support offered by Siemens is merged under Planning Efficiency. At each phase of the project, online functions make the everyday work of the planners easier and more efficient. Planning Efficiency focuses on optimizing the control cabinet configuration among other things.

Especially in this early phase, up to 80% of time and costs can be saved.

In order to supply the planners with all they need and to simplify the modern electrical planning of every aspect of the control cabinet configuration, the electrical support of Planning Efficiency focuses on four benefits:

- Finding the right product faster using intuitive product selection
- Time savings of up to 80 % with universal product data for your CAE and CAD systems
- User-friendly compilation of project-specific documentation
- Comprehensive support – at any time, whatever your location

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Process phases

At each phase of the process, Siemens provides comprehensive online functions free of charge.

This ensures that all the necessary information and product data are available around the clock at any location worldwide.

Configurators for products and systems

With just a few mouse clicks, you will find yourself guided by the configurator to a suitable product or system. Simply enter the relevant parameters and select your individual solution.

CAx Download Manager

The CAx Download Manager can supply you with all the necessary CAx file types for the products of your choice for use in all common CAE and CAD systems. The data contained in the files is continuously updated. The whole process involves only four selection steps and is free of charge. All the files you select will then be compiled into a zip file and made available for you to download for further use. This results in a time saving of up to 80 % because there is no need for manual data collection thanks to the universal manufacturer data for all commonly used CAE and CAD systems.

My Documentation Manager

To provide support when creating the plant documentation, we have developed a manual configurator. My Documentation Manager enables you to assemble the standard-compliant plant documentation individually with just a few clicks of the mouse. Simply select the required sections from the existing manuals of the installed Siemens products.

EPLAN Electric P8 Macro – a big plus for EPLAN users

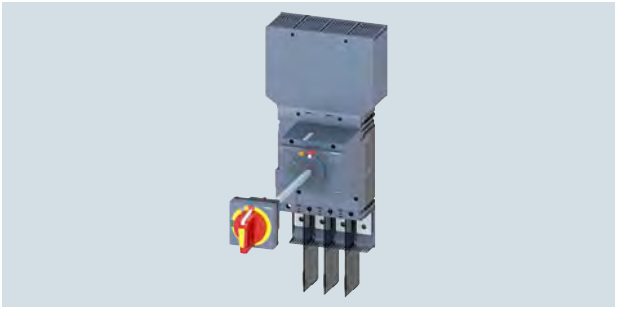
Using the EPLAN Electric P8 Macro in .edz exchange format (EPLAN Data Archived Zipped) the overall time required for data integration can be further reduced. With just a few clicks, the data types for any number of article numbers can be imported and combined. In this way, it is possible for the installed Siemens products to be displayed across different pages of the circuit diagram quickly and easily.

At a glance

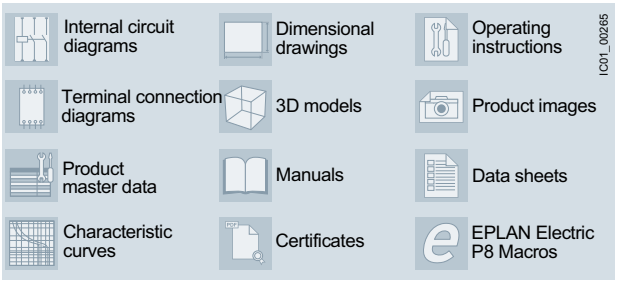
Without Planning Efficiency a lot of time would often be lost due to manual data transmission. Now you are able to concentrate on the essentials. All necessary information and product data is provided by Siemens for easy retrieval.

This makes the control cabinet configuration process more efficient and simplifies your everyday work.

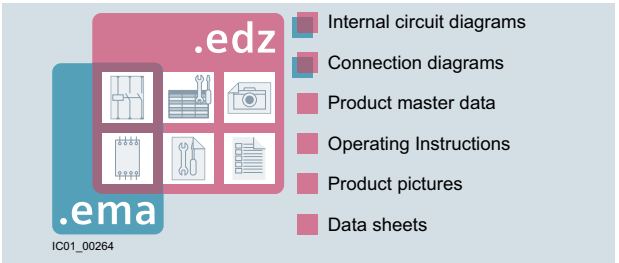
For more information, see www.siemens.com/planning-efficiency.



The configurator supplies the appropriate 3D models and dimension drawings for the control cabinet construction diagram.



The CAx Download-Manager makes 11 universal data types available, as well as the EPLAN Electric P8 macro.



The EPLAN Electric P8 macro in .edz exchange format offers even more compared to the .ema exchange format.

Find out more about Planning Efficiency in our informative videos

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Technical Support

The Technical Support for low-voltage power distribution and electrical installation technology assists you with all your technical queries about our products and systems – both before and after delivery.

Still have questions?

Our experts will help you with competent specialist support

Competent and fast specialist advice on:

- Product selection
- Commissioning
- Issues during operation
- Possible special versions
- Special requirements
- Product features
- Device communication

I201_19185

Get all the information you need – with just one click

Technical Support – fast online access to the latest information (Service and Support)

www.siemens.com/lowvoltage/product-support

In Product Support you will find FAQs, manuals, certificates, applications and tools, etc.

Support Request – the quickest route to the experts

www.siemens.com/lowvoltage/technical-support

You can put your question directly to our Technical Support team using the Support Request Form in Online Support.

Conversion tool – the easy and efficient way of finding successor products

www.siemens.com/lowvoltage/conversion-tool

The benefits for you

- Response within 4 hours in 93% of cases
- Direct support from an experienced team of engineers and technicians

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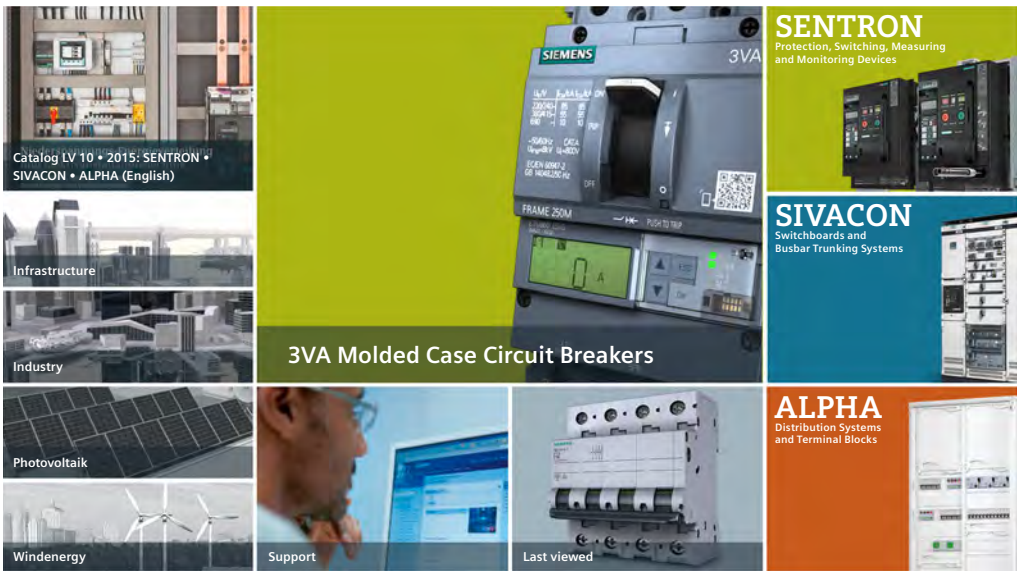
Get all the information you need – with just one click



www.siemens.com/lowvoltage/lv-explorer

I201_19157

LV Explorer – Discover Low Voltage in 3D
Get comprehensive and specific information about our products using our 3D animations, trailers and technical information.

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www.siemens.com/lowvoltage/support

I201_19079

Always at your service – every step of the way
We offer comprehensive support, from planning and configuration to operation.

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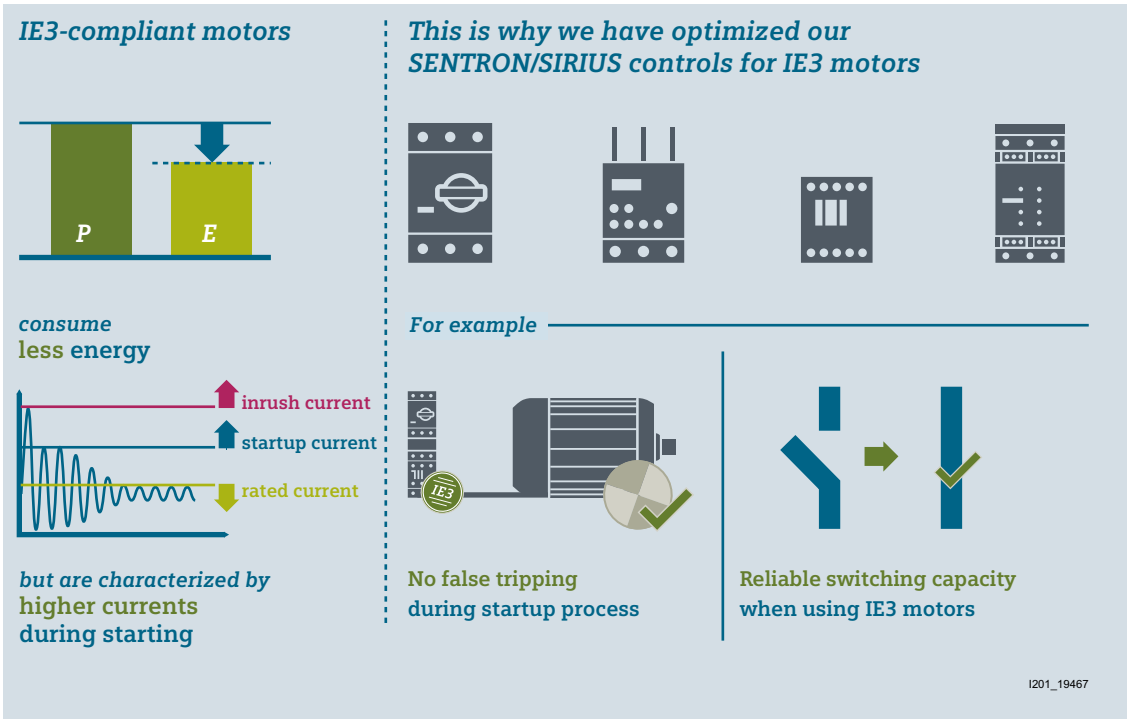
We are IE3 ready

SENTRON/SIRIUS Controls

for reliable switching and protection of IE3 motors



IE3 motors have been mandatory for mains-fed operation in Europe since January 1, 2015. The initial stage applies to the 7.5 to 375 kW output range, while in the second stage starting in 2017, the scope will be extended to include outputs down to 0.75 kW.

From an electrical viewpoint, IE3 motors behave differently than less energy-efficient models – they are characterized by higher startup currents and modified dynamic behavior. This entails certain challenges for our controls.

The latest generation of SENTRON/SIRIUS controls has been fully optimized for IE3. They avoid false tripping due to the higher inrush currents of IE3 motors, offer optimized setting ranges for rated currents, and ensure reliable switching and protection in any situation - the best requirements for use of modern IE3 motors.

You will be optimally equipped for the new motor generation with the **3VA and 3VL molded case circuit breakers**.

HIGHLIGHTS

- Comprehensive range of IE3 motors for every application
- Siemens offers expertise through extensive analysis of IE3 motors
- Optimization of SENTRON/SIRIUS controls for use with IE3 motors

More information:

For the IE3 ready portal, see siemens.com/ie3ready

For the configuration manual for Controls with IE3 Motors, see https://support.industry.siemens.com/cs/ww/en/view/94770820

Are you IE3 ready?

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For your mobile devices: The tablet-friendly manual

The manual for the new 3VA molded case circuit breakers is now available as a free tablet edition for your mobile device. Gain 24/7 access to extensive technical information, characteristic curves, explosion graphics and more.

Easy to understand:
3D diagrams quickly and easily illustrate the commissioning of the basic units and the various accessories.

Comprehensively prepared:
In the tablet edition of the manual you'll find complex technical information clearly presented, including items such as interactive characteristic curves.

www.siemens.com/lowvoltage/tablet-edition

I201_19463

Direct access to the tablet edition via QR code.

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Notes

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	3WL1 air circuit breakers/ non-automatic air circuit breakers
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	Up to 6300 A (AC), IEC
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1/9	General data
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Ch. 12	**3KC ATC5300 and NEW ATC3100 transfer control devices**

For further information on 3WL5,
see Catalog LV 16

For further technical product information:

Configuration Manual

Air Circuit Breakers
Article No.: 3ZW1012-3WL11-0AC1

Siemens Industry Online Support:

www.siemens.com/lowvoltage/product-support

→ Entry type:
- Application example
- Certificate
- Characteristic
- Download
- FAQ
- Manual
- Product note
- Software archive
- Technical data

NEW

Direct reference to the products in the Industry Mall from the selection and ordering data tables:

Article No.
www.siemens.com/product?Article No.
3VA2025-5HL36-0AA0

Paper catalog:
To get more product information enter the Web address plus Article No.

PDF catalog:
Get more product information with just a mouse click.

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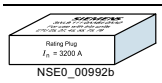
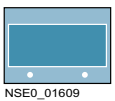
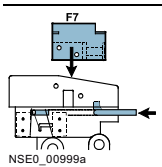
Overview

Devices		Page		Applications/ Individual components	Standards	Used in		
		3WL1	3WL5			Non-residential buildings	Residential buildings	Industry
	3WL1 air circuit breakers/ non-automatic air circuit breakers up to 6300 A (AC), IEC	1/16 ... 1/43	--	As incoming-feeder, distribution, tie, and outgoing-feeder circuit breakers in electrical installations. For switching and protecting motors, capacitors, generators, transformers, busbars and cables.	IEC 60947-2, climate-proof acc. to IEC 60068-2-30 CCC	✓	--	✓
	3WL1 non-automatic air circuit breakers up to 4000 A (DC), IEC	1/76 ... 1/78	--	As incoming-feeder, distribution, tie, and outgoing-feeder circuit breakers in electrical installations. For switching and protecting busbars and cables.	IEC 60947-2, climate-proof acc. to IEC 60068-2-30 CCC	✓	--	✓
	3WL5 air circuit breakers up to 5000 A (AC), UL 489/IEC 60947-2	--	1/90 ... 1/93	As incoming-feeder, distribution, tie, and outgoing-feeder circuit breakers in electrical installations. For switching and protecting motors, capacitors, generators, transformers, busbars and cables.	UL 489, UL 489B, IEC 60947-2 IEC 60947-2 appendix F/CISPR 11/22 Class B DIN VDE 0660 Part 101 climate-proof acc. to IEC 60068-2-30 CCC	✓	--	✓
	3WL5 air circuit breakers up to 3200 A (DC), UL 489B/IEC 60947-2	--	1/94	As incoming-feeder, distribution, tie, and outgoing-feeder circuit breakers in electrical installations. For switching and protecting busbars and cables.	UL 489, UL 489B, IEC 60947-2 IEC 60947-2 appendix F/CISPR 11/22 Class B DIN VDE 0660 Part 101 climate-proof acc. to IEC 60068-2-30 CCC	✓	--	✓
	Protective device with device holder and optional measurement function (ETU)	1/58	1/104	Electronic Trip Unit with protection functions LI, LSI, LSING and LSIN(G), with or without measurement function *Plus*	As for circuit breakers	✓	--	✓
 NSE0_00992b	**Rating Plugs**	1/58	1/104	For rated currents I_n from 250 A to 6300 A. The maximum rated current of the circuit breaker must not be exceeded.	As for circuit breakers	✓	--	✓
NSE0_01027a	**Ground-fault modules**	1/58	1/104	With alarm and tripping	As for circuit breakers	✓	--	✓
 NSE0_01609	**Displays**	1/58	1/104	4-line displays for ETU45B	As for circuit breakers	✓	--	✓
NSE0_00990a	**Current transformers for N conductor protection**	1/58	1/104	Internal transformers for N conductors, external transformers for N conductors	As for circuit breakers	✓	--	✓
	EMC filters	1/58	1/104	Common-mode interference suppressor filters	As for circuit breakers	✓	--	✓
 NSE0_00999a	**More accessories for Electronic Trip Units**	1/59	1/105	Sealable and lockable covers, automatic reset of the reclosing lockout, remote reset solenoid, retrofittable internal **Cubicle**BUS wiring, retrofittable internal wiring for connection of external N and G transformers	As for circuit breakers	✓	--	✓

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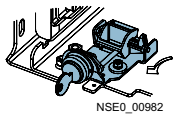
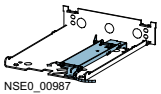
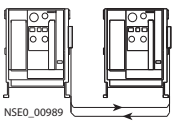
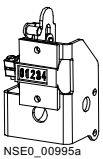
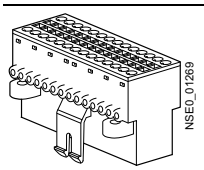
Devices		Page		Applications/ Individual components	Standards	Used in		
		3WL1	3WL5			Non-residential buildings	Residential buildings	Industry
 NSE0_00982	**Locking devices**	1/59	1/105	Interlocking set for mechanical ON/OFF, locking devices against unauthorized closing in operator panels/for withdrawable circuit breakers, locking devices for operating mechanism handle with padlock, locking devices to prevent movement of the withdrawable circuit breakers, interlocking systems	As for circuit breakers	✓	--	✓
 NSE0_00987	**Locking mechanisms**	1/60	1/106	To prevent movement of the withdrawable circuit breakers into disconnected position, to prevent opening of the cabinet door in ON position, to prevent opening of the cabinet door, to prevent movement with the cabinet door open	As for circuit breakers	✓	--	✓
 NSE0_00989	**Interlocks**	1/61	1/107	Mutual mechanical interlocking, couplings on the circuit breaker (with ring) for mutual interlocking, Bowden wire	As for circuit breakers	✓	--	✓
	3KC ATC5300 and NEW ATC3100 transfer control devices	Ch. 12	Ch. 12	The 3KC ATC5300 and ATC3100 transfer control devices, equipped with two circuit breakers with motorized operating mechanism, serve as a transfer system that automatically or manually switches between two power supply systems in low-voltage power distribution applications.	IEC 60947-6-1 DIN VDE 0660-114 UL 508 CSA 22.2 No. 14	✓	✓	✓
	Test devices	1/61	1/107	Manual tester Release 2 for Electronic Trip Units, function testers	As for circuit breakers	✓	--	✓
	Capacitor storage devices	1/61	1/107	For shunt releases	As for circuit breakers	✓	--	✓
 NSE0_00995a	**Indicators, control elements**	1/62	1/108	Ready-to-close signaling switches, signaling switches, tripped signaling switches, operating cycles counters, stored energy status signaling switches, position signaling switches for guide frames, electric ON buttons, motor shutdown switches, EMERGENCY-STOP buttons	As for circuit breakers	✓	--	✓
 NSE0_01269	**Auxiliary conductor connections**	1/63	1/109	Male connectors for circuit breakers, extension for 1000 V male connector versions, male connectors and extension for 1000 V, auxiliary supply connectors for circuit breakers or guide frames, coding kits, sliding contacts for guide frames, blanking blocks for circuit breakers	As for circuit breakers	✓	--	✓
	Auxiliary release	1/64	1/110	Closing solenoids/shunt releases, undervoltage releases	As for circuit breakers	✓	--	✓
	Operating mechanisms	1/64	1/110	Motorized operating mechanism	As for circuit breakers	✓	--	✓
	Auxiliary contacts	1/64	1/110	Auxiliary switch blocks	As for circuit breakers	✓	--	✓
	Door sealing frames, hoods, shutters	1/65	1/111	Door sealing frames, IP55 protective covers, shutters	As for circuit breakers	✓	--	✓
	Arc chutes	1/65	--	Arc chutes, arc chute covers	As for circuit breakers	✓	--	✓

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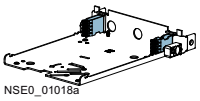
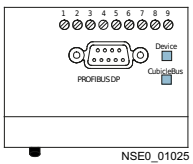
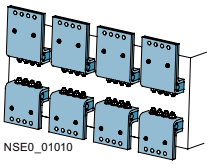
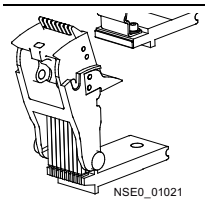
Devices		Page		Applications/ Individual components	Standards	Used in		
		3WL1	3WL5			Non-residential buildings	Residential buildings	Industry
	Coding for withdrawable version	1/65	1/111	By customer, for 36 coding variants	As for circuit breakers	✓	--	✓
 NSE0_01018a	**Grounding connection**	1/66	--	Grounding connection between the guide frame and the withdrawable circuit breaker, contacting modules for withdrawable circuit breakers	As for circuit breakers	✓	--	✓
	Support brackets	1/66	1/112	For mounting fixed-mounted circuit breakers on vertical plane	As for circuit breakers	✓	--	✓
	CubicleBUS modules	1/66	1/112	Digital and analog input and output modules, Zone Selective Interlocking modules	As for circuit breakers	✓	--	✓
	Parameterization systems	1/66	1/112	Breaker Data Adapter (BDA), BDA *Plus*, connection cables for BDA *Plus*, powerconfig parameterization software	As for circuit breakers	✓	--	✓
	Accessories for communications	1/67	1/113	Factory-fitted cables for CubicleBUS modules, SENTRON manuals for communication solutions, voltage transformers	As for circuit breakers	✓	--	✓
 NSE0_01025	**Retrofitting and spare parts**	1/67	1/113	PROFIBUS retrofit kits, COM15 PROFIBUS modules, COM16 MODBUS modules, MODBUS IEC retrofit kits, Breaker Status Sensor (BSS), measurement function *Plus*	As for circuit breakers	✓	--	✓
 NSE0_01010	**Main conductor connections, fixed-mounted, main conductor connections, withdrawable**	1/68, 1/69	1/114, 1/115	Front-accessible main connections with double or single hole, rear vertical main connections, rear horizontal main connections, circuit connecting flanges, supports for front and DIN connecting bars	As for circuit breakers	✓	--	✓
	Conversion sets	1/70	1/115	Conversion set for converting fixed-mounted circuit breakers into withdrawable circuit breakers	As for circuit breakers	✓	--	✓
 NSE0_01021	**Main contact elements**	1/70	--	For replacement of the main contacts during maintenance and thus to boost the useful life of the breaker.	As for circuit breakers	✓	--	✓
	Withdrawable short-circuiting, grounding and bridging units	1/71	--	For use during maintenance work on the system.	As for circuit breakers	✓	--	✓

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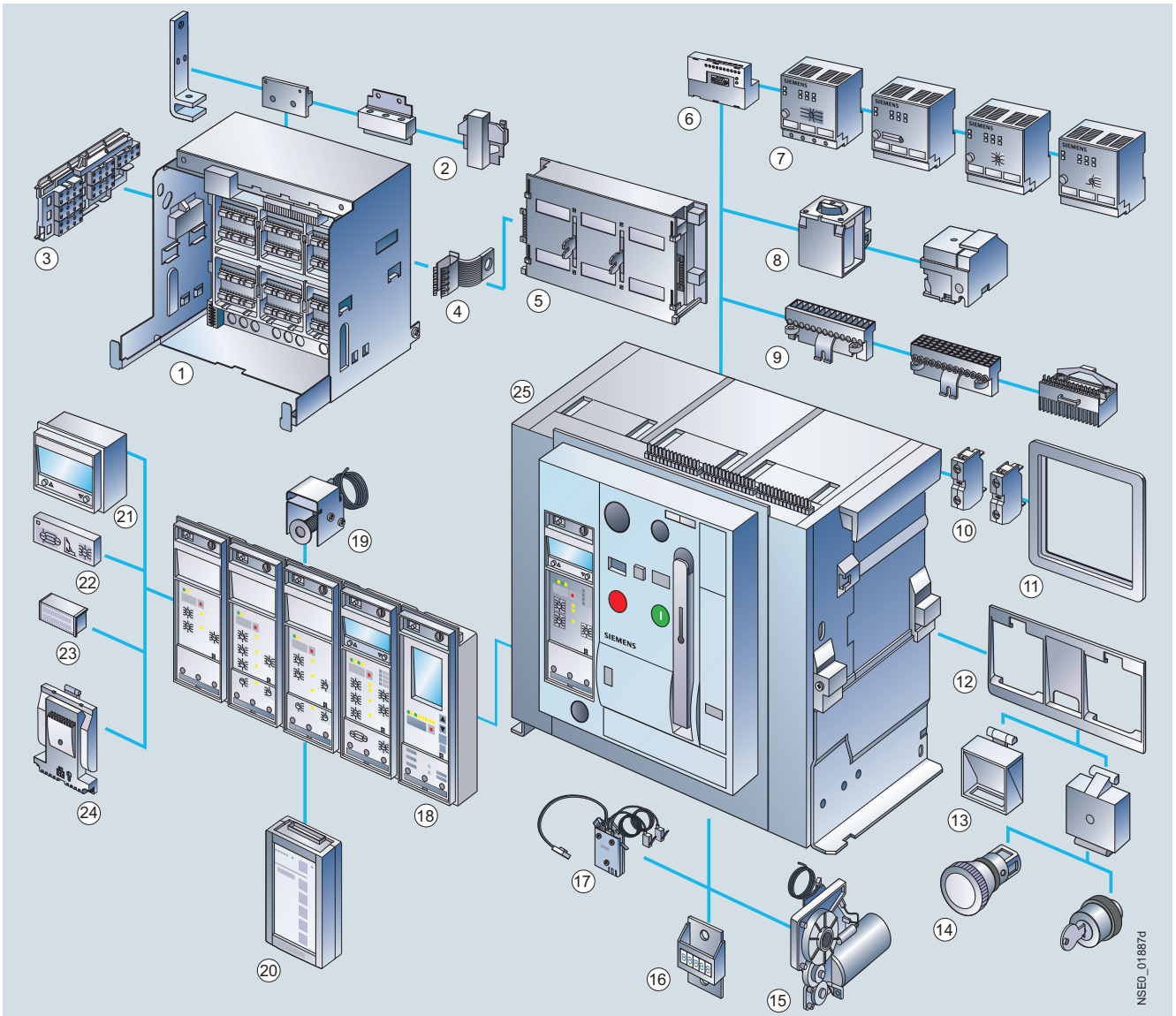
Overview

3WL1 air circuit breakers offer highly flexible application and consistent communication capability. With the 3WL1 circuit breakers, just three sizes cover a performance range of 630 A to 6300 A. All models are characterized by the same design, the same operation and the same comprehensive accessories.



① Guide frame (page 1/52 to page 1/57)
② Main circuit connection front, flange, horizontal, vertical (page 1/49, 1/68 and 1/69)
③ Position signaling switch (page 1/47 and 1/62)
④ Grounding connection, leading (page 1/66)
⑤ Shutters (page 1/47 and 1/65)
⑥ COM15 PROFIBUS module or COM16 MODBUS module (page 1/47 and 1/67)
⑦ External **Cubicle**BUS modules (page 1/66)
⑧ Closing coil, auxiliary release (page 1/44, 1/46 and 1/64)
⑨ Auxiliary conductor plug-in system (page 1/48 and 1/63)
⑩ Auxiliary switch block (page 1/44 and 1/64)
⑪ Door sealing frame (page 1/46 and 1/65)
⑫ Interlocking set for mechanical ON/OFF (page 1/59)
⑬ Transparent panel, function insert (page 1/59)
⑭ EMERGENCY-STOP pushbutton, key operated (page 1/62)
⑮ Motorized operating mechanism (page 1/46 und 1/64)
⑯ Operating cycles counter (page 1/46 and 1/62)
⑰ Breaker Status Sensor (BSS) (page 1/47 and 1/67)
⑱ Protective device with device holder, Electronic Trip Unit (ETU) (page 1/58)
⑲ Remote reset solenoid (page 1/46 and 1/59)
⑳ Breaker Data Adapter (BDA *Plus*) (page 1/66)
㉑ Four-line display (page 1/58)
㉒ Ground-fault protection module (page 1/58)
㉓ Rating plug (page 1/45 and 1/58)
㉔ Measurement function module (page 1/47 and 1/58)
㉕ Air circuit breaker (page 1/16 to 1/43)

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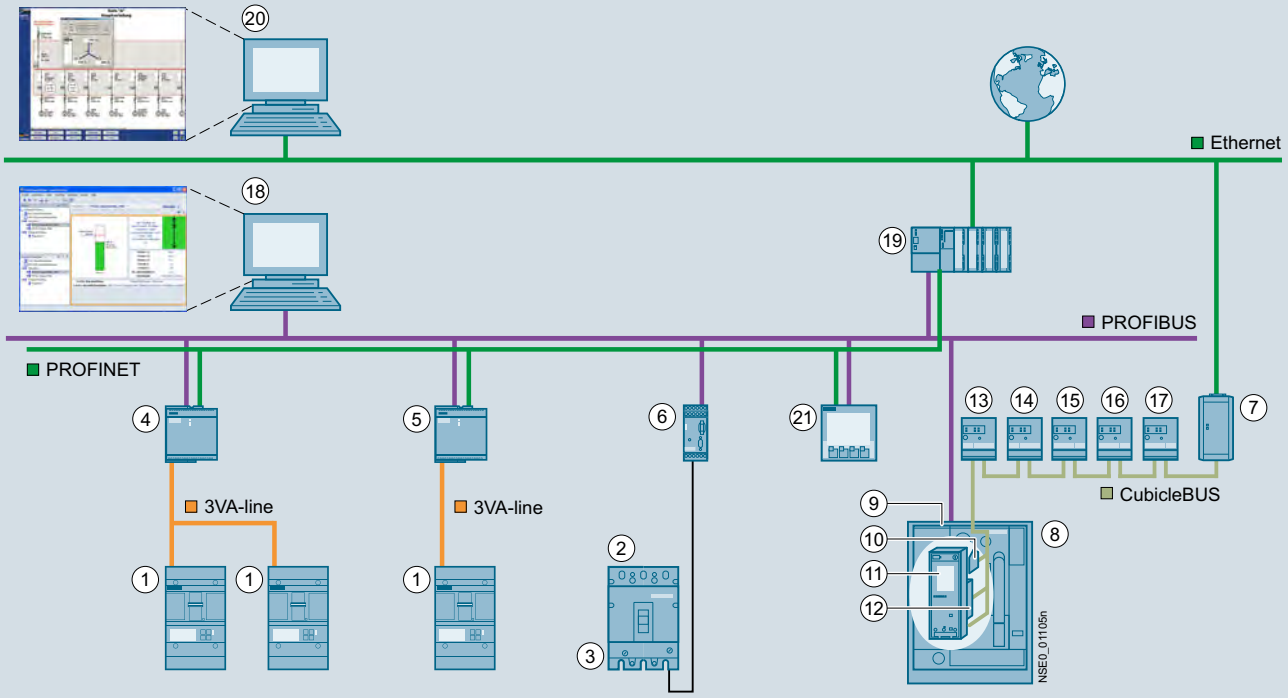
Introduction

Overview

Communication-capable circuit breakers (with ETU45B or ETU76B Electronic Trip Unit)



1 3VA molded case circuit breakers
2 3VL molded case circuit breakers
3 Electronic trip unit ETU / LCD ETU
4 COM800 breaker data server
5 COM100 breaker data server
6 COM20 Release 2 PROFIBUS module including Zone Selective Interlocking
7 BDA *Plus* with Ethernet interface
8 3WL air circuit breaker
9 COM15 PROFIBUS module
10 Breaker status sensor (BSS)
11 Electronic trip unit (ETU)
12 Measurement function *Plus*
13 Zone Selective Interlocking module
14 Digital output module with relay contacts
15 Digital output module with relay contacts, configurable
16 Analog output modules
17 Digital input modules
18 Configuration software powerconfig V2.3 and higher
19 PLC, e.g. SIMATIC S7
20 E.g. SIMATIC powerrate
21 7KM PAC measuring devices

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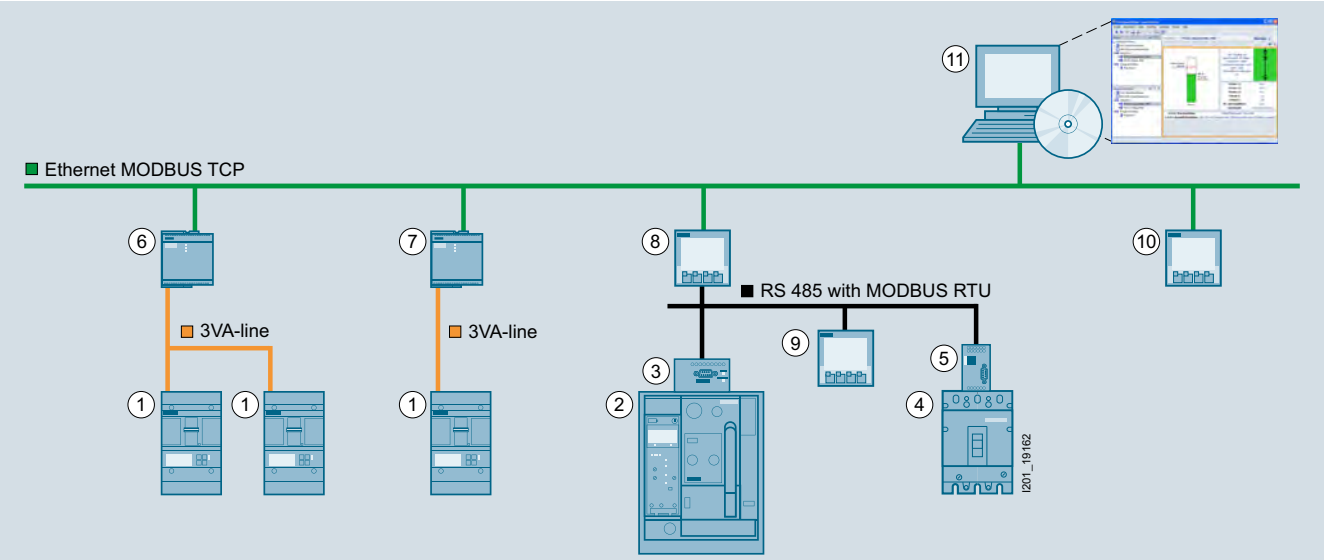

1 3VA molded case circuit breakers
2 3WL air circuit breaker
3 COM16 MODBUS module
4 3VL molded case circuit breaker
5 COM21 MODBUS module
6 COM800 breaker data server
7 COM100 breaker data server
8 7KM PAC4200 measuring device
9 7KM PAC3100 measuring device
10 7KM PAC3200 measuring device
11 powerconfig configuration software from V2.3

Characteristics

- Coordinated communication concept using the PROFIBUS DP or MODBUS, ranging from 16 A to 6300 A with 3VL molded case circuit breakers and 3WL air circuit breakers
- The high level of modularity of circuit breakers and accessories allows easy retrofitting of all communication components
- Significant additional benefits for the switchboard due to the possibility of linking up external input and output modules to the circuit breaker-internal **Cubicle**BUS of the 3WL air circuit breaker
- Innovative software products for parameterization, operation, monitoring, and diagnostics of circuit breakers, both locally or via PROFIBUS DP, MODBUS or Ethernet/Intranet/Internet
- Complete integration of the circuit breakers into the Totally Integrated Power and Totally Integrated Automation solutions

Communication:

- For air circuit breakers with optional communication function (ETU45B or ETU76B Electronic Trip Unit), see page 1/16 to page 1/43.
- For accessories, see page 1/66 and page 1/67.
- For more information, see chapter "Measuring Devices and Power Monitoring" and see chapter "Monitoring Devices".
- For configuring information, also see Configuration Manual "Air Circuit Breakers" at www.siemens.com/lowvoltage/manuals.

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Benefits

Low space requirements

The 3WL1 air circuit breakers require very little space. Size I devices (up to 2000 A) fit into a 400 mm wide switchboard panel. Size III devices (up to 6300 A) are the smallest of their kind and with their construction width of 704 mm fit into an 800 mm wide switchboard panel.

Modular design

Components such as auxiliary releases, motorized operating mechanisms, Electronic Trip Units, current sensors, auxiliary circuit signaling switches, automatic reset devices, interlocks and engagement operating mechanisms can all be exchanged or retrofitted at a later stage, thus allowing the circuit breaker to be adapted to new, changing requirements.

The main contact elements can all be replaced in order to increase the endurance of the circuit breaker.

Retrofittable modules for Electronic Trip Units

Modularity is one of the main features of the new 3WL1 circuit breakers.
Special LCDs, ground-fault modules, rating plugs and communication modules for the Electronic Trip Units are available for fast and easy retrofitting and adaptation to changing requirements.

Communication/measuring functions

The use of modern communication-capable circuit breakers opens up completely new possibilities in terms of start-up, parameterization, diagnostics, maintenance and operation. This allows many different ways of reducing costs and improving productivity in industrial plants, buildings and infrastructure projects to be achieved:

- Fast and reliable parameterization
- Timely information and response can prevent plant stoppages
- Effective diagnostics management
- Measured values are the basis for efficient load management, for drawing up power demand profiles and for allocating energy to cost centers
- Preventive maintenance reduces the risk of expensive plant downtimes
- Measurement function with a very wide range of measured values, such as current, voltage, energy, power etc.
- Can be used in 690 V networks

Application

- As incoming-feeder, distribution, tie, and outgoing-feeder circuit breakers in electrical installations.
- For switching and protecting motors, capacitors, generators, transformers, busbars and cables.

When connected to an electronic I&C system, the air circuit breakers offer a wide range of options for monitoring network events.

Air circuit breakers belong to the SENTRON product family of protection, switching, measuring and monitoring devices and can be used in applications between 16 A and 6300 A.

The AC devices are available as circuit breakers and non-automatic air circuit breakers. DC devices are only available as non-automatic air circuit breakers.

Standards

3WL1 air circuit breakers comply with:

- IEC 60947-2
- IEC 60947-2 Appendix F / CISPR 11/22 Class B
- Climate-proof according to IEC 60068-2-30.

For further standards, see chapter "Appendix".

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Technical specifications

Size			I				II			
Type			**... 3WL1110**	**3WL1112**	**3WL1116**	**3WL1120**	**3WL1208**	**3WL1210**	**3WL1212**	**3WL1216**
Number of poles			3-pole, 4-pole							
Rated current I_n at 40 °C, at 50/60 Hz										
Main conductor		A	... 1000	1250	1600	2000	800	1000	1250	1600
N conductor (only on 4-pole versions)		A	... 1000	1250	1600	2000	800	1000	1250	1600
Rated operational voltage U_e at 50/60 Hz		V AC	...	...	...	...	...	...	...	...
(1000 V version, see page 1/45 "Options")			690/1000	690/1000	690/1000	690/1000	690/1000	690/1000	690/1000	690/1000
Rated insulation voltage U_i		V AC	1000	1000	1000	1000	1000	1000	1000	1000
Rated impulse withstand voltage U_{imp}										
• Main conducting paths		kV	12	12	12	12	12	12	12	12
• Auxiliary circuits		kV	4	4	4	4	4	4	4	4
• Control circuits[9]		kV	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Isolating function acc. to EN 60 947-2			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Utilization category			B							
Permissible ambient temperature										
• During operation (in operation with LCD max. 55 °C)[1]		°C	–25/+70	–25/+70	–25/+70	–25/+70	–25/+70	–25/+70	–25/+70	–25/+70
• Storage		°C	–40/+70	–40/+70	–40/+70	–40/+70	–40/+70	–40/+70	–40/+70	–40/+70
Permissible load for withdrawable versions at rear horizontal main connections	• Up to 55 °C (Cu bare)	A	1000	1250	1600	2000	800	1000	1250	1600
	• Up to 60 °C (Cu bare)[2]	A	1000	1250	1600	1930	800	1000	1250	1600
	• Up to 70 °C (Cu black painted)[2]	A	1000	1210	1490[3]	1780	800	1000	1250	1600
Rated rotor operational voltage U_{er}		V	2000	2000	2000	2000	2000	2000	2000	2000
Power loss at I_n										
With 3-phase symmetrical load										
• Fixed-mounted circuit breakers		W	100	105	150	240	40	45	80	85
• Withdrawable circuit breakers		W	195	205	350	440	85	95	165	175
Switching times										
• Make time		ms	35	35	35	35	35	35	35	35
• Opening time		ms	38	38	38	38	34	34	34	34
• Electrical make time (through closing solenoid)[4]		ms	80	80	80	80	100	100	100	100
• Electrical opening time (through shunt release)		ms	73	73	73	73	73	73	73	73
• Electrical opening time (instantaneous undervoltage release)		ms	73	73	73	73	73	73	73	73
• Opening time due to ETU, instantaneous short-circuit release		ms	50	50	50	50	50	50	50	50
Service life: Breaking capacity N and S, 3-/4-pole										
• Mechanical (without maintenance)	Operating cycles		10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000
• Mechanical (with maintenance)[5]	Operating cycles		20 000	20 000	20 000	15 000	15 000	15 000	15 000	15 000
• Electrical (without maintenance)	Operating cycles		10 000	10 000	10 000	7500	7500	7500	7500	7500
• 1000 V version, electrical (without maintenance)	Oper. cycles		--	--	--	--	--	--	--	--
• 1150 V version, electrical (without maintenance)	Oper. cycles		--	--	--	--	--	--	--	--
• Electrical (with maintenance)[5]	Operating cycles		20 000	20 000	20 000	15 000	15 000	15 000	15 000	15 000
Service life: Breaking capacity H, 3-pole										
• Mechanical (without maintenance)	Operating cycles		10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000
• Mechanical (with maintenance)[5]	Operating cycles		15 000	15 000	15 000	15 000	15 000	15 000	15 000	15 000
• Electrical (without maintenance)	Operating cycles		7 500	7 500	7 500	7500	7500	7500	7500	7500
• 1000 V version, electrical (without maintenance)	Oper. cycles		1000	1000	1000	1000	1000	1000	1000	1000
• 1150 V version, electrical (without maintenance)	Oper. cycles		--	--	--	--	500	500	500	500
• Electrical (with maintenance)[5][6]	Operating cycles		15 000	15 000	15 000	15 000	15 000	15 000	15 000	15 000
Service life: Breaking capacity H, 4-pole										
• Mechanical (without maintenance)	Operating cycles		10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000
• Mechanical (with maintenance)[5]	Operating cycles		15 000	15 000	15 000	15 000	15 000	15 000	15 000	15 000
• Electrical (without maintenance)	Operating cycles		7 500	7 500	7 500	7500	7500	7500	7500	7500
• 1000 V version, electrical (without maintenance)	Oper. cycles		1000	1000	1000	1000	1000	1000	1000	1000
• 1150 V version, electrical (without maintenance)	Oper. cycles		--	--	--	--	500	500	500	500
• Electrical (with maintenance)[5][6]	Operating cycles		10 000	10 000	10 000	10 000	15 000	15 000	15 000	15 000
Service life: Breaking capacity C										
• Mechanical (without maintenance)	Operating cycles		--	--	--	--	5 000	5 000	5 000	5 000
• Mechanical (with maintenance) [5]	Operating cycles		--	--	--	--	10 000	10 000	10 000	10 000
• Electrical (without maintenance)	Operating cycles		--	--	--	--	5 000	5 000	5 000	5 000
• Electrical (with maintenance)[5]	Operating cycles		--	--	--	--	10 000	10 000	10 000	10 000
Switching frequency[7]										
• 690 V version		1/h	60[8]	60[8]	60[8]	60	60[8]	60[8]	60[8]	60[8]
• 1000 V version		1/h	--	--	--	20	20	20	20	20
• 1150 V version		1/h	--	--	--	--	20	20	20	20
Minimum interval between tripping operation by electronic trip unit and next making operation of the circuit breaker (only with autom. mechanical resetting of the lockout device). Minimum interval between On-Off or Off-On switching operations.		ms	80	80	80	80	80	80	80	80

1) Use of trip units from -20 °C.
2) ETU76B with graphics display can be used up to max. 55 °C.
3) At breaking capacity H: 1600 A to 70 °C.
4) Make-time through closing solenoid for synchronization purposes (short-time excited) 50 ms.
5) Maintenance means: replace main contact elements and arc chutes (see Operating Manual).
6) Replacement of the main contact elements of circuit breakers size I with breaking capacity H is only possible at the factory.
7) Minimum interval time between 2 tripping operations.
8) 3-pole switching with breaking capacity N and S: 45/h.
9) Motorized operating mechanism U_{imp}=1.2 kV

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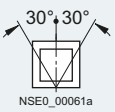
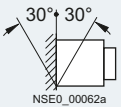
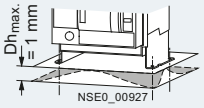
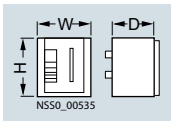
General data

Size				I				II			
Type				**... 3WL1110**	**3WL1112**	**3WL1116**	**3WL1120**	**3WL1208**	**3WL1210**	**3WL1212**	**3WL1216**
Mounting position				 and/or 							
Degree of protection				IP20 without cabinet door, IP41 with door sealing frame, IP55 with cover							
Main conductor minimum cross-sections	• Copper bars, bare	Unit(s)	mm^2	1 × 60 × 10	2 × 40 × 10	2 × 50 × 10	3 × 50 × 10	1 × 50 × 10	1 × 60 × 10	2 × 40 × 10	2 × 50 × 10
	• Copper bars, painted black	Unit(s)	mm^2	1 × 60 × 10	2 × 40 × 10	2 × 50 × 10	3 × 50 × 10	1 × 50 × 10	1 × 60 × 10	2 × 40 × 10	2 × 50 × 10
Auxiliary conductors (Cu) Max. number Auxiliary conductors × cross-section (solid/stranded)	Standard connection = strain-relief clamp										
	• Without end sleeve			2 × 0.5 mm^2 (AWG 20) ... 2 × 1.5 mm^2 (AWG 16); 1 × 2.5 mm^2 (AWG 14)							
	• With end sleeve acc. to DIN 46228 Part 2			1 × 0.5 mm^2 (AWG 20) ... 1 × 1.5 mm^2 (AWG 16)							
	• With twin end sleeve			2 × 0.5 mm^2 (AWG 20) ... 2 × 1.5 mm^2 (AWG 16)							
	Optional connection = tension spring										
	• Without end sleeve			2 × 0.5 mm^2 (AWG 20) ... 2 × 2.5 mm^2 (AWG 14)							
	• With end sleeve acc. to DIN 46228 Part 2			2 × 0.5 mm^2 (AWG 20) ... 2 × 1.5 mm^2 (AWG 16)							
Position signaling switches	Tension spring terminals			1 × 0.5 mm^2 (AWG 20) ... 1 × 2.5 mm^2 (AWG 14)							
Weights	3-pole	• Fixed-mounted circuit breakers	kg	43	43	43	43	56	56	56	56
		• Withdrawable circuit breakers	kg	45	45	45	45	60	60	60	60
		• Guide frames	kg	25	25	25	25	31	31	31	31
	4-pole	• Fixed-mounted circuit breakers	kg	50	50	50	50	67	67	67	67
		• Withdrawable circuit breakers	kg	54	54	54	54	72	72	72	72
		• Guide frames	kg	30	30	30	30	37	37	37	37
Dimensions 3-/4-pole 			W mm	320/410				460/590			
	Fixed-mounted		H mm	434				434			
			D mm	291				291			
	Withdrawable		H mm	465.5				465.5			
			D mm	471				471			

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Size			II				III		
Type			**3WL1220**	**3WL1225**	**3WL1232**	**3WL1240**	**3WL1340**	**3WL1350**	**3WL1363**
Number of poles			3-pole, 4-pole						
Rated current I_n at 40 °C, at 50/60 Hz									
Main conductor		A	2000	2500	3200	4000	4000	5000	6300
N conductor (only on 4-pole versions)		A	2000	2500	3200	4000	4000	5000	6300
Rated operational voltage U_e at 50/60 Hz		V AC	...	...	...	... 690	...	...	...
(1000 V version, see page 1/45 "Options")			690/1000	690/1000	690/1000		690/1000	690/1000	690/1000
Rated insulation voltage U_i		V AC	1000	1000	1000	1000	1000	1000	1000
Rated impulse withstand voltage U_{imp}									
• Main conducting paths		kV	12	12	12	12	12	12	12
• Auxiliary circuits		kV	4	4	4	4	4	4	4
• Control circuits[10]		kV	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Isolating function acc. to EN 60947-2			Yes	Yes	Yes	Yes	Yes	Yes	Yes
Utilization category			B						
Permissible ambient temperature									
• During operation (in operation with LCD max. 55 °C)[1]		°C	–25/+70	–25/+70	–25/+70	–25/+70	–25/+70	–25/+70	–25/+70
• Storage		°C	–40/+70	–40/+70	–40/+70	–40/+70	–40/+70	–40/+70	–40/+70
Permissible load for withdrawable versions[2] [4]	• Up to 55 °C (Cu bare)	A	2000	2500	3200	3950	4000	5000	5920
	• Up to 60 °C (Cu bare)	A	2000	2500	3020	3810	4000	5000	5810
	• Up to 70 °C (Cu painted black)	A	2000	2280	2870	3600	4000	5000	5500
Rated rotor operational voltage U_{er}		V	2000	2000	2000	2000	2000	2000	2000
Power loss at I_n									
With 3-phase symmetrical load									
• Fixed-mounted circuit breakers		W	180	270	410	750	520	630	900
• Withdrawable circuit breakers		W	320	520	710	925	810	1050	1600
Switching times									
• Make time		ms	35	35	35	35	35	35	35
• Opening time		ms	34	34	34	34	34	34	34
• Electrical make time (through closing solenoid)[5]		ms	100	100	100	100	100	100	100
• Electrical opening time (through shunt release)		ms	73	73	73	73	73	73	73
• Electrical opening time (instantaneous undervoltage release)		ms	73	73	73	73	73	73	73
• Opening time due to ETU, instantaneous short-circuit release		ms	50	50	50	50	50	50	50
Service life: Breaking capacity N, S and H[11]									
• Mechanical (without maintenance)		Operating cycles	10000	10000	10000	10000	5000	5000	5000
• Mechanical (with maintenance)[6]		Operating cycles	15000	15000	15000	15000	10000	10000	10000
• Electrical (without maintenance) up to 690 V		Operating cycles	7500	7500	4000	2000	2000	2000	2000
• 1000 V version, electrical (without maintenance)		Operating cycles	1000	1000	1000	1000	1000	1000	1000
• 1150 V version, electrical[7] (without maintenance)		Operating cycles	500	500	500	500	500	500	500
• Electrical (with maintenance)[6]		Operating cycles	15000	15000	15000	15000	10000	10000	10000
Service life: Breaking capacity C									
• Mechanical (without maintenance)		Operating cycles	5000	5000	5000	--	5000	5000	5000
• Mechanical (with maintenance)[6]		Operating cycles	10000	10000	10000	--	10000	10000	10000
• Electrical (without maintenance) up to 690 V		Operating cycles	5000	5000	4000	--	1000	1000	1000
• Electrical (without maintenance) up to 1150 V		Operating cycles	--	--	--	--	500	500	500
• Electrical (with maintenance) up to 690 V[6]		Operating cycles	10000	10000	8000	--	--	--	--
Switching frequency[8]									
• 690 V version		1/h	60[9]	60[9]	60[9]	60[9]	60	60	60
• 1000 V version		1/h	20	20	20	20	20	20	20
• 1150 V version[7]		1/h	20	20	20	20	20	20	20
Minimum interval between tripping operation by electronic trip unit and next making operation of the circuit breaker (only with autom. mechanical resetting of the lockout device)		ms	80	80	80	80	80	80	80
Minimum interval between On-Off or Off-On switching operations.									

1) Use of trip units from -20 °C.

2) 4000 A, size II in fixed-mounted version, 3-pole.

4) ETU76B with graphics display can be used up to max. 55 °C.

5) Make-time through closing solenoid for synchronization purposes (short-time excited) 50 ms.

6) Maintenance means: replace main contact elements and arc chutes (see Operating Manual).

7) Size II with order code "A15" and size III: data for very high breaking capacity.

8) Minimum interval time between 2 tripping operations.

9) 3-pole switching with breaking capacity N and S: 45/h.

10) Motorized operating mechanism U_{imp}=1.2 kV

11) 1000 V and 1150 V versions only in the case of H breaking capacity

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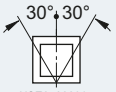
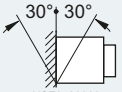
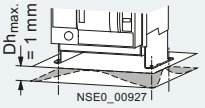
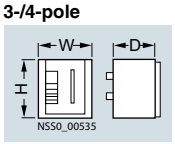
General data

Size				II				III		
Type				**3WL1220**	**3WL1225**	**3WL1232**	**3WL1240**	**3WL1340**	**3WL1350**	**3WL1363**
Mounting position				 NSE0_00061a and/or  NSE0_00062a						
				 NSE0_00927						
Degree of protection				IP20 without cabinet door, IP41 with door sealing frame, IP55 with cover						
Main conductor minimum cross-sections		• Copper bars, bare	Unit(s) mm^2	3 × 50 × 10	2 × 100 × 10	3 × 100 × 10	4 × 120 × 10	4 x 100 x 10	6 x 100 x 10	6 x 120 x 10
		• Copper bars, painted black	Unit(s) mm^2	3 × 50 × 10	2 × 100 × 10	3 × 100 × 10	4 × 100 × 10[1]	4 × 100 × 10	6 × 100 × 10	6 × 120 × 10
Auxiliary conductors (Cu) Max. number of auxiliary conductors × cross-section (solid/stranded)		Standard connection = strain-relief clamp • Without end sleeve • With end sleeve acc. to DIN 46228 Part 2 • With twin end sleeve		 2 × 0.5 mm^2 (AWG 20) ... 2 × 1.5 mm^2 (AWG 16); 1 × 2.5 mm^2 (AWG 14) 1 × 0.5 mm^2 (AWG 20) ... 1 × 1.5 mm^2 (AWG 16) 2 × 0.5 mm^2 (AWG 20) ... 2 × 1.5 mm^2 (AWG 16)						
		Optional connection = tension spring • Without end sleeve • With end sleeve acc. to DIN 46228 Part 2		 2 × 0.5 mm^2 (AWG 20) ... 2 × 2.5 mm^2 (AWG 14) 2 × 0.5 mm^2 (AWG 20) ... 2 × 1.5 mm^2 (AWG 16)						
Position signaling switches		Tension spring terminals		1 × 0.5 mm^2 (AWG 20) ... 1 × 2.5 mm^2 (AWG 14)						
Weights	3-pole	• Fixed-mounted circuit breakers	kg	56	59	64	85	82	82	90
		• Withdrawable circuit breakers	kg	60	63	68	121	88	88	96
		• Guide frames	kg	31	39	45	52	60	60	70
	4-pole	• Fixed-mounted circuit breakers	kg	67	71	77	103	99	99	108
		• Withdrawable circuit breakers	kg	72	76	82	146	106	106	108
		• Guide frames	kg	37	47	54	62	84	84	119
Dimensions 3-/4-pole  NSS0_00535			W mm	460/590				704/914		
		Fixed-mounted	H mm	434				434		
			D mm	291				291		
		Withdrawable	H mm	465.5				465.5		
			D mm	471				471		

[1] Minimum main conductor cross-sections for 4-pole withdrawable circuit breakers: 4 x 120 x 10 mm.

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Breaking capacity

Size		I			II				III		
Type		3WL11			3WL12				3WL13		
Breaking capacity		N (N)	S (S)	H (H)	N (N)	S (S)	H (H)	C (C)	H (H)	C 3-pole (C)	C 4-pole (C)
Short-circuit breaking capacity											
Rated operational voltage U_e up to 415 V AC											
I_{cu}	kA	55	66	85	66	80	100	130	100	150	130
I_{cs}	kA	55	66	85	66	80	100	130	100	150	130
I_{cm}	kA	121	145	187	145	176	220	286	220	330	286
Rated operational voltage U_e up to 500 V AC											
I_{cu}	kA	55	66	85	66	80	100	130	100	150	130
I_{cs}	kA	55	66	85	66	80	100	130	100	150	130
I_{cm}	kA	121	145	187	145	176	220	286	220	330	286
Rated operational voltage U_e up to 690 V AC											
I_{cu}	kA	42	50	66	50	75	85	100	85	150	130
I_{cs}	kA	42	50	66	50	75	85	100	85	150	130
I_{cm}	kA	88	105	145	105	165	187	220	187	330	286
Rated operational voltage U_e up to 1000 V/1150 V AC											
I_{cu}	kA	--	--	50[5]	--	--	50	--	50	70[4]	70[4]
I_{cs}	kA	--	--	50[5]	--	--	50	--	50	70[4]	70[4]
I_{cm}	kA	--	--	105[5]	--	--	105	--	105	154[4]	154[4]
Rated short-time withstand current I_{cw}[3]											
0.5 s	kA	55	66	75	66	80	100	100	100	100	100
1 s	kA	42	50	66	55	66	85	100	100	100	100
2 s	kA	29.5	35	46	39	46	65[1]/70[2]	70	80	80	80
3 s	kA	24	29	44	32	44	50[1]/65[2]	65	65	65	65
Conditional rated short-circuit breaking capacity I_{cc} of the non-automatic air circuit breakers											
Up to 500 V AC	kA	55	66	75	66	80	100	130	100	100	100
Up to 690 V AC	kA	42	50	66	50	75	85	100	85	100	100
Up to 1000 V/1150 V AC	kA	--	--	50[5]	--	--	50[4]	--	50[6]	70[4]	70[4]

(N) Circuit breakers with ECO breaking capacity N
(S) Circuit breakers with standard breaking capacity S
(H) Circuit breakers with high breaking capacity H
(C) Circuit breakers with very high breaking capacity C
(DC) Non-automatic air circuit breakers with DC breaking capacity

These breaking capacities are indicated in the corresponding tables by the symbols shown on orange backgrounds.

Note:

For further technical specifications, see the configuration manual "Air Circuit Breakers". Free download from: www.siemens.com/lowvoltage/manuals

Abbreviations* (functions)	English long text	Explanation
L	Long Time Delay	Overload protection
S	Short Time Delay	Short-circuit protection (short-time delayed)
I	Instantaneous	Short-circuit protection (instantaneous)
N	Neutral Protection	Neutral conductor protection
G	Ground Fault	Ground-fault protection

* Designations according to IEC 60947-2, Appendix K.

1) Size II with $I_{n\,max} \leq 2500$ A.
2) Size II with $I_{n\,max} = 3200$ A and $I_{n\,max} = 4000$ A.
3) At a rated voltage of ≥ 690 V, the I_{cw} value of the circuit breaker cannot be greater than the I_{cu} or I_{cs} value at 690 V.
4) Rated operational voltage $U_e = 1150$ V.
5) Values also apply to 690 V + 20 % version with Z-option "A16".
6) Rated operational voltage $U_e = 1000$ V

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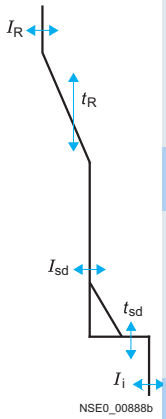
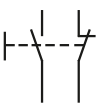
General data

Protection functions Parameterization by			ETU15B D	ETU25B D	ETU27B D & S
Function overview of the electronic trip system					
		**Overload protection**	✓	✓	✓
		Function can be switched on/off	--	--	--
		Setting range $I_R = I_n \times ...$	0.5-0.55-0.6-0.65-0.7-0.75-0.8-0.85-0.9-1	0.4-0.45-0.5-0.55-0.6-0.65-0.7-0.8-0.9-1	0.4-0.45-0.5-0.55-0.6-0.65-0.7-0.8-0.9-1
	L	Switchable overload protection (I^2t- or I^4t-dependent function)	--	--	--
		Setting range for time-lag class t_R at I^2t	10 s fixed	10 s fixed	10 s fixed
		Setting range for time-lag class t_R at I^4t	--	--	--
		Thermal image can be switched on/off	--	--	--
		Phase failure sensitivity	--	At t_{sd} = 20 ms (M)	At t_{sd} = 20 ms (M)
	N	**N-conductor protection**	--	--	✓
		Function can be switched on/off	--	--	✓
		N conductor setting range $I_N = I_n \times ...$	--	--	1
	S	**Short-time delayed short-circuit protection**	--	✓	✓
		Function can be switched on/off	--	--	--
		Setting range $I_{sd} = I_n \times ...$	--	1.25-1.5-2-2.5-3-4-6-8-10-12	1.25-1.5-2-2.5-3-4-6-8-10-12
		Setting range for delay time t_{sd}	--	0-M-100-200-300-400 ms	0-M-100-200-300-400 ms
		Switchable short-time delayed short-circuit protection (I^2t-dependent function)	--	--	--
		Setting range for delay time t_{sd} at I^2t	--	--	--
		ZSI function	--	--	--
NSE0_00888b	I	**Instantaneous short-circuit protection**	✓	✓	✓
		Function can be switched on/off	--	--	--
		Setting range $I_i = I_n \times ...$	2-3-4-5-6-7-8	Fixed for $I_i \geq 20 \times I_n$, max. 50 kA	Fixed for $I_i \geq 20 \times I_n$, max. 50 kA
	G	**Ground-fault protection**	--	--	✓ Fixed mounted
		Tripping and alarm functions	--	--	--
		Tripping function can be switched on/off	--	--	✓
		Alarm function can be switched on/off	--	--	--
		Detection of the ground-fault current through summation current formation with internal or external N conductor transformer	--	--	✓
NSE0_00889a		Detection of ground-fault current through external current transformer	--	--	--
		Setting range of the operating current I_g for tripping	--	--	A-B-C-D-E
		Setting range of the operating current I_a for alarm	--	--	--
		Setting range of the delay time t_g	--	--	100-200-300-400-500 ms
		Switchable ground-fault protection characteristic curve (I^2t-dependent function)	--	--	--
		Setting range for delay time t_g at I^2t	--	--	--
		ZSI-G function	--	--	--
Parameter set changeover					
		Switchable between parameter set A and B	--	--	--
LCD					
		Alphanumeric LCD (4-line)	--	--	--
		Graphical LCD (24 V, external power supply required)	--	--	--
Communication					
		CubicleBUS integrated	--	--	--
		Communications capability via PROFIBUS DP	--	--	--
Measuring function					
		Metering capability with measuring function *Plus*	--	--	--
LED display					
		Electronic trip unit active	✓	✓	✓
		Alarm	✓	✓	✓
		ETU fault	✓	✓	✓
		L tripping operation	--	✓	✓
NSE0_00890		S tripping operation	--	✓	✓
		I tripping operation	--	✓	✓
		N tripping operation	--	--	✓
		G tripping operation	--	--	✓
		G alarm	--	--	--
		Tripping operation as a result of extended protection function	--	--	--
		Communication	--	--	--
Signals from signaling switches with external CubicleBUS **modules (relays)**					
		Overload warning	--	--	--
		Load shedding, load absorbing	--	--	--
		Leading signal overload trip 200 ms	--	--	--
		Temperature alarm	--	--	--
		Phase unbalance	--	--	--
		Instantaneous short-circuit trip	--	--	--
NSE0_00891		Short-time delayed short-circuit trip	--	--	--
		Overload trip	--	--	--
		Neutral conductor trip	--	--	--
		Ground-fault protection trip	--	--	--
		Ground-fault alarm	--	--	--
		Auxiliary relay	--	--	--
		ETU fault	--	--	--

Delay time figures given in ms.
M = Motor protection, corresponds to 20 ms.
D = Rotary coding switch
D & S = Rotary coding and slide switch
K = Communication
M/K = Menu/Communication

✓ Available.
-- Not available.
❑ Optional.

For setting range of the operating current I_g, see page 1/15.

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Protection functions **Parameterization by**	**ETU45B** **D & S**	**ETU76B** **M/K**
Function overview of the electronic trip system		
Overload protection	✓	✓
Function can be switched on/off	--	✓
Setting range $I_R = I_n \times ...$	0.4-0.45-0.5-0.55-0.6-0.65-0.7-0.8-0.9-1	0.4 ... 1
Switchable overload protection (I^2t- or I^4t-dependent function)	✓	✓
Setting range for time-lag class t_R at I^2t	2-3.5-5.5-8-10-14-17-21-25-30 s	2 ... 30 s
Setting range for time-lag class t_R at I^4t	1-2-3-4-5 s	1 ... 5 s
Thermal image can be switched on/off	✓	✓
Phase failure sensitivity	At t_{sd} = 20 ms (M)	✓ (on/off)
N-conductor protection	✓	✓
Function can be switched on/off	✓	✓
N conductor setting range $I_N = I_n \times ...$	0.5 ... 1	0.2 ... 2
Short-time delayed short-circuit protection	✓	✓
Function can be switched on/off	✓	✓
Setting range $I_{sd} = I_n \times ...$	1.25-1.5-2-2.5-3-4-6-8-10-12	1.25 × I_n ... 0.8 × I_{cw}
Setting range for delay time t_{sd}	M-100-200-300-400 ms	M-80 ... 4000 ms
Switchable short-time delayed short-circuit protection (I^2t-dependent function)	✓	✓
Setting range for delay time t_{sd} at I^2t	100-200-300-400 ms	100 ... 400 ms
ZSI function	By **Cubicle**BUS module	By **Cubicle**BUS module
Instantaneous short-circuit protection	✓	✓
Function can be switched on/off	✓	✓
Setting range $I_i = I_n \times ...$	1.5-2.2-3-4-6-8-10-12-0.8 x I_{cs}	1.5 × I_n ... 0.8 × I_{cs}
Ground-fault protection	❑ Module can be retrofitted	❑ Module can be retrofitted
Tripping and alarm functions	✓	✓
Tripping function can be switched on/off	✓	✓
Alarm function can be switched on/off	--	✓
Detection of the ground-fault current through summation current formation with internal or external N conductor transformer	✓	✓
Detection of ground-fault current through external current transformer	✓	✓
Setting range of the operating current I_g for tripping	A-B-C-D-E	A ... E
Setting range of the operating current I_g for alarm	A-B-C-D-E	A ... E
Setting range of the delay time t_g	100-200-300-400-500 ms	100 ... 500 ms
Switchable ground-fault protection characteristic curve (I^2t-dependent function)	✓	✓
Setting range for delay time t_g at I^2t	100-200-300-400-500 ms	100 ... 500 ms
ZSI-G function	By **Cubicle**BUS module	By **Cubicle**BUS module
Parameter set changeover		
Switchable between parameter set A and B	--	✓
LCD		
Alphanumeric LCD (4-line)	❑	--
Graphical LCD (24 V, external power supply required)	--	✓
Communication		
CubicleBUS integrated	✓	✓
Communications capability via PROFIBUS DP	✓	✓
Measuring function		
Metering capability with measuring function *Plus*	✓	✓
LED display		
Electronic trip unit active	✓	✓
Alarm	✓	✓
ETU fault	✓	✓
L tripping operation	✓	✓
S tripping operation	✓	✓
I tripping operation	✓	✓
N tripping operation	✓	✓
G tripping operation	✓ (Only with ground-fault protection module)	✓ (Only with ground-fault protection module)
G alarm	✓ (Only with ground-fault protection module)	✓ (Only with ground-fault protection module)
Tripping operation as a result of extended protection functions	✓	✓
Communication	✓	✓
Signals from signaling switches with external CubicleBUS **modules (relays)**		
Overload warning	✓	✓
Load shedding, load absorbing	✓	✓
Leading signal overload trip 200 ms	✓	✓
Temperature alarm	✓	✓
Phase unbalance	✓	✓
Instantaneous short-circuit trip	✓	✓
Short-time delayed short-circuit trip	✓	✓
Overload trip	✓	✓
Neutral conductor trip	✓	✓
Ground-fault protection trip	✓ (Only with ground-fault protection module)	✓ (Only with ground-fault protection module)
Ground-fault alarm	✓ (Only with ground-fault protection module)	✓ (Only with ground-fault protection module)
Auxiliary relay	✓	✓
ETU fault	✓	✓

Setting range of the operating current I_g

	Size I and size II	Size III
A	100 A	400 A
B	300 A	600 A
C	600 A	800 A
D	900 A	1000 A
E	1200 A	1200 A

Increment size when settings are made for the ETU76B using the menu

From ... to	Increment size	From ... to	Increment size
0 ... 1	0,1	1000 ... 1600	50
1 ... 100	1	1600 ... 10000	100
100 ... 500	5	10000 ... max.	1000
500 ... 1000	10		

Legend, see page 1/14.

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3-pole, fixed-mounted versions

Selection and ordering data

Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	**I_{cu} 55/66 kA at 500 V, ECO breaking capacity N** (N) Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Horizontal main circuit connection										
I	630	630	55		3WL1106-2□□32-□□□□		1	1 unit	1CA	43.000
	800	800			3WL1108-2□□32-□□□□		1	1 unit	1CA	43.000
	1000	1000			3WL1110-2□□32-□□□□		1	1 unit	1CA	43.000
	1250	1250			3WL1112-2□□32-□□□□		1	1 unit	1CA	43.000
	1600	1600			3WL1116-2□□32-□□□□		1	1 unit	1CA	43.000
	2000	2000			3WL1120-2□□32-□□□□		1	1 unit	1CA	43.000
II	800	800	66		3WL1208-2□□32-□□□□		1	1 unit	1CA	56.000
	1000	1000			3WL1210-2□□32-□□□□		1	1 unit	1CA	56.000
	1250	1250			3WL1212-2□□32-□□□□		1	1 unit	1CA	56.000
	1600	1600			3WL1216-2□□32-□□□□		1	1 unit	1CA	56.000
	2000	2000			3WL1220-2□□32-□□□□		1	1 unit	1CA	56.000
	2500	2500			3WL1225-2□□32-□□□□		1	1 unit	1CA	59.000
	3200	3200			3WL1232-2□□32-□□□□		1	1 unit	1CA	64.000
Vertical main circuit connection										
I	630	630	55		3WL1106-2□□31-□□□□		1	1 unit	1CA	43.000
	800	800			3WL1108-2□□31-□□□□		1	1 unit	1CA	43.000
	1000	1000			3WL1110-2□□31-□□□□		1	1 unit	1CA	43.000
	1250	1250			3WL1112-2□□31-□□□□		1	1 unit	1CA	43.000
	1600	1600			3WL1116-2□□31-□□□□		1	1 unit	1CA	43.000
	2000	2000			3WL1120-2□□31-□□□□		1	1 unit	1CA	43.000
II	800	800	66		3WL1208-2□□31-□□□□		1	1 unit	1CA	56.000
	1000	1000			3WL1210-2□□31-□□□□		1	1 unit	1CA	56.000
	1250	1250			3WL1212-2□□31-□□□□		1	1 unit	1CA	56.000
	1600	1600			3WL1216-2□□31-□□□□		1	1 unit	1CA	56.000
	2000	2000			3WL1220-2□□31-□□□□		1	1 unit	1CA	56.000
	2500	2500			3WL1225-2□□31-□□□□		1	1 unit	1CA	59.000
	3200	3200			3WL1232-2□□31-□□□□		1	1 unit	1CA	64.000
	4000	4000			3WL1240-2□□31-□□□□		1	1 unit	1CA	85.000

Options				Additional price
Non-automatic air circuit breakers[2]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU15B: Protection functions LI[6]	**BB**		✓
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[3]	**EB**		✓
	ETU45B: Protection functions LSIN[3] with 4-line display	**FB**		✓
	ETU76B: Protection functions LSIN[3] with graphics display	**NB**		✓
	Versions with ground-fault protection			
	ETU27B: Protection functions LSING[4]	**DG**		✓
	ETU45B: Protection functions LSING[3)5)]	**EG**		✓
	ETU45B: Protection functions LSING[3)5)] with 4-line display	**FG**		✓
	ETU76B: Protection functions LSING[3)5)] with graphics display	**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

3) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58.

4) Current transformers for protection of the N conductor are to be ordered separately, see page 1/58.

5) ETU45B and ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

6) ETU15B cannot be used with 3WL1 circuit breakers, size III.

* You can order this quantity or a multiple thereof.

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Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	I_{cu} 55/66 kA at 500 V, ECO breaking capacity N (N) Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Front main circuit connection, single hole										
I	630	630	55		3WL1106-2□□33-□□□□		1	1 unit	1CA	43.000
	800	800			3WL1108-2□□33-□□□□		1	1 unit	1CA	43.000
	1000	1000			3WL1110-2□□33-□□□□		1	1 unit	1CA	43.000
	1250	1250			3WL1112-2□□33-□□□□		1	1 unit	1CA	43.000
	1600	1600			3WL1116-2□□33-□□□□		1	1 unit	1CA	43.000
II	800	800	66		3WL1208-2□□33-□□□□		1	1 unit	1CA	56.000
	1000	1000			3WL1210-2□□33-□□□□		1	1 unit	1CA	56.000
	1250	1250			3WL1212-2□□33-□□□□		1	1 unit	1CA	56.000
	1600	1600			3WL1216-2□□33-□□□□		1	1 unit	1CA	56.000
	2000	2000			3WL1220-2□□33-□□□□		1	1 unit	1CA	56.000
	2500	2500			3WL1225-2□□33-□□□□		1	1 unit	1CA	59.000
	3200	3200			3WL1232-2□□33-□□□□		1	1 unit	1CA	64.000
Front main circuit connection, double hole										
I	630	630	55		3WL1106-2□□34-□□□□		1	1 unit	1CA	43.000
	800	800			3WL1108-2□□34-□□□□		1	1 unit	1CA	43.000
	1000	1000			3WL1110-2□□34-□□□□		1	1 unit	1CA	43.000
	1250	1250			3WL1112-2□□34-□□□□		1	1 unit	1CA	43.000
	1600	1600			3WL1116-2□□34-□□□□		1	1 unit	1CA	43.000
	2000	2000			3WL1120-2□□34-□□□□		1	1 unit	1CA	43.000
II	800	800	66		3WL1208-2□□34-□□□□		1	1 unit	1CA	56.000
	1000	1000			3WL1210-2□□34-□□□□		1	1 unit	1CA	56.000
	1250	1250			3WL1212-2□□34-□□□□		1	1 unit	1CA	56.000
	1600	1600			3WL1216-2□□34-□□□□		1	1 unit	1CA	56.000
	2000	2000			3WL1220-2□□34-□□□□		1	1 unit	1CA	56.000
	2500	2500			3WL1225-2□□34-□□□□		1	1 unit	1CA	59.000
	3200	3200			3WL1232-2□□34-□□□□		1	1 unit	1CA	64.000

Options				Additional price
Non-automatic air circuit breakers[2]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU15B: Protection functions LI[6]	**BB**		✓
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[3]	**EB**		✓
	ETU45B: Protection functions LSIN[3] with 4-line display	**FB**		✓
	ETU76B: Protection functions LSIN[3] with graphics display	**NB**		✓
	Versions with ground-fault protection			
	ETU27B: Protection functions LSING[4]	**DG**		✓
	ETU45B: Protection functions LSING[3][5]	**EG**		✓
	ETU45B: Protection functions LSING[3][5] with 4-line display	**FG**		✓
	ETU76B: Protection functions LSING[3][5] with graphics display	**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

3) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58.

4) Current transformers for protection of the N conductor are to be ordered separately, see page 1/58.

5) ETU45B and ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

6) ETU15B cannot be used with 3WL1 circuit breakers, size III.

*** You can order this quantity or a multiple thereof.**

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3-pole, fixed-mounted versions

Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	I_{cu} 66/80 kA at 500 V, standard breaking capacity S (S) — Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Horizontal main circuit connection										
I	630	630	66		3WL1106-3□□32-□□□□		1	1 unit	1CA	43.000
	800	800			3WL1108-3□□32-□□□□		1	1 unit	1CA	43.000
	1000	1000			3WL1110-3□□32-□□□□		1	1 unit	1CA	43.000
	1250	1250			3WL1112-3□□32-□□□□		1	1 unit	1CA	43.000
	1600	1600			3WL1116-3□□32-□□□□		1	1 unit	1CA	43.000
	2000	2000			3WL1120-3□□32-□□□□		1	1 unit	1CA	43.000
II	800	800	80		3WL1208-3□□32-□□□□		1	1 unit	1CA	56.000
	1000	1000			3WL1210-3□□32-□□□□		1	1 unit	1CA	56.000
	1250	1250			3WL1212-3□□32-□□□□		1	1 unit	1CA	56.000
	1600	1600			3WL1216-3□□32-□□□□		1	1 unit	1CA	56.000
	2000	2000			3WL1220-3□□32-□□□□		1	1 unit	1CA	56.000
	2500	2500			3WL1225-3□□32-□□□□		1	1 unit	1CA	59.000
	3200	3200			3WL1232-3□□32-□□□□		1	1 unit	1CA	64.000
Vertical main circuit connection										
I	630	630	66		3WL1106-3□□31-□□□□		1	1 unit	1CA	43.000
	800	800			3WL1108-3□□31-□□□□		1	1 unit	1CA	43.000
	1000	1000			3WL1110-3□□31-□□□□		1	1 unit	1CA	43.000
	1250	1250			3WL1112-3□□31-□□□□		1	1 unit	1CA	43.000
	1600	1600			3WL1116-3□□31-□□□□		1	1 unit	1CA	43.000
	2000	2000			3WL1120-3□□31-□□□□		1	1 unit	1CA	43.000
II	800	800	80		3WL1208-3□□31-□□□□		1	1 unit	1CA	56.000
	1000	1000			3WL1210-3□□31-□□□□		1	1 unit	1CA	56.000
	1250	1250			3WL1212-3□□31-□□□□		1	1 unit	1CA	56.000
	1600	1600			3WL1216-3□□31-□□□□		1	1 unit	1CA	56.000
	2000	2000			3WL1220-3□□31-□□□□		1	1 unit	1CA	56.000
	2500	2500			3WL1225-3□□31-□□□□		1	1 unit	1CA	59.000
	3200	3200			3WL1232-3□□31-□□□□		1	1 unit	1CA	64.000
	4000	4000			3WL1240-3□□31-□□□□		1	1 unit	1CA	85.000

Options				Additional price
Non-automatic air circuit breakers[2]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU15B: Protection functions LI[6]	**BB**		✓
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[3]	**EB**		✓
	ETU45B: Protection functions LSIN[3] with 4-line display	**FB**		✓
	ETU76B: Protection functions LSIN[3] with graphics display	**NB**		✓
	Versions with ground-fault protection			
	ETU27B: Protection functions LSING[4]	**DG**		✓
	ETU45B: Protection functions LSING[3][5]	**EG**		✓
	ETU45B: Protection functions LSING[3][5] with 4-line display	**FG**		✓
	ETU76B: Protection functions LSING[3][5] with graphics display	**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

3) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58.

4) Current transformers for protection of the N conductor are to be ordered separately, see page 1/58.

5) ETU45B and ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

6) ETU15B cannot be used with 3WL1 circuit breakers, size III.

* You can order this quantity or a multiple thereof.

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Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	I_{cu} 66/80 kA at 500 V, standard breaking capacity S (S) Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Front main circuit connection, single hole										
I	630	630	66		3WL1106-3□□33-□□□□		1	1 unit	1CA	43.000
	800	800			3WL1108-3□□33-□□□□		1	1 unit	1CA	43.000
	1000	1000			3WL1110-3□□33-□□□□		1	1 unit	1CA	43.000
	1250	1250			3WL1112-3□□33-□□□□		1	1 unit	1CA	43.000
	1600	1600			3WL1116-3□□33-□□□□		1	1 unit	1CA	43.000
II	800	800	80		3WL1208-3□□33-□□□□		1	1 unit	1CA	56.000
	1000	1000			3WL1210-3□□33-□□□□		1	1 unit	1CA	56.000
	1250	1250			3WL1212-3□□33-□□□□		1	1 unit	1CA	56.000
	1600	1600			3WL1216-3□□33-□□□□		1	1 unit	1CA	56.000
	2000	2000			3WL1220-3□□33-□□□□		1	1 unit	1CA	56.000
	2500	2500			3WL1225-3□□33-□□□□		1	1 unit	1CA	59.000
	3200	3200			3WL1232-3□□33-□□□□		1	1 unit	1CA	64.000
Front main circuit connection, double hole										
I	630	630	66		3WL1106-3□□34-□□□□		1	1 unit	1CA	43.000
	800	800			3WL1108-3□□34-□□□□		1	1 unit	1CA	43.000
	1000	1000			3WL1110-3□□34-□□□□		1	1 unit	1CA	43.000
	1250	1250			3WL1112-3□□34-□□□□		1	1 unit	1CA	43.000
	1600	1600			3WL1116-3□□34-□□□□		1	1 unit	1CA	43.000
	2000	2000			3WL1120-3□□34-□□□□		1	1 unit	1CA	43.000
II	800	800	80		3WL1208-3□□34-□□□□		1	1 unit	1CA	56.000
	1000	1000			3WL1210-3□□34-□□□□		1	1 unit	1CA	56.000
	1250	1250			3WL1212-3□□34-□□□□		1	1 unit	1CA	56.000
	1600	1600			3WL1216-3□□34-□□□□		1	1 unit	1CA	56.000
	2000	2000			3WL1220-3□□34-□□□□		1	1 unit	1CA	56.000
	2500	2500			3WL1225-3□□34-□□□□		1	1 unit	1CA	59.000
	3200	3200			3WL1232-3□□34-□□□□		1	1 unit	1CA	64.000

Options				Additional price
Non-automatic air circuit breakers[2]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU15B: Protection functions LI[6]	**BB**		✓
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[3]	**EB**		✓
	ETU45B: Protection functions LSIN[3] with 4-line display	**FB**		✓
	ETU76B: Protection functions LSIN[3] with graphics display	**NB**		✓
	Versions with ground-fault protection			
	ETU27B: Protection functions LSING[4]	**DG**		✓
	ETU45B: Protection functions LSING[3][5]	**EG**		✓
	ETU45B: Protection functions LSING[3][5] with 4-line display	**FG**		✓
	ETU76B: Protection functions LSING[3][5] with graphics display	**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

3) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58.

4) Current transformers for protection of the N conductor are to be ordered separately, see page 1/58.

5) ETU45B and ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

6) ETU15B cannot be used with 3WL1 circuit breakers, size III.

*** You can order this quantity or a multiple thereof.**

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3-pole, fixed-mounted versions

Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	**I_{cu} 85/100 kA at 500 V, high breaking capacity H** (H) Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Horizontal main circuit connection										
I	630	630	85		3WL1106-4□□32-□□□□		1	1 unit	1CA	43.000
	800	800			3WL1108-4□□32-□□□□		1	1 unit	1CA	43.000
	1000	1000			3WL1110-4□□32-□□□□		1	1 unit	1CA	43.000
	1250	1250			3WL1112-4□□32-□□□□		1	1 unit	1CA	43.000
	1600	1600			3WL1116-4□□32-□□□□		1	1 unit	1CA	43.000
	2000	2000			3WL1120-4□□32-□□□□		1	1 unit	1CA	43.000
II	800	800	100		3WL1208-4□□32-□□□□		1	1 unit	1CA	56.000
	1000	1000			3WL1210-4□□32-□□□□		1	1 unit	1CA	56.000
	1250	1250			3WL1212-4□□32-□□□□		1	1 unit	1CA	56.000
	1600	1600			3WL1216-4□□32-□□□□		1	1 unit	1CA	56.000
	2000	2000			3WL1220-4□□32-□□□□		1	1 unit	1CA	56.000
	2500	2500			3WL1225-4□□32-□□□□		1	1 unit	1CA	59.000
	3200	3200			3WL1232-4□□32-□□□□		1	1 unit	1CA	64.000
III	4000	4000	100		3WL1340-4□□32-□□□□		1	1 unit	1CA	82.000
	5000	5000			3WL1350-4□□32-□□□□		1	1 unit	1CA	82.000
Vertical main circuit connection										
I	630	630	85		3WL1106-4□□31-□□□□		1	1 unit	1CA	43.000
	800	800			3WL1108-4□□31-□□□□		1	1 unit	1CA	43.000
	1000	1000			3WL1110-4□□31-□□□□		1	1 unit	1CA	43.000
	1250	1250			3WL1112-4□□31-□□□□		1	1 unit	1CA	43.000
	1600	1600			3WL1116-4□□31-□□□□		1	1 unit	1CA	43.000
	2000	2000			3WL1120-4□□31-□□□□		1	1 unit	1CA	43.000
II	800	800	100		3WL1208-4□□31-□□□□		1	1 unit	1CA	56.000
	1000	1000			3WL1210-4□□31-□□□□		1	1 unit	1CA	56.000
	1250	1250			3WL1212-4□□31-□□□□		1	1 unit	1CA	56.000
	1600	1600			3WL1216-4□□31-□□□□		1	1 unit	1CA	56.000
	2000	2000			3WL1220-4□□31-□□□□		1	1 unit	1CA	56.000
	2500	2500			3WL1225-4□□31-□□□□		1	1 unit	1CA	59.000
	3200	3200			3WL1232-4□□31-□□□□		1	1 unit	1CA	64.000
	4000	4000			3WL1240-4□□31-□□□□		1	1 unit	1CA	85.000
III	4000	4000	100		3WL1340-4□□31-□□□□		1	1 unit	1CA	82.000
	5000	5000			3WL1350-4□□31-□□□□		1	1 unit	1CA	82.000
	6300	6300			3WL1363-4□□31-□□□□		1	1 unit	1CA	90.000

Options				Additional price
Non-automatic air circuit breakers[2]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU15B: Protection functions LI[6]	**BB**		✓
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[3]	**EB**		✓
	ETU45B: Protection functions LSIN[3] with 4-line display	**FB**		✓
	ETU76B: Protection functions LSIN[3] with graphics display	**NB**		✓
	Versions with ground-fault protection			
	ETU27B: Protection functions LSING[4]	**DG**		✓
	ETU45B: Protection functions LSING[3][5]	**EG**		✓
	ETU45B: Protection functions LSING[3][5] with 4-line display	**FG**		✓
	ETU76B: Protection functions LSING[3][5] with graphics display	**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

3) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58.

4) Current transformers for protection of the N conductor are to be ordered separately, see page 1/58.

5) ETU45B and ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

6) ETU15B cannot be used with 3WL1 circuit breakers, size III.

* You can order this quantity or a multiple thereof.

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Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	**I_{cu} 85/100 kA at 500 V, high breaking capacity H** (H) Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Front main circuit connection, single hole										
II	800	800	100		3WL1208-4□□33-□□□□		1	1 unit	1CA	56.000
	1000	1000			3WL1210-4□□33-□□□□		1	1 unit	1CA	56.000
	1250	1250			3WL1212-4□□33-□□□□		1	1 unit	1CA	56.000
	1600	1600			3WL1216-4□□33-□□□□		1	1 unit	1CA	56.000
	2000	2000			3WL1220-4□□33-□□□□		1	1 unit	1CA	56.000
	2500	2500			3WL1225-4□□33-□□□□		1	1 unit	1CA	59.000
	3200	3200			3WL1232-4□□33-□□□□		1	1 unit	1CA	64.000
III	4000	4000	100		3WL1340-4□□33-□□□□		1	1 unit	1CA	82.000
Front main circuit connection, double hole										
I	630	630	85		3WL1106-4□□34-□□□□		1	1 unit	1CA	43.000
	800	800			3WL1108-4□□34-□□□□		1	1 unit	1CA	43.000
	1000	1000			3WL1110-4□□34-□□□□		1	1 unit	1CA	43.000
	1250	1250			3WL1112-4□□34-□□□□		1	1 unit	1CA	43.000
	1600	1600			3WL1116-4□□34-□□□□		1	1 unit	1CA	43.000
	2000	2000			3WL1120-4□□34-□□□□		1	1 unit	1CA	43.000
II	800	800	100		3WL1208-4□□34-□□□□		1	1 unit	1CA	56.000
	1000	1000			3WL1210-4□□34-□□□□		1	1 unit	1CA	56.000
	1250	1250			3WL1212-4□□34-□□□□		1	1 unit	1CA	56.000
	1600	1600			3WL1216-4□□34-□□□□		1	1 unit	1CA	56.000
	2000	2000			3WL1220-4□□34-□□□□		1	1 unit	1CA	56.000
	2500	2500			3WL1225-4□□34-□□□□		1	1 unit	1CA	59.000
	3200	3200			3WL1232-4□□34-□□□□		1	1 unit	1CA	64.000
III	4000	4000	100		3WL1340-4□□34-□□□□		1	1 unit	1CA	82.000

Options					Additional price
Non-automatic air circuit breakers[2]	Without Electronic Trip Units	**AA**			**None**
Electronic Trip Units	**Versions without ground-fault protection**				
	ETU15B: Protection functions LI[6]	**BB**			✓
	ETU25B: Protection functions LSI	**CB**			✓
	ETU45B: Protection functions LSIN[3]	**EB**			✓
	ETU45B: Protection functions LSIN[3] with 4-line display	**FB**			✓
	ETU76B: Protection functions LSIN[3] with graphics display	**NB**			✓
	Versions with ground-fault protection				
	ETU27B: Protection functions LSING[4]	**DG**			✓
	ETU45B: Protection functions LSING[3][5]	**EG**			✓
	ETU45B: Protection functions LSING[3][5] with 4-line display	**FG**			✓
	ETU76B: Protection functions LSING[3][5] with graphics display	**NG**			✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**		**None**
	For further Article No. supplements, see page 1/44				

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

3) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58.

4) Current transformers for protection of the N conductor are to be ordered separately, see page 1/58.

5) ETU45B and ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

6) ETU15B cannot be used with 3WL1 circuit breakers, size III.

*** You can order this quantity or a multiple thereof.**

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3-pole, fixed-mounted versions

Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	**I_{cu} 130/150 kA at 500 V, very high breaking capacity C** (C) Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Horizontal main circuit connection										
II	1600	1600	130		3WL1216-5□□32-□□□□		1	1 unit	1CA	65.000
	2000	2000			3WL1220-5□□32-□□□□		1	1 unit	1CA	65.000
	2500	2500			3WL1225-5□□32-□□□□		1	1 unit	1CA	65.000
	3200	3200			3WL1232-5□□32-□□□□		1	1 unit	1CA	65.000
III	4000	4000	150		3WL1340-5□□32-□□□□		1	1 unit	1CA	82.000
	5000	5000			3WL1350-5□□32-□□□□		1	1 unit	1CA	82.000
Vertical main circuit connection										
II	1600	1600	130		3WL1216-5□□31-□□□□		1	1 unit	1CA	65.000
	2000	2000			3WL1220-5□□31-□□□□		1	1 unit	1CA	65.000
	2500	2500			3WL1225-5□□31-□□□□		1	1 unit	1CA	65.000
	3200	3200			3WL1232-5□□31-□□□□		1	1 unit	1CA	65.000
III	4000	4000	150		3WL1340-5□□31-□□□□		1	1 unit	1CA	82.000
	5000	5000			3WL1350-5□□31-□□□□		1	1 unit	1CA	82.000
	6300	6300			3WL1363-5□□31-□□□□		1	1 unit	1CA	90.000

Options				Additional price
Non-automatic air circuit breakers[2]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU15B: Protection functions LI[3]	**BB**		✓
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[4]	**EB**		✓
	ETU45B: Protection functions LSIN[4] with 4-line display	**FB**		✓
	ETU76B: Protection functions LSIN[4] with graphics display	**NB**		✓
	Versions with ground-fault protection			
	ETU27B: Protection functions LSING[5]	**DG**		✓
	ETU45B: Protection functions LSING[4)6)]	**EG**		✓
	ETU45B: Protection functions LSING[4)6)] with 4-line display	**FG**		✓
	ETU76B: Protection functions LSING[4)6)] with graphics display	**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

3) ETU15B cannot be used with 3WL1 circuit breakers, size III.

4) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58.

5) Current transformers for protection of the N conductor are to be ordered separately, see page 1/58.

6) ETU45B and ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

* You can order this quantity or a multiple thereof.

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Selection and ordering data

Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	I_{cu} 55/66 kA at 500 V, ECO breaking capacity N (N) Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Without guide frames[2] (for guide frames, see pages 1/52 to 1/57)										
I	630	630	55		3WL1106-2□□35-□□□□		1	1 unit	1CA	45.000
	800	800			3WL1108-2□□35-□□□□		1	1 unit	1CA	45.000
	1000	1000			3WL1110-2□□35-□□□□		1	1 unit	1CA	45.000
	1250	1250			3WL1112-2□□35-□□□□		1	1 unit	1CA	45.000
	1600	1600			3WL1116-2□□35-□□□□		1	1 unit	1CA	45.000
	2000	2000			3WL1120-2□□35-□□□□		1	1 unit	1CA	45.000
II	800	800	66		3WL1208-2□□35-□□□□		1	1 unit	1CA	60.000
	1000	1000			3WL1210-2□□35-□□□□		1	1 unit	1CA	60.000
	1250	1250			3WL1212-2□□35-□□□□		1	1 unit	1CA	60.000
	1600	1600			3WL1216-2□□35-□□□□		1	1 unit	1CA	60.000
	2000	2000			3WL1220-2□□35-□□□□		1	1 unit	1CA	60.000
	2500	2500			3WL1225-2□□35-□□□□		1	1 unit	1CA	63.000
	3200	3200			3WL1232-2□□35-□□□□		1	1 unit	1CA	68.000
NEW	4000	4000			3WL1240-2□□35-□□□□		1	1 unit	1CA	71.000
With guide frames, horizontal main circuit connection										
I	630	630	55		3WL1106-2□□36-□□□□		1	1 unit	1CA	70.000
	800	800			3WL1108-2□□36-□□□□		1	1 unit	1CA	70.000
	1000	1000			3WL1110-2□□36-□□□□		1	1 unit	1CA	70.000
	1250	1250			3WL1112-2□□36-□□□□		1	1 unit	1CA	70.000
	1600	1600			3WL1116-2□□36-□□□□		1	1 unit	1CA	70.000
	2000	2000			3WL1120-2□□36-□□□□		1	1 unit	1CA	70.000
II	800	800	66		3WL1208-2□□36-□□□□		1	1 unit	1CA	91.000
	1000	1000			3WL1210-2□□36-□□□□		1	1 unit	1CA	91.000
	1250	1250			3WL1212-2□□36-□□□□		1	1 unit	1CA	91.000
	1600	1600			3WL1216-2□□36-□□□□		1	1 unit	1CA	91.000
	2000	2000			3WL1220-2□□36-□□□□		1	1 unit	1CA	91.000
	2500	2500			3WL1225-2□□36-□□□□		1	1 unit	1CA	102.000
	3200	3200			3WL1232-2□□36-□□□□		1	1 unit	1CA	113.000

Options					Additional price
Non-automatic air circuit breakers[3]	Without Electronic Trip Units		**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**				
	ETU15B: Protection functions LI		**BB**		✓
	ETU25B: Protection functions LSI		**CB**		✓
	ETU45B: Protection functions LSIN[4]		**EB**		✓
	ETU45B: Protection functions LSIN[4] with 4-line display		**FB**		✓
	ETU76B: Protection functions LSIN[4] with graphics display		**NB**		✓
	Versions with ground-fault protection				
	ETU27B: Protection functions LSING[5]		**DG**		✓
	ETU45B: Protection functions LSING[4][6]		**EG**		✓
	ETU45B: Protection functions LSING[4][6] with 4-line display		**FG**		✓
	ETU76B: Protection functions LSING[4][6] with graphics display		**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO			**1AA2**	**None**
	For further Article No. supplements, see page 1/44				

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) Z options which are installed on the guide frame are not available.

3) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

4) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58.

5) Current transformers for protection of the N conductor are to be ordered separately, see page 1/58.

6) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

*** You can order this quantity or a multiple thereof.**

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3-pole, withdrawable versions

Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	I_{cu} 55/66 kA at 500 V, ECO breaking capacity N (N) Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
With guide frames, vertical main circuit connection										
I	630	630	55		3WL1106-2□□37-□□□□		1	1 unit	1CA	70.000
	800	800			3WL1108-2□□37-□□□□		1	1 unit	1CA	70.000
	1000	1000			3WL1110-2□□37-□□□□		1	1 unit	1CA	70.000
	1250	1250			3WL1112-2□□37-□□□□		1	1 unit	1CA	70.000
	1600	1600			3WL1116-2□□37-□□□□		1	1 unit	1CA	70.000
	2000	2000			3WL1120-2□□37-□□□□		1	1 unit	1CA	70.000
II	800	800	66		3WL1208-2□□37-□□□□		1	1 unit	1CA	91.000
	1000	1000			3WL1210-2□□37-□□□□		1	1 unit	1CA	91.000
	1250	1250			3WL1212-2□□37-□□□□		1	1 unit	1CA	91.000
	1600	1600			3WL1216-2□□37-□□□□		1	1 unit	1CA	91.000
	2000	2000			3WL1220-2□□37-□□□□		1	1 unit	1CA	91.000
	2500	2500			3WL1225-2□□37-□□□□		1	1 unit	1CA	102.000
	3200	3200			3WL1232-2□□37-□□□□		1	1 unit	1CA	113.000
	4000	4000			3WL1240-2□□37-□□□□		1	1 unit	1CA	121.000
With guide frames, connecting flanges										
I	630	630	55		3WL1106-2□□38-□□□□		1	1 unit	1CA	70.000
	800	800			3WL1108-2□□38-□□□□		1	1 unit	1CA	70.000
	1000	1000			3WL1110-2□□38-□□□□		1	1 unit	1CA	70.000
	1250	1250			3WL1112-2□□38-□□□□		1	1 unit	1CA	70.000
	1600	1600			3WL1116-2□□38-□□□□		1	1 unit	1CA	70.000
	2000	2000			3WL1120-2□□38-□□□□		1	1 unit	1CA	70.000
II	800	800	66		3WL1208-2□□38-□□□□		1	1 unit	1CA	91.000
	1000	1000			3WL1210-2□□38-□□□□		1	1 unit	1CA	91.000
	1250	1250			3WL1212-2□□38-□□□□		1	1 unit	1CA	91.000
	1600	1600			3WL1216-2□□38-□□□□		1	1 unit	1CA	91.000
	2000	2000			3WL1220-2□□38-□□□□		1	1 unit	1CA	91.000
	2500	2500			3WL1225-2□□38-□□□□		1	1 unit	1CA	102.000
	3200	3200			3WL1232-2□□38-□□□□		1	1 unit	1CA	113.000

Options				Additional price
Non-automatic air circuit breakers[3]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU15B: Protection functions LI	**BB**		✓
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[4]	**EB**		✓
	ETU45B: Protection functions LSIN[4] with 4-line display	**FB**		✓
	ETU76B: Protection functions LSIN[4] with graphics display	**NB**		✓
	Versions with ground-fault protection			
	ETU27B: Protection functions LSING[5]	**DG**		✓
	ETU45B: Protection functions LSING[4][6]	**EG**		✓
	ETU45B: Protection functions LSING[4][6] with 4-line display	**FG**		✓
	ETU76B: Protection functions LSING[4][6] with graphics display	**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) Z options which are installed on the guide frame are not available.

3) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

4) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58.

5) Current transformers for protection of the N conductor are to be ordered separately, see page 1/58.

6) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

* You can order this quantity or a multiple thereof.

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Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	**I_{cu} 66/80 kA at 500 V, standard breaking capacity S** (S) Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Without guide frames[2] (for guide frames, see pages 1/52 to 1/57)										
I	630	630	66		3WL1106-3□□35-□□□□		1	1 unit	1CA	45.000
	800	800			3WL1108-3□□35-□□□□		1	1 unit	1CA	45.000
	1000	1000			3WL1110-3□□35-□□□□		1	1 unit	1CA	45.000
	1250	1250			3WL1112-3□□35-□□□□		1	1 unit	1CA	45.000
	1600	1600			3WL1116-3□□35-□□□□		1	1 unit	1CA	45.000
	2000	2000			3WL1120-3□□35-□□□□		1	1 unit	1CA	45.000
II	800	800	80		3WL1208-3□□35-□□□□		1	1 unit	1CA	60.000
	1000	1000			3WL1210-3□□35-□□□□		1	1 unit	1CA	60.000
	1250	1250			3WL1212-3□□35-□□□□		1	1 unit	1CA	60.000
	1600	1600			3WL1216-3□□35-□□□□		1	1 unit	1CA	60.000
	2000	2000			3WL1220-3□□35-□□□□		1	1 unit	1CA	60.000
	2500	2500			3WL1225-3□□35-□□□□		1	1 unit	1CA	63.000
	3200	3200			3WL1232-3□□35-□□□□		1	1 unit	1CA	68.000
NEW	4000	4000			3WL1240-3□□35-□□□□		1	1 unit		71.000
With guide frames, horizontal main circuit connection										
I	630	630	66		3WL1106-3□□36-□□□□		1	1 unit	1CA	70.000
	800	800			3WL1108-3□□36-□□□□		1	1 unit	1CA	70.000
	1000	1000			3WL1110-3□□36-□□□□		1	1 unit	1CA	70.000
	1250	1250			3WL1112-3□□36-□□□□		1	1 unit	1CA	70.000
	1600	1600			3WL1116-3□□36-□□□□		1	1 unit	1CA	70.000
	2000	2000			3WL1120-3□□36-□□□□		1	1 unit	1CA	70.000
II	800	800	80		3WL1208-3□□36-□□□□		1	1 unit	1CA	91.000
	1000	1000			3WL1210-3□□36-□□□□		1	1 unit	1CA	91.000
	1250	1250			3WL1212-3□□36-□□□□		1	1 unit	1CA	91.000
	1600	1600			3WL1216-3□□36-□□□□		1	1 unit	1CA	91.000
	2000	2000			3WL1220-3□□36-□□□□		1	1 unit	1CA	91.000
	2500	2500			3WL1225-3□□36-□□□□		1	1 unit	1CA	102.000
	3200	3200			3WL1232-3□□36-□□□□		1	1 unit	1CA	113.000

Options				Additional price
Non-automatic air circuit breakers[3]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU15B: Protection functions LI	**BB**		✓
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[4]	**EB**		✓
	ETU45B: Protection functions LSIN[4] with 4-line display	**FB**		✓
	ETU76B: Protection functions LSIN[4] with graphics display	**NB**		✓
	Versions with ground-fault protection			
	ETU27B: Protection functions LSING[5]	**DG**		✓
	ETU45B: Protection functions LSING[4][6]	**EG**		✓
	ETU45B: Protection functions LSING[4][6] with 4-line display	**FG**		✓
	ETU76B: Protection functions LSING[4][6] with graphics display	**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) Z options which are installed on the guide frame are not available.

3) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

4) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58.

5) Current transformers for protection of the N conductor are to be ordered separately, see page 1/58.

6) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

*** You can order this quantity or a multiple thereof.**

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3-pole, withdrawable versions

Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	I_{cu} 66/80 kA at 500 V, standard breaking capacity S (S) — Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
With guide frames, vertical main circuit connection										
I	630	630	66		3WL1106-3□□37-□□□□		1	1 unit	1CA	70.000
	800	800			3WL1108-3□□37-□□□□		1	1 unit	1CA	70.000
	1000	1000			3WL1110-3□□37-□□□□		1	1 unit	1CA	70.000
	1250	1250			3WL1112-3□□37-□□□□		1	1 unit	1CA	70.000
	1600	1600			3WL1116-3□□37-□□□□		1	1 unit	1CA	70.000
	2000	2000			3WL1120-3□□37-□□□□		1	1 unit	1CA	70.000
II	800	800	80		3WL1208-3□□37-□□□□		1	1 unit	1CA	91.000
	1000	1000			3WL1210-3□□37-□□□□		1	1 unit	1CA	91.000
	1250	1250			3WL1212-3□□37-□□□□		1	1 unit	1CA	91.000
	1600	1600			3WL1216-3□□37-□□□□		1	1 unit	1CA	91.000
	2000	2000			3WL1220-3□□37-□□□□		1	1 unit	1CA	91.000
	2500	2500			3WL1225-3□□37-□□□□		1	1 unit	1CA	102.000
	3200	3200			3WL1232-3□□37-□□□□		1	1 unit	1CA	113.000
	4000	4000			3WL1240-3□□37-□□□□		1	1 unit	1CA	121.000
With guide frames, connecting flanges										
I	630	630	66		3WL1106-3□□38-□□□□		1	1 unit	1CA	70.000
	800	800			3WL1108-3□□38-□□□□		1	1 unit	1CA	70.000
	1000	1000			3WL1110-3□□38-□□□□		1	1 unit	1CA	70.000
	1250	1250			3WL1112-3□□38-□□□□		1	1 unit	1CA	70.000
	1600	1600			3WL1116-3□□38-□□□□		1	1 unit	1CA	70.000
	2000	2000			3WL1120-3□□38-□□□□		1	1 unit	1CA	70.000
II	800	800	80		3WL1208-3□□38-□□□□		1	1 unit	1CA	91.000
	1000	1000			3WL1210-3□□38-□□□□		1	1 unit	1CA	91.000
	1250	1250			3WL1212-3□□38-□□□□		1	1 unit	1CA	91.000
	1600	1600			3WL1216-3□□38-□□□□		1	1 unit	1CA	91.000
	2000	2000			3WL1220-3□□38-□□□□		1	1 unit	1CA	91.000
	2500	2500			3WL1225-3□□38-□□□□		1	1 unit	1CA	102.000
	3200	3200			3WL1232-3□□38-□□□□		1	1 unit	1CA	113.000

Options				Additional price
Non-automatic air circuit breakers[3]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU15B: Protection functions LI	**BB**		✓
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[4]	**EB**		✓
	ETU45B: Protection functions LSIN[4] with 4-line display	**FB**		✓
	ETU76B: Protection functions LSIN[4] with graphics display	**NB**		✓
	Versions with ground-fault protection			
	ETU27B: Protection functions LS-ING[5]	**DG**		✓
	ETU45B: Protection functions LS-ING[4)6)]	**EG**		✓
	ETU45B: Protection functions LSING[4)6)] with 4-line display	**FG**		✓
	ETU76B: Protection functions LS-ING[4)6)] with graphics display	**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) Z options which are installed on the guide frame are not available.

3) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

4) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58.

5) Current transformers for protection of the N conductor are to be ordered separately, see page 1/58.

6) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

* You can order this quantity or a multiple thereof.

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Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	**I_{cu} 85/100 kA at 500 V, high breaking capacity H** (H) Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Without guide frames[2] (for guide frames, see pages 1/52 to 1/57)										
I	630	630	85		3WL1106-4□□35-□□□□		1	1 unit	1CA	45.000
	800	800			3WL1108-4□□35-□□□□		1	1 unit	1CA	45.000
	1000	1000			3WL1110-4□□35-□□□□		1	1 unit	1CA	45.000
	1250	1250			3WL1112-4□□35-□□□□		1	1 unit	1CA	45.000
	1600	1600			3WL1116-4□□35-□□□□		1	1 unit	1CA	45.000
	2000	2000			3WL1120-4□□35-□□□□		1	1 unit	1CA	45.000
II	800	800	100		3WL1208-4□□35-□□□□		1	1 unit	1CA	60.000
	1000	1000			3WL1210-4□□35-□□□□		1	1 unit	1CA	60.000
	1250	1250			3WL1212-4□□35-□□□□		1	1 unit	1CA	60.000
	1600	1600			3WL1216-4□□35-□□□□		1	1 unit	1CA	60.000
	2000	2000			3WL1220-4□□35-□□□□		1	1 unit	1CA	60.000
	2500	2500			3WL1225-4□□35-□□□□		1	1 unit	1CA	63.000
	3200	3200			3WL1232-4□□35-□□□□		1	1 unit	1CA	68.000
NEW	4000	4000			3WL1240-4□□35-□□□□		1	1 unit	1CA	71.000
III	4000	4000	100		3WL1340-4□□35-□□□□		1	1 unit	1CA	88.000
	5000	5000			3WL1350-4□□35-□□□□		1	1 unit	1CA	88.000
	6300	6300			3WL1363-4□□35-□□□□		1	1 unit	1CA	96.000
With guide frames, horizontal main circuit connection										
I	630	630	85		3WL1106-4□□36-□□□□		1	1 unit	1CA	70.000
	800	800			3WL1108-4□□36-□□□□		1	1 unit	1CA	70.000
	1000	1000			3WL1110-4□□36-□□□□		1	1 unit	1CA	70.000
	1250	1250			3WL1112-4□□36-□□□□		1	1 unit	1CA	70.000
	1600	1600			3WL1116-4□□36-□□□□		1	1 unit	1CA	70.000
	2000	2000			3WL1120-4□□36-□□□□		1	1 unit	1CA	70.000
II	800	800	100		3WL1208-4□□36-□□□□		1	1 unit	1CA	91.000
	1000	1000			3WL1210-4□□36-□□□□		1	1 unit	1CA	91.000
	1250	1250			3WL1212-4□□36-□□□□		1	1 unit	1CA	91.000
	1600	1600			3WL1216-4□□36-□□□□		1	1 unit	1CA	91.000
	2000	2000			3WL1220-4□□36-□□□□		1	1 unit	1CA	91.000
	2500	2500			3WL1225-4□□36-□□□□		1	1 unit	1CA	102.000
	3200	3200			3WL1232-4□□36-□□□□		1	1 unit	1CA	113.000
III	4000	4000	100		3WL1340-4□□36-□□□□		1	1 unit	1CA	148.000
	5000	5000			3WL1350-4□□36-□□□□		1	1 unit	1CA	148.000

Options					Additional price
Non-automatic air circuit breakers[3]	Without Electronic Trip Units	**AA**			**None**
Electronic Trip Units	**Versions without ground-fault protection**				
	ETU15B: Protection functions LI[7]	**BB**			✓
	ETU25B: Protection functions LSI	**CB**			✓
	ETU45B: Protection functions LSIN[4]	**EB**			✓
	ETU45B: Protection functions LSIN[4] with 4-line display	**FB**			✓
	ETU76B: Protection functions LSIN[4] with graphics display	**NB**			✓
	Versions with ground-fault protection				
	ETU27B: Protection functions LSING[5]	**DG**			✓
	ETU45B: Protection functions LSING[4][6]	**EG**			✓
	ETU45B: Protection functions LSING[4][6] with 4-line display	**FG**			✓
	ETU76B: Protection functions LSING[4][6] with graphics display	**NG**			✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO			**1AA2**	**None**
	For further Article No. supplements, see page 1/44				

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) Z options which are installed on the guide frame are not available.

3) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

4) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58.

5) Current transformers for protection of the N conductor are to be ordered separately, see page 1/58.

6) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

7) ETU15B cannot be used with 3WL1 circuit breakers, size III.

*** You can order this quantity or a multiple thereof.**

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3-pole, withdrawable versions

Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	I_{cu} 85/100 kA at 500 V, high breaking capacity H (H) Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
With guide frames, vertical main circuit connection										
I	630	630	85		3WL1106-4□□37-□□□□		1	1 unit	1CA	70.000
	800	800			3WL1108-4□□37-□□□□		1	1 unit	1CA	70.000
	1000	1000			3WL1110-4□□37-□□□□		1	1 unit	1CA	70.000
	1250	1250			3WL1112-4□□37-□□□□		1	1 unit	1CA	70.000
	1600	1600			3WL1116-4□□37-□□□□		1	1 unit	1CA	70.000
	2000	2000			3WL1120-4□□37-□□□□		1	1 unit	1CA	70.000
II	800	800	100		3WL1208-4□□37-□□□□		1	1 unit	1CA	91.000
	1000	1000			3WL1210-4□□37-□□□□		1	1 unit	1CA	91.000
	1250	1250			3WL1212-4□□37-□□□□		1	1 unit	1CA	91.000
	1600	1600			3WL1216-4□□37-□□□□		1	1 unit	1CA	91.000
	2000	2000			3WL1220-4□□37-□□□□		1	1 unit	1CA	91.000
	2500	2500			3WL1225-4□□37-□□□□		1	1 unit	1CA	102.000
	3200	3200			3WL1232-4□□37-□□□□		1	1 unit	1CA	113.000
	4000	4000			3WL1240-4□□37-□□□□		1	1 unit	1CA	121.000
III	4000	4000	100		3WL1340-4□□37-□□□□		1	1 unit	1CA	148.000
	5000	5000			3WL1350-4□□37-□□□□		1	1 unit	1CA	148.000
	6300	6300			3WL1363-4□□37-□□□□		1	1 unit	1CA	166.000
With guide frames, connecting flanges										
I	630	630	85		3WL1106-4□□38-□□□□		1	1 unit	1CA	70.000
	800	800			3WL1108-4□□38-□□□□		1	1 unit	1CA	70.000
	1000	1000			3WL1110-4□□38-□□□□		1	1 unit	1CA	70.000
	1250	1250			3WL1112-4□□38-□□□□		1	1 unit	1CA	70.000
	1600	1600			3WL1116-4□□38-□□□□		1	1 unit	1CA	70.000
	2000	2000			3WL1120-4□□38-□□□□		1	1 unit	1CA	70.000
II	800	800	100		3WL1208-4□□38-□□□□		1	1 unit	1CA	91.000
	1000	1000			3WL1210-4□□38-□□□□		1	1 unit	1CA	91.000
	1250	1250			3WL1212-4□□38-□□□□		1	1 unit	1CA	91.000
	1600	1600			3WL1216-4□□38-□□□□		1	1 unit	1CA	91.000
	2000	2000			3WL1220-4□□38-□□□□		1	1 unit	1CA	91.000
	2500	2500			3WL1225-4□□38-□□□□		1	1 unit	1CA	102.000
	3200	3200			3WL1232-4□□38-□□□□		1	1 unit	1CA	113.000
III	4000	4000	100		3WL1340-4□□38-□□□□		1	1 unit	1CA	148.000

Options					Additional price
Non-automatic air circuit breakers[3]	Without Electronic Trip Units	**AA**			**None**
Electronic Trip Units	**Versions without ground-fault protection**				
	ETU15B: Protection functions LI[7]	**BB**			✓
	ETU25B: Protection functions LSI	**CB**			✓
	ETU45B: Protection functions LSIN[4]	**EB**			✓
	ETU45B: Protection functions LSIN[4] with 4-line display	**FB**			✓
	ETU76B: Protection functions LSIN[4] with graphics display	**NB**			✓
	Versions with ground-fault protection				
	ETU27B: Protection functions LSING[5]	**DG**			✓
	ETU45B: Protection functions LSING[4][6]	**EG**			✓
	ETU45B: Protection functions LSING[4][6] with 4-line display	**FG**			✓
	ETU76B: Protection functions LSING[4][6] with graphics display	**NG**			✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO			**1AA2**	**None**
	For further Article No. supplements, see page 1/44				

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) Z options which are installed on the guide frame are not available.

3) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

4) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58.

5) Current transformers for protection of the N conductor are to be ordered separately, see page 1/58.

6) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

7) ETU15B cannot be used with 3WL1 circuit breakers, size III.

* You can order this quantity or a multiple thereof.

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Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	**I_{cu} 130/150 kA at 500 V, very high breaking capacity C** Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Without guide frames[2] (for guide frames, see pages 1/52 to 1/57)										
II	1600	1600	130		3WL1216-5□□35-□□□□		1	1 unit	1CA	69.000
	2000	2000			3WL1220-5□□35-□□□□		1	1 unit	1CA	69.000
	2500	2500			3WL1225-5□□35-□□□□		1	1 unit	1CA	69.000
	3200	3200			3WL1232-5□□35-□□□□		1	1 unit	1CA	69.000
III	4000	4000	150		3WL1340-5□□35-□□□□		1	1 unit	1CA	88.000
	5000	5000			3WL1350-5□□35-□□□□		1	1 unit	1CA	88.000
	6300	6300			3WL1363-5□□35-□□□□		1	1 unit	1CA	96.000
With guide frames, horizontal main circuit connection										
II	1600	1600	130		3WL1216-5□□36-□□□□		1	1 unit	1CA	123.000
	2000	2000			3WL1220-5□□36-□□□□		1	1 unit	1CA	123.000
	2500	2500			3WL1225-5□□36-□□□□		1	1 unit	1CA	123.000
	3200	3200			3WL1232-5□□36-□□□□		1	1 unit	1CA	123.000
III	4000	4000	150		3WL1340-5□□36-□□□□		1	1 unit	1CA	148.000
	5000	5000			3WL1350-5□□36-□□□□		1	1 unit	1CA	148.000
With guide frames, vertical main circuit connection										
II	1600	1600	130		3WL1216-5□□37-□□□□		1	1 unit	1CA	123.000
	2000	2000			3WL1220-5□□37-□□□□		1	1 unit	1CA	123.000
	2500	2500			3WL1225-5□□37-□□□□		1	1 unit	1CA	123.000
	3200	3200			3WL1232-5□□37-□□□□		1	1 unit	1CA	123.000
III	4000	4000	150		3WL1340-5□□37-□□□□		1	1 unit	1CA	148.000
	5000	5000			3WL1350-5□□37-□□□□		1	1 unit	1CA	148.000
	6300	6300			3WL1363-5□□37-□□□□		1	1 unit	1CA	166.000

Options				Additional price
Non-automatic air circuit breakers[3]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU15B: Protection functions LI[4]	**BB**		✓
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[5]	**EB**		✓
	ETU45B: Protection functions LSIN[5] with 4-line display	**FB**		✓
	ETU76B: Protection functions LSIN[5] with graphics display	**NB**		✓
	Versions with ground-fault protection			
	ETU27B: Protection functions LSING[6]	**DG**		✓
	ETU45B: Protection functions LSING[5)7)]	**EG**		✓
	ETU45B: Protection functions LSING[5)7)] with 4-line display	**FG**		✓
	ETU76B: Protection functions LSING[5)7)] with graphics display	**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) Z options which are installed on the guide frame are not available.

3) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

4) ETU15B cannot be used with 3WL1 circuit breakers, size III.

5) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58.

6) Current transformers for protection of the N conductor are to be ordered separately, see page 1/58.

7) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

*** You can order this quantity or a multiple thereof.**

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1

4-pole, fixed-mounted versions

Selection and ordering data

Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	I_{cu} 55/66 kA at 500 V, ECO breaking capacity N (N)		PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
					Article No. www.siemens.com/product?Article No.	Basic price per PU				
	A	A	kA							kg
Horizontal main circuit connection										
I	630	630	55		3WL1106-2□□42-□□□□		1	1 unit	1CA	50.000
	800	800			3WL1108-2□□42-□□□□		1	1 unit	1CA	50.000
	1000	1000			3WL1110-2□□42-□□□□		1	1 unit	1CA	50.000
	1250	1250			3WL1112-2□□42-□□□□		1	1 unit	1CA	50.000
	1600	1600			3WL1116-2□□42-□□□□		1	1 unit	1CA	50.000
	2000	2000			3WL1120-2□□42-□□□□		1	1 unit	1CA	50.000
II	800	800	66		3WL1208-2□□42-□□□□		1	1 unit	1CA	67.000
	1000	1000			3WL1210-2□□42-□□□□		1	1 unit	1CA	67.000
	1250	1250			3WL1212-2□□42-□□□□		1	1 unit	1CA	67.000
	1600	1600			3WL1216-2□□42-□□□□		1	1 unit	1CA	67.000
	2000	2000			3WL1220-2□□42-□□□□		1	1 unit	1CA	67.000
	2500	2500			3WL1225-2□□42-□□□□		1	1 unit	1CA	71.000
	3200	3200			3WL1232-2□□42-□□□□		1	1 unit	1CA	77.000
Vertical main circuit connection										
I	630	630	55		3WL1106-2□□41-□□□□		1	1 unit	1CA	50.000
	800	800			3WL1108-2□□41-□□□□		1	1 unit	1CA	50.000
	1000	1000			3WL1110-2□□41-□□□□		1	1 unit	1CA	50.000
	1250	1250			3WL1112-2□□41-□□□□		1	1 unit	1CA	50.000
	1600	1600			3WL1116-2□□41-□□□□		1	1 unit	1CA	50.000
	2000	2000			3WL1120-2□□41-□□□□		1	1 unit	1CA	50.000
II	800	800	66		3WL1208-2□□41-□□□□		1	1 unit	1CA	75.000
	1000	1000			3WL1210-2□□41-□□□□		1	1 unit	1CA	75.000
	1250	1250			3WL1212-2□□41-□□□□		1	1 unit	1CA	75.000
	1600	1600			3WL1216-2□□41-□□□□		1	1 unit	1CA	75.000
	2000	2000			3WL1220-2□□41-□□□□		1	1 unit	1CA	67.000
	2500	2500			3WL1225-2□□41-□□□□		1	1 unit	1CA	71.000
	3200	3200			3WL1232-2□□41-□□□□		1	1 unit	1CA	77.000
	4000	4000			3WL1240-2□□41-□□□□		1	1 unit	1CA	103.000

Options				Additional price
Non-automatic air circuit breakers[2]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU15B: Protection functions LI	**BB**		✓
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[3]	**EB**		✓
	ETU45B: Protection functions LSIN[3] with 4-line display	**FB**		✓
	ETU76B: Protection functions LSIN[3] with graphics display	**NB**		✓
	Versions with ground-fault protection			
	ETU27B: Protection functions LS-ING[3]	**DG**		✓
	ETU45B: Protection functions LS-ING[3][4]	**EG**		✓
	ETU45B: Protection functions LSING[3][4] with 4-line display	**FG**		✓
	ETU76B: Protection functions LS-ING[3][4] with graphics display	**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

3) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58. The internal current transformers for N-conductors can be ordered by adding the supplement "–Z" and the order code "F23", see page 1/47.

4) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

* You can order this quantity or a multiple thereof.

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4-pole, fixed-mounted versions

Size	Max. rated circuit breaker current $I_{n\ max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	I_{cu} 55/66 kA at 500 V, ECO breaking capacity N (N)		PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
					Article No. www.siemens.com/product?Article No.	Basic price per PU				
	A	A	kA							kg
Front main circuit connection, single hole										
I	630	630	55		3WL1106-2□□43-□□□□		1	1 unit	1CA	50.000
	800	800			3WL1108-2□□43-□□□□		1	1 unit	1CA	50.000
	1000	1000			3WL1110-2□□43-□□□□		1	1 unit	1CA	50.000
	1250	1250			3WL1112-2□□43-□□□□		1	1 unit	1CA	50.000
	1600	1600			3WL1116-2□□43-□□□□		1	1 unit	1CA	50.000
II	800	800	66		3WL1208-2□□43-□□□□		1	1 unit	1CA	67.000
	1000	1000			3WL1210-2□□43-□□□□		1	1 unit	1CA	67.000
	1250	1250			3WL1212-2□□43-□□□□		1	1 unit	1CA	67.000
	1600	1600			3WL1216-2□□43-□□□□		1	1 unit	1CA	67.000
	2000	2000			3WL1220-2□□43-□□□□		1	1 unit	1CA	67.000
	2500	2500			3WL1225-2□□43-□□□□		1	1 unit	1CA	71.000
	3200	3200			3WL1232-2□□43-□□□□		1	1 unit	1CA	77.000
Front main circuit connection, double hole										
I	630	630	55		3WL1106-2□□44-□□□□		1	1 unit	1CA	50.000
	800	800			3WL1108-2□□44-□□□□		1	1 unit	1CA	50.000
	1000	1000			3WL1110-2□□44-□□□□		1	1 unit	1CA	50.000
	1250	1250			3WL1112-2□□44-□□□□		1	1 unit	1CA	50.000
	1600	1600			3WL1116-2□□44-□□□□		1	1 unit	1CA	50.000
	2000	2000			3WL1120-2□□44-□□□□		1	1 unit	1CA	50.000
II	800	800	66		3WL1208-2□□44-□□□□		1	1 unit	1CA	67.000
	1000	1000			3WL1210-2□□44-□□□□		1	1 unit	1CA	67.000
	1250	1250			3WL1212-2□□44-□□□□		1	1 unit	1CA	67.000
	1600	1600			3WL1216-2□□44-□□□□		1	1 unit	1CA	67.000
	2000	2000			3WL1220-2□□44-□□□□		1	1 unit	1CA	67.000
	2500	2500			3WL1225-2□□44-□□□□		1	1 unit	1CA	71.000
	3200	3200			3WL1232-2□□44-□□□□		1	1 unit	1CA	77.000

Options				Additional price
Non-automatic air circuit breakers[2]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU15B: Protection functions LI	**BB**		✓
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[3]	**EB**		✓
	ETU45B: Protection functions LSIN[3] with 4-line display	**FB**		✓
	ETU76B: Protection functions LSIN[3] with graphics display	**NB**		✓
	Versions with ground-fault protection			
	ETU27B: Protection functions LSING[3]	**DG**		✓
	ETU45B: Protection functions LSING[3][4]	**EG**		✓
	ETU45B: Protection functions LSING[3][4] with 4-line display	**FG**		✓
	ETU76B: Protection functions LSING[3][4] with graphics display	**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

3) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58. The internal current transformers for N-conductors can be ordered by adding the supplement "–Z" and the order code "F23", see page 1/47.

4) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

*** You can order this quantity or a multiple thereof.**

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4-pole, fixed-mounted versions

Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	I_{cu} 66/80 kA at 500 V, standard breaking capacity S (S) Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Horizontal main circuit connection										
I	630	630	66		3WL1106-3□□42-□□□□		1	1 unit	1CA	50.000
	800	800			3WL1108-3□□42-□□□□		1	1 unit	1CA	50.000
	1000	1000			3WL1110-3□□42-□□□□		1	1 unit	1CA	50.000
	1250	1250			3WL1112-3□□42-□□□□		1	1 unit	1CA	50.000
	1600	1600			3WL1116-3□□42-□□□□		1	1 unit	1CA	50.000
	2000	2000			3WL1120-3□□42-□□□□		1	1 unit	1CA	50.000
II	800	800	80		3WL1208-3□□42-□□□□		1	1 unit	1CA	67.000
	1000	1000			3WL1210-3□□42-□□□□		1	1 unit	1CA	67.000
	1250	1250			3WL1212-3□□42-□□□□		1	1 unit	1CA	67.000
	1600	1600			3WL1216-3□□42-□□□□		1	1 unit	1CA	67.000
	2000	2000			3WL1220-3□□42-□□□□		1	1 unit	1CA	67.000
	2500	2500			3WL1225-3□□42-□□□□		1	1 unit	1CA	71.000
	3200	3200			3WL1232-3□□42-□□□□		1	1 unit	1CA	77.000
Vertical main circuit connection										
I	630	630	66		3WL1106-3□□41-□□□□		1	1 unit	1CA	50.000
	800	800			3WL1108-3□□41-□□□□		1	1 unit	1CA	50.000
	1000	1000			3WL1110-3□□41-□□□□		1	1 unit	1CA	50.000
	1250	1250			3WL1112-3□□41-□□□□		1	1 unit	1CA	50.000
	1600	1600			3WL1116-3□□41-□□□□		1	1 unit	1CA	50.000
	2000	2000			3WL1120-3□□41-□□□□		1	1 unit	1CA	50.000
II	800	800	80		3WL1208-3□□41-□□□□		1	1 unit	1CA	67.000
	1000	1000			3WL1210-3□□41-□□□□		1	1 unit	1CA	67.000
	1250	1250			3WL1212-3□□41-□□□□		1	1 unit	1CA	67.000
	1600	1600			3WL1216-3□□41-□□□□		1	1 unit	1CA	67.000
	2000	2000			3WL1220-3□□41-□□□□		1	1 unit	1CA	67.000
	2500	2500			3WL1225-3□□41-□□□□		1	1 unit	1CA	71.000
	3200	3200			3WL1232-3□□41-□□□□		1	1 unit	1CA	77.000
	4000	4000			3WL1240-3□□41-□□□□		1	1 unit	1CA	103.000

Options				Additional price
Non-automatic air circuit breakers[2]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU15B: Protection functions LI	**BB**		✓
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[3]	**EB**		✓
	ETU45B: Protection functions LSIN[3] with 4-line display	**FB**		✓
	ETU76B: Protection functions LSIN[3] with graphics display	**NB**		✓
	Versions with ground-fault protection			
	ETU27B: Protection functions LSING[3]	**DG**		✓
	ETU45B: Protection functions LSING[3][4]	**EG**		✓
	ETU45B: Protection functions LSING[3][4] with 4-line display	**FG**		✓
	ETU76B: Protection functions LSING[3][4] with graphics display	**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

3) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58. The internal current transformers for N-conductors can be ordered by adding the supplement "–Z" and the order code "F23", see page 1/47.

4) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

* You can order this quantity or a multiple thereof.

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4-pole, fixed-mounted versions

Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	I_{cu} 66/80 kA at 500 V, standard breaking capacity S (S) — Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Front main circuit connection, single hole										
I	630	630	66		3WL1106-3□□43-□□□□		1	1 unit	1CA	50.000
	800	800			3WL1108-3□□43-□□□□		1	1 unit	1CA	50.000
	1000	1000			3WL1110-3□□43-□□□□		1	1 unit	1CA	50.000
	1250	1250			3WL1112-3□□43-□□□□		1	1 unit	1CA	50.000
	1600	1600			3WL1116-3□□43-□□□□		1	1 unit	1CA	50.000
II	800	800	80		3WL1208-3□□43-□□□□		1	1 unit	1CA	67.000
	1000	1000			3WL1210-3□□43-□□□□		1	1 unit	1CA	67.000
	1250	1250			3WL1212-3□□43-□□□□		1	1 unit	1CA	67.000
	1600	1600			3WL1216-3□□43-□□□□		1	1 unit	1CA	67.000
	2000	2000			3WL1220-3□□43-□□□□		1	1 unit	1CA	67.000
	2500	2500			3WL1225-3□□43-□□□□		1	1 unit	1CA	71.000
	3200	3200			3WL1232-3□□43-□□□□		1	1 unit	1CA	77.000
Front main circuit connection, double hole										
I	630	630	66		3WL1106-3□□44-□□□□		1	1 unit	1CA	50.000
	800	800			3WL1108-3□□44-□□□□		1	1 unit	1CA	50.000
	1000	1000			3WL1110-3□□44-□□□□		1	1 unit	1CA	50.000
	1250	1250			3WL1112-3□□44-□□□□		1	1 unit	1CA	50.000
	1600	1600			3WL1116-3□□44-□□□□		1	1 unit	1CA	50.000
	2000	2000			3WL1120-3□□44-□□□□		1	1 unit	1CA	50.000
II	800	800	80		3WL1208-3□□44-□□□□		1	1 unit	1CA	67.000
	1000	1000			3WL1210-3□□44-□□□□		1	1 unit	1CA	67.000
	1250	1250			3WL1212-3□□44-□□□□		1	1 unit	1CA	67.000
	1600	1600			3WL1216-3□□44-□□□□		1	1 unit	1CA	67.000
	2000	2000			3WL1220-3□□44-□□□□		1	1 unit	1CA	67.000
	2500	2500			3WL1225-3□□44-□□□□		1	1 unit	1CA	71.000
	3200	3200			3WL1232-3□□44-□□□□		1	1 unit	1CA	77.000

Options				Additional price
Non-automatic air circuit breakers[2]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU15B: Protection functions LI	**BB**		✓
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[3]	**EB**		✓
	ETU45B: Protection functions LSIN[3] with 4-line display	**FB**		✓
	ETU76B: Protection functions LSIN[3] with graphics display	**NB**		✓
	Versions with ground-fault protection			
	ETU27B: Protection functions LSING[3]	**DG**		✓
	ETU45B: Protection functions LSING[3][4]	**EG**		✓
	ETU45B: Protection functions LSING[3][4] with 4-line display	**FG**		✓
	ETU76B: Protection functions LSING[3][4] with graphics display	**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

3) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58. The internal current transformers for N-conductors can be ordered by adding the supplement "–Z" and the order code "F23", see page 1/47.

4) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

*** You can order this quantity or a multiple thereof.**

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4-pole, fixed-mounted versions

Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	I_{cu} 85/100 kA at 500 V, high breaking capacity H (H) Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Horizontal main circuit connection										
I	630	630	85		3WL1106-4□□42-□□□□		1	1 unit	1CA	50.000
	800	800			3WL1108-4□□42-□□□□		1	1 unit	1CA	50.000
	1000	1000			3WL1110-4□□42-□□□□		1	1 unit	1CA	50.000
	1250	1250			3WL1112-4□□42-□□□□		1	1 unit	1CA	50.000
	1600	1600			3WL1116-4□□42-□□□□		1	1 unit	1CA	50.000
	2000	2000			3WL1120-4□□42-□□□□		1	1 unit	1CA	50.000
II	800	800	100		3WL1208-4□□42-□□□□		1	1 unit	1CA	67.000
	1000	1000			3WL1210-4□□42-□□□□		1	1 unit	1CA	67.000
	1250	1250			3WL1212-4□□42-□□□□		1	1 unit	1CA	67.000
	1600	1600			3WL1216-4□□42-□□□□		1	1 unit	1CA	67.000
	2000	2000			3WL1220-4□□42-□□□□		1	1 unit	1CA	67.000
	2500	2500			3WL1225-4□□42-□□□□		1	1 unit	1CA	71.000
	3200	3200			3WL1232-4□□42-□□□□		1	1 unit	1CA	77.000
III	4000	4000	100		3WL1340-4□□42-□□□□		1	1 unit	1CA	99.000
	5000	5000			3WL1350-4□□42-□□□□		1	1 unit	1CA	99.000
Vertical main circuit connection										
I	630	630	85		3WL1106-4□□41-□□□□		1	1 unit	1CA	50.000
	800	800			3WL1108-4□□41-□□□□		1	1 unit	1CA	50.000
	1000	1000			3WL1110-4□□41-□□□□		1	1 unit	1CA	50.000
	1250	1250			3WL1112-4□□41-□□□□		1	1 unit	1CA	50.000
	1600	1600			3WL1116-4□□41-□□□□		1	1 unit	1CA	50.000
	2000	2000			3WL1120-4□□41-□□□□		1	1 unit	1CA	50.000
II	800	800	100		3WL1208-4□□41-□□□□		1	1 unit	1CA	67.000
	1000	1000			3WL1210-4□□41-□□□□		1	1 unit	1CA	67.000
	1250	1250			3WL1212-4□□41-□□□□		1	1 unit	1CA	67.000
	1600	1600			3WL1216-4□□41-□□□□		1	1 unit	1CA	67.000
	2000	2000			3WL1220-4□□41-□□□□		1	1 unit	1CA	67.000
	2500	2500			3WL1225-4□□41-□□□□		1	1 unit	1CA	71.000
	3200	3200			3WL1232-4□□41-□□□□		1	1 unit	1CA	77.000
	4000	4000			3WL1240-4□□41-□□□□		1	1 unit	1CA	103.000
III	4000	4000	100		3WL1340-4□□41-□□□□		1	1 unit	1CA	99.000
	5000	5000			3WL1350-4□□41-□□□□		1	1 unit	1CA	99.000
	6300	6300			3WL1363-4□□41-□□□□		1	1 unit	1CA	108.000

Options				Additional price
Non-automatic air circuit breakers[2]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU15B: Protection functions LI[5]	**BB**		✓
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[3]	**EB**		✓
	ETU45B: Protection functions LSIN[3] with 4-line display	**FB**		✓
	ETU76B: Protection functions LSIN[3] with graphics display	**NB**		✓
	Versions with ground-fault protection			
	ETU27B: Protection functions LSING[3]	**DG**		✓
	ETU45B: Protection functions LSING[3][4]	**EG**		✓
	ETU45B: Protection functions LSING[3][4] with 4-line display	**FG**		✓
	ETU76B: Protection functions LSING[3][4] with graphics display	**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

3) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58. The internal current transformers for N-conductors can be ordered by adding the supplement "–Z" and the order code "F23", see page 1/47.

4) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

5) ETU15B cannot be used with 3WL1 circuit breakers, size III.

* You can order this quantity or a multiple thereof.

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4-pole, fixed-mounted versions

Size	Max. rated circuit breaker current $I_{n\ max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	I_{cu} 85/100 kA at 500 V, high breaking capacity H (H) Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Front main circuit connection, single hole										
II	800	800	100		3WL1208-4□□43-□□□□		1	1 unit	1CA	67.000
	1000	1000			3WL1210-4□□43-□□□□		1	1 unit	1CA	67.000
	1250	1250			3WL1212-4□□43-□□□□		1	1 unit	1CA	67.000
	1600	1600			3WL1216-4□□43-□□□□		1	1 unit	1CA	67.000
	2000	2000			3WL1220-4□□43-□□□□		1	1 unit	1CA	67.000
	2500	2500			3WL1225-4□□43-□□□□		1	1 unit	1CA	71.000
	3200	3200			3WL1232-4□□43-□□□□		1	1 unit	1CA	77.000
III	4000	4000	100		3WL1340-4□□43-□□□□		1	1 unit	1CA	99.000
Front main circuit connection, double hole										
I	630	630	85		3WL1106-4□□44-□□□□		1	1 unit	1CA	50.000
	800	800			3WL1108-4□□44-□□□□		1	1 unit	1CA	50.000
	1000	1000			3WL1110-4□□44-□□□□		1	1 unit	1CA	50.000
	1250	1250			3WL1112-4□□44-□□□□		1	1 unit	1CA	50.000
	1600	1600			3WL1116-4□□44-□□□□		1	1 unit	1CA	50.000
	2000	2000			3WL1120-4□□44-□□□□		1	1 unit	1CA	50.000
II	800	800	100		3WL1208-4□□44-□□□□		1	1 unit	1CA	67.000
	1000	1000			3WL1210-4□□44-□□□□		1	1 unit	1CA	67.000
	1250	1250			3WL1212-4□□44-□□□□		1	1 unit	1CA	67.000
	1600	1600			3WL1216-4□□44-□□□□		1	1 unit	1CA	67.000
	2000	2000			3WL1220-4□□44-□□□□		1	1 unit	1CA	67.000
	2500	2500			3WL1225-4□□44-□□□□		1	1 unit	1CA	71.000
	3200	3200			3WL1232-4□□44-□□□□		1	1 unit	1CA	77.000
III	4000	4000	100		3WL1340-4□□44-□□□□		1	1 unit	1CA	99.000

Options					Additional price
Non-automatic air circuit breakers[2]	Without Electronic Trip Units		**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**				
	ETU15B: Protection functions LI[5]		**BB**		✓
	ETU25B: Protection functions LSI		**CB**		✓
	ETU45B: Protection functions LSIN[3]		**EB**		✓
	ETU45B: Protection functions LSIN[3] with 4-line display		**FB**		✓
	ETU76B: Protection functions LSIN[3] with graphics display		**NB**		✓
	Versions with ground-fault protection				
	ETU27B: Protection functions LSING[3]		**DG**		✓
	ETU45B: Protection functions LSING[3][4]		**EG**		✓
	ETU45B: Protection functions LSING[3][4] with 4-line display		**FG**		✓
	ETU76B: Protection functions LSING[3][4] with graphics display		**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO			**1AA2**	**None**
	For further Article No. supplements, see page 1/44				

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

3) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58. The internal current transformers for N-conductors can be ordered by adding the supplement "–Z" and the order code "F23", see page 1/47.

4) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

5) ETU15B cannot be used with 3WL1 circuit breakers, size III.

*** You can order this quantity or a multiple thereof.**

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4-pole, fixed-mounted versions

Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	**I_{cu} 130/150 kA at 500 V, very high breaking capacity C** Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Horizontal main circuit connection										
II	1600	1600	130		**3WL1216-5□□42-□□□□**		1	1 unit	1CA	78.000
	2000	2000			**3WL1220-5□□42-□□□□**		1	1 unit	1CA	78.000
	2500	2500			**3WL1225-5□□42-□□□□**		1	1 unit	1CA	78.000
	3200	3200			**3WL1232-5□□42-□□□□**		1	1 unit	1CA	78.000
III	4000	4000	130		**3WL1340-5□□42-□□□□**		1	1 unit	1CA	99.000
	5000	5000			**3WL1350-5□□42-□□□□**		1	1 unit	1CA	99.000
Vertical main circuit connection										
II	1600	1600	130		**3WL1216-5□□41-□□□□**		1	1 unit	1CA	78.000
	2000	2000			**3WL1220-5□□41-□□□□**		1	1 unit	1CA	78.000
	2500	2500			**3WL1225-5□□41-□□□□**		1	1 unit	1CA	78.000
	3200	3200			**3WL1232-5□□41-□□□□**		1	1 unit	1CA	78.000
III	4000	4000	130		**3WL1340-5□□41-□□□□**		1	1 unit	1CA	99.000
	5000	5000			**3WL1350-5□□41-□□□□**		1	1 unit	1CA	99.000
	6300	6300			**3WL1363-5□□41-□□□□**		1	1 unit	1CA	108.000

Options				Additional price
Non-automatic air circuit breakers[2]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU15B: Protection functions LI[3]	**BB**		✓
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[4]	**EB**		✓
	ETU45B: Protection functions LSIN[4] with 4-line display	**FB**		✓
	ETU76B: Protection functions LSIN[4] with graphics display	**NB**		✓
	Versions with ground-fault protection			
	ETU27B: Protection functions LSING[4]	**DG**		✓
	ETU45B: Protection functions LSING[4][5]	**EG**		✓
	ETU45B: Protection functions LSING[4][5] with 4-line display	**FG**		✓
	ETU76B: Protection functions LSING[4][5] with graphics display	**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

3) ETU15B cannot be used with 3WL1 circuit breakers, size III.

4) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58. The internal current transformers for N-conductors can be ordered by adding the supplement "–Z" and the order code "F23", see page 1/47.

5) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

* You can order this quantity or a multiple thereof.

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Selection and ordering data

Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	I_{cu} 55/66 kA at 500 V, ECO breaking capacity N (N) Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Without guide frames[2] (for guide frames, see pages 1/52 to 1/57)										
I	630	630	55		3WL1106-2□□45-□□□□		1	1 unit	1CA	54.000
	800	800			3WL1108-2□□45-□□□□		1	1 unit	1CA	54.000
	1000	1000			3WL1110-2□□45-□□□□		1	1 unit	1CA	54.000
	1250	1250			3WL1112-2□□45-□□□□		1	1 unit	1CA	54.000
	1600	1600			3WL1116-2□□45-□□□□		1	1 unit	1CA	54.000
	2000	2000			3WL1120-2□□45-□□□□		1	1 unit	1CA	54.000
II	800	800	66		3WL1208-2□□45-□□□□		1	1 unit	1CA	75.000
	1000	1000			3WL1210-2□□45-□□□□		1	1 unit	1CA	75.000
	1250	1250			3WL1212-2□□45-□□□□		1	1 unit	1CA	75.000
	1600	1600			3WL1216-2□□45-□□□□		1	1 unit	1CA	75.000
	2000	2000			3WL1220-2□□45-□□□□		1	1 unit	1CA	72.000
	2500	2500			3WL1225-2□□45-□□□□		1	1 unit	1CA	76.000
	3200	3200			3WL1232-2□□45-□□□□		1	1 unit	1CA	82.000
NEW	4000	4000			3WL1240-2□□45-□□□□		1	1 unit	1CA	84.000
With guide frames, horizontal main circuit connection										
I	630	630	55		3WL1106-2□□46-□□□□		1	1 unit	1CA	84.000
	800	800			3WL1108-2□□46-□□□□		1	1 unit	1CA	84.000
	1000	1000			3WL1110-2□□46-□□□□		1	1 unit	1CA	84.000
	1250	1250			3WL1112-2□□46-□□□□		1	1 unit	1CA	84.000
	1600	1600			3WL1116-2□□46-□□□□		1	1 unit	1CA	84.000
	2000	2000			3WL1120-2□□46-□□□□		1	1 unit	1CA	84.000
II	800	800	66		3WL1208-2□□46-□□□□		1	1 unit	1CA	109.000
	1000	1000			3WL1210-2□□46-□□□□		1	1 unit	1CA	109.000
	1250	1250			3WL1212-2□□46-□□□□		1	1 unit	1CA	109.000
	1600	1600			3WL1216-2□□46-□□□□		1	1 unit	1CA	109.000
	2000	2000			3WL1220-2□□46-□□□□		1	1 unit	1CA	109.000
	2500	2500			3WL1225-2□□46-□□□□		1	1 unit	1CA	123.000
	3200	3200			3WL1232-2□□46-□□□□		1	1 unit	1CA	136.000

Options					Additional price
Non-automatic air circuit breakers[3]	Without Electronic Trip Units		**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**				
	ETU15B: Protection functions LI		**BB**		✓
	ETU25B: Protection functions LSI		**CB**		✓
	ETU45B: Protection functions LSIN[4]		**EB**		✓
	ETU45B: Protection functions LSIN[4] with 4-line display		**FB**		✓
	ETU76B: Protection functions LSIN[4] with graphics display		**NB**		✓
	Versions with ground-fault protection				
	ETU27B: Protection functions LSING[4]		**DG**		✓
	ETU45B: Protection functions LSING[4][5]		**EG**		✓
	ETU45B: Protection functions LSING[4][5] with 4-line display		**FG**		✓
	ETU76B: Protection functions LSING[4][5] with graphics display		**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO			**1AA2**	**None**
	For further Article No. supplements, see page 1/44				

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) Z options which are installed on the guide frame are not available.

3) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

4) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58. The internal current transformers for N-conductors can be ordered by adding the supplement "–Z" and the order code "F23", see page 1/47.

5) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

*** You can order this quantity or a multiple thereof.**

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4-pole, withdrawable versions

Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	I_{cu} 55/66 kA at 500 V, ECO breaking capacity N (N) Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
With guide frames, vertical main circuit connection										
I	630	630	55		3WL1106-2□□47-□□□□		1	1 unit	1CA	84.000
	800	800			3WL1108-2□□47-□□□□		1	1 unit	1CA	84.000
	1000	1000			3WL1110-2□□47-□□□□		1	1 unit	1CA	84.000
	1250	1250			3WL1112-2□□47-□□□□		1	1 unit	1CA	84.000
	1600	1600			3WL1116-2□□47-□□□□		1	1 unit	1CA	84.000
	2000	2000			3WL1120-2□□47-□□□□		1	1 unit	1CA	84.000
II	800	800	66		3WL1208-2□□47-□□□□		1	1 unit	1CA	109.000
	1000	1000			3WL1210-2□□47-□□□□		1	1 unit	1CA	109.000
	1250	1250			3WL1212-2□□47-□□□□		1	1 unit	1CA	109.000
	1600	1600			3WL1216-2□□47-□□□□		1	1 unit	1CA	109.000
	2000	2000			3WL1220-2□□47-□□□□		1	1 unit	1CA	109.000
	2500	2500			3WL1225-2□□47-□□□□		1	1 unit	1CA	123.000
	3200	3200			3WL1232-2□□47-□□□□		1	1 unit	1CA	136.000
	4000	4000			3WL1240-2□□47-□□□□		1	1 unit	1CA	146.000
With guide frames, connecting flanges										
I	630	630	55		3WL1106-2□□48-□□□□		1	1 unit	1CA	84.000
	800	800			3WL1108-2□□48-□□□□		1	1 unit	1CA	84.000
	1000	1000			3WL1110-2□□48-□□□□		1	1 unit	1CA	84.000
	1250	1250			3WL1112-2□□48-□□□□		1	1 unit	1CA	84.000
	1600	1600			3WL1116-2□□48-□□□□		1	1 unit	1CA	84.000
	2000	2000			3WL1120-2□□48-□□□□		1	1 unit	1CA	84.000
II	800	800	66		3WL1208-2□□48-□□□□		1	1 unit	1CA	109.000
	1000	1000			3WL1210-2□□48-□□□□		1	1 unit	1CA	109.000
	1250	1250			3WL1212-2□□48-□□□□		1	1 unit	1CA	109.000
	1600	1600			3WL1216-2□□48-□□□□		1	1 unit	1CA	109.000
	2000	2000			3WL1220-2□□48-□□□□		1	1 unit	1CA	109.000
	2500	2500			3WL1225-2□□48-□□□□		1	1 unit	1CA	123.000
	3200	3200			3WL1232-2□□48-□□□□		1	1 unit	1CA	136.000

Options				Additional price
Non-automatic air circuit breakers[3]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU15B: Protection functions LI	**BB**		✓
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[4]	**EB**		✓
	ETU45B: Protection functions LSIN[4] with 4-line display	**FB**		✓
	ETU76B: Protection functions LSIN[4] with graphics display	**NB**		✓
	Versions with ground-fault protection			
	ETU27B: Protection functions LSING[4]	**DG**		✓
	ETU45B: Protection functions LSING[4][5]	**EG**		✓
	ETU45B: Protection functions LSING[4][5] with 4-line display	**FG**		✓
	ETU76B: Protection functions LSING[4][5] with graphics display	**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) Z options which are installed on the guide frame are not available.

3) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

4) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58. The internal current transformers for N-conductors can be ordered by adding the supplement "–Z" and the order code "F23", see page 1/47.

5) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

* You can order this quantity or a multiple thereof.

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4-pole, withdrawable versions

Size	Max. rated circuit breaker current $I_{n\ max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	I_{cu} 66/80 kA at 500 V, standard breaking capacity S (S) — Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Without guide frames[2] (for guide frames, see pages 1/52 to 1/57)										
I	630	630	66		3WL1106-3□□45-□□□□		1	1 unit	1CA	54.000
	800	800			3WL1108-3□□45-□□□□		1	1 unit	1CA	54.000
	1000	1000			3WL1110-3□□45-□□□□		1	1 unit	1CA	54.000
	1250	1250			3WL1112-3□□45-□□□□		1	1 unit	1CA	54.000
	1600	1600			3WL1116-3□□45-□□□□		1	1 unit	1CA	54.000
	2000	2000			3WL1120-3□□45-□□□□		1	1 unit	1CA	54.000
II	800	800	80		3WL1208-3□□45-□□□□		1	1 unit	1CA	72.000
	1000	1000			3WL1210-3□□45-□□□□		1	1 unit	1CA	72.000
	1250	1250			3WL1212-3□□45-□□□□		1	1 unit	1CA	72.000
	1600	1600			3WL1216-3□□45-□□□□		1	1 unit	1CA	72.000
	2000	2000			3WL1220-3□□45-□□□□		1	1 unit	1CA	72.000
	2500	2500			3WL1225-3□□45-□□□□		1	1 unit	1CA	76.000
	3200	3200			3WL1232-3□□45-□□□□		1	1 unit	1CA	82.000
NEW	4000	4000			3WL1240-3□□45-□□□□		1	1 unit	1CA	84.000
With guide frames, horizontal main circuit connection										
I	630	630	66		3WL1106-3□□46-□□□□		1	1 unit	1CA	84.000
	800	800			3WL1108-3□□46-□□□□		1	1 unit	1CA	84.000
	1000	1000			3WL1110-3□□46-□□□□		1	1 unit	1CA	84.000
	1250	1250			3WL1112-3□□46-□□□□		1	1 unit	1CA	84.000
	1600	1600			3WL1116-3□□46-□□□□		1	1 unit	1CA	84.000
	2000	2000			3WL1120-3□□46-□□□□		1	1 unit	1CA	84.000
II	800	800	80		3WL1208-3□□46-□□□□		1	1 unit	1CA	109.000
	1000	1000			3WL1210-3□□46-□□□□		1	1 unit	1CA	109.000
	1250	1250			3WL1212-3□□46-□□□□		1	1 unit	1CA	109.000
	1600	1600			3WL1216-3□□46-□□□□		1	1 unit	1CA	109.000
	2000	2000			3WL1220-3□□46-□□□□		1	1 unit	1CA	109.000
	2500	2500			3WL1225-3□□46-□□□□		1	1 unit	1CA	123.000
	3200	3200			3WL1232-3□□46-□□□□		1	1 unit	1CA	136.000

Options				Additional price
Non-automatic air circuit breakers[3]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU15B: Protection functions LI	**BB**		✓
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[4]	**EB**		✓
	ETU45B: Protection functions LSIN[4] with 4-line display	**FB**		✓
	ETU76B: Protection functions LSIN[4] with graphics display	**NB**		✓
	Versions with ground-fault protection			
	ETU27B: Protection functions LSING[4]	**DG**		✓
	ETU45B: Protection functions LSING[4][5]	**EG**		✓
	ETU45B: Protection functions LSING[4][5] with 4-line display	**FG**		✓
	ETU76B: Protection functions LSING[4][5] with graphics display	**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) Z options which are installed on the guide frame are not available.

3) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

4) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58. The internal current transformers for N-conductors can be ordered by adding the supplement "–Z" and the order code "F23", see page 1/47.

5) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

*** You can order this quantity or a multiple thereof.**

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4-pole, withdrawable versions

Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	I_{cu} 66/80 kA at 500 V, standard breaking capacity S (S) Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
With guide frames, vertical main circuit connection										
I	630	630	66		3WL1106-3□□47-□□□□		1	1 unit	1CA	84.000
	800	800			3WL1108-3□□47-□□□□		1	1 unit	1CA	84.000
	1000	1000			3WL1110-3□□47-□□□□		1	1 unit	1CA	84.000
	1250	1250			3WL1112-3□□47-□□□□		1	1 unit	1CA	84.000
	1600	1600			3WL1116-3□□47-□□□□		1	1 unit	1CA	84.000
	2000	2000			3WL1120-3□□47-□□□□		1	1 unit	1CA	84.000
II	800	800	80		3WL1208-3□□47-□□□□		1	1 unit	1CA	109.000
	1000	1000			3WL1210-3□□47-□□□□		1	1 unit	1CA	109.000
	1250	1250			3WL1212-3□□47-□□□□		1	1 unit	1CA	109.000
	1600	1600			3WL1216-3□□47-□□□□		1	1 unit	1CA	109.000
	2000	2000			3WL1220-3□□47-□□□□		1	1 unit	1CA	109.000
	2500	2500			3WL1225-3□□47-□□□□		1	1 unit	1CA	123.000
	3200	3200			3WL1232-3□□47-□□□□		1	1 unit	1CA	136.000
	4000	4000			3WL1240-3□□47-□□□□		1	1 unit	1CA	146.000
With guide frames, connecting flanges										
I	630	630	66		3WL1106-3□□48-□□□□		1	1 unit	1CA	84.000
	800	800			3WL1108-3□□48-□□□□		1	1 unit	1CA	84.000
	1000	1000			3WL1110-3□□48-□□□□		1	1 unit	1CA	84.000
	1250	1250			3WL1112-3□□48-□□□□		1	1 unit	1CA	84.000
	1600	1600			3WL1116-3□□48-□□□□		1	1 unit	1CA	84.000
	2000	2000			3WL1120-3□□48-□□□□		1	1 unit	1CA	84.000
II	800	800	80		3WL1208-3□□48-□□□□		1	1 unit	1CA	109.000
	1000	1000			3WL1210-3□□48-□□□□		1	1 unit	1CA	109.000
	1250	1250			3WL1212-3□□48-□□□□		1	1 unit	1CA	109.000
	1600	1600			3WL1216-3□□48-□□□□		1	1 unit	1CA	109.000
	2000	2000			3WL1220-3□□48-□□□□		1	1 unit	1CA	109.000
	2500	2500			3WL1225-3□□48-□□□□		1	1 unit	1CA	123.000
	3200	3200			3WL1232-3□□48-□□□□		1	1 unit	1CA	136.000

Options				Additional price
Non-automatic air circuit breakers[3]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU15B: Protection functions LI	**BB**		✓
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[4]	**EB**		✓
	ETU45B: Protection functions LSIN[4] with 4-line display	**FB**		✓
	ETU76B: Protection functions LSIN[4] with graphics display	**NB**		✓
	Versions with ground-fault protection			
	ETU27B: Protection functions LSING[4]	**DG**		✓
	ETU45B: Protection functions LSING[4][5]	**EG**		✓
	ETU45B: Protection functions LSING[4][5] with 4-line display	**FG**		✓
	ETU76B: Protection functions LSING[4][5] with graphics display	**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) Z options which are installed on the guide frame are not available.

3) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

4) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58. The internal current transformers for N-conductors can be ordered by adding the supplement "–Z" and the order code "F23", see page 1/47.

5) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

* You can order this quantity or a multiple thereof.

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4-pole, withdrawable versions

Size	Max. rated circuit breaker current $I_{n\ max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	I_{cu} 85/100 kA at 500 V, high breaking capacity H (H) Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Without guide frames[2] (for guide frames, see pages 1/52 to 1/57)										
I	630	630	85		3WL1106-4□□45-□□□□		1	1 unit	1CA	54.000
	800	800			3WL1108-4□□45-□□□□		1	1 unit	1CA	54.000
	1000	1000			3WL1110-4□□45-□□□□		1	1 unit	1CA	54.000
	1250	1250			3WL1112-4□□45-□□□□		1	1 unit	1CA	54.000
	1600	1600			3WL1116-4□□45-□□□□		1	1 unit	1CA	54.000
	2000	2000			3WL1120-4□□45-□□□□		1	1 unit	1CA	54.000
II	800	800	100		3WL1208-4□□45-□□□□		1	1 unit	1CA	72.000
	1000	1000			3WL1210-4□□45-□□□□		1	1 unit	1CA	72.000
	1250	1250			3WL1212-4□□45-□□□□		1	1 unit	1CA	72.000
	1600	1600			3WL1216-4□□45-□□□□		1	1 unit	1CA	72.000
	2000	2000			3WL1220-4□□45-□□□□		1	1 unit	1CA	72.000
	2500	2500			3WL1225-4□□45-□□□□		1	1 unit	1CA	76.000
	3200	3200			3WL1232-4□□45-□□□□		1	1 unit	1CA	82.000
NEW	4000	4000			3WL1240-4□□45-□□□□		1	1 unit	1CA	84.000
III	4000	4000	100		3WL1340-4□□45-□□□□		1	1 unit	1CA	106.000
	5000	5000			3WL1350-4□□45-□□□□		1	1 unit	1CA	106.000
	6300	6300			3WL1363-4□□45-□□□□		1	1 unit	1CA	108.000
With guide frames, horizontal main circuit connection										
I	630	630	85		3WL1106-4□□46-□□□□		1	1 unit	1CA	84.000
	800	800			3WL1108-4□□46-□□□□		1	1 unit	1CA	84.000
	1000	1000			3WL1110-4□□46-□□□□		1	1 unit	1CA	84.000
	1250	1250			3WL1112-4□□46-□□□□		1	1 unit	1CA	84.000
	1600	1600			3WL1116-4□□46-□□□□		1	1 unit	1CA	84.000
	2000	2000			3WL1120-4□□46-□□□□		1	1 unit	1CA	84.000
II	800	800	100		3WL1208-4□□46-□□□□		1	1 unit	1CA	109.000
	1000	1000			3WL1210-4□□46-□□□□		1	1 unit	1CA	109.000
	1250	1250			3WL1212-4□□46-□□□□		1	1 unit	1CA	109.000
	1600	1600			3WL1216-4□□46-□□□□		1	1 unit	1CA	109.000
	2000	2000			3WL1220-4□□46-□□□□		1	1 unit	1CA	109.000
	2500	2500			3WL1225-4□□46-□□□□		1	1 unit	1CA	123.000
	3200	3200			3WL1232-4□□46-□□□□		1	1 unit	1CA	136.000
III	4000	4000	100		3WL1340-4□□46-□□□□		1	1 unit	1CA	190.000
	5000	5000			3WL1350-4□□46-□□□□		1	1 unit	1CA	190.000

Options					Additional price
Non-automatic air circuit breakers[3]	Without Electronic Trip Units	**AA**			**None**
Electronic Trip Units	**Versions without ground-fault protection**				
	ETU15B: Protection functions LI[6]	**BB**			✓
	ETU25B: Protection functions LSI	**CB**			✓
	ETU45B: Protection functions LSIN[4]	**EB**			✓
	ETU45B: Protection functions LSIN[4] with 4-line display	**FB**			✓
	ETU76B: Protection functions LSIN[4] with graphics display	**NB**			✓
	Versions with ground-fault protection				
	ETU27B: Protection functions LSING[4]	**DG**			✓
	ETU45B: Protection functions LSING[4)5)]	**EG**			✓
	ETU45B: Protection functions LSING[4)5)] with 4-line display	**FG**			✓
	ETU76B: Protection functions LSING[4)5)] with graphics display	**NG**			✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO			**1AA2**	**None**
	For further Article No. supplements, see page 1/44				

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) Z options which are installed on the guide frame are not available.

3) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

4) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58. The internal current transformers for N-conductors can be ordered by adding the supplement "–Z" and the order code "F23", see page 1/47.

5) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

6) ETU15B cannot be used with 3WL1 circuit breakers, size III.

*** You can order this quantity or a multiple thereof.**

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4-pole, withdrawable versions

Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	I_{cu} 85/100 kA at 500 V, high breaking capacity H (H) — Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
With guide frames, vertical main circuit connection										
I	630	630	85		3WL1106-4□□47-□□□□		1	1 unit	1CA	84.000
	800	800			3WL1108-4□□47-□□□□		1	1 unit	1CA	84.000
	1000	1000			3WL1110-4□□47-□□□□		1	1 unit	1CA	84.000
	1250	1250			3WL1112-4□□47-□□□□		1	1 unit	1CA	84.000
	1600	1600			3WL1116-4□□47-□□□□		1	1 unit	1CA	84.000
	2000	2000			3WL1120-4□□47-□□□□		1	1 unit	1CA	84.000
II	800	800	100		3WL1208-4□□47-□□□□		1	1 unit	1CA	109.000
	1000	1000			3WL1210-4□□47-□□□□		1	1 unit	1CA	109.000
	1250	1250			3WL1212-4□□47-□□□□		1	1 unit	1CA	109.000
	1600	1600			3WL1216-4□□47-□□□□		1	1 unit	1CA	109.000
	2000	2000			3WL1220-4□□47-□□□□		1	1 unit	1CA	109.000
	2500	2500			3WL1225-4□□47-□□□□		1	1 unit	1CA	123.000
	3200	3200			3WL1232-4□□47-□□□□		1	1 unit	1CA	136.000
	4000	4000			3WL1240-4□□47-□□□□		1	1 unit	1CA	146.000
III	4000	4000	100		3WL1340-4□□47-□□□□		1	1 unit	1CA	190.000
	5000	5000			3WL1350-4□□47-□□□□		1	1 unit	1CA	190.000
	6300	6300			3WL1363-4□□47-□□□□		1	1 unit	1CA	227.000
With guide frames, connecting flanges										
I	630	630	85		3WL1106-4□□48-□□□□		1	1 unit	1CA	84.000
	800	800			3WL1108-4□□48-□□□□		1	1 unit	1CA	84.000
	1000	1000			3WL1110-4□□48-□□□□		1	1 unit	1CA	84.000
	1250	1250			3WL1112-4□□48-□□□□		1	1 unit	1CA	84.000
	1600	1600			3WL1116-4□□48-□□□□		1	1 unit	1CA	84.000
	2000	2000			3WL1120-4□□48-□□□□		1	1 unit	1CA	84.000
II	800	800	100		3WL1208-4□□48-□□□□		1	1 unit	1CA	109.000
	1000	1000			3WL1210-4□□48-□□□□		1	1 unit	1CA	109.000
	1250	1250			3WL1212-4□□48-□□□□		1	1 unit	1CA	109.000
	1600	1600			3WL1216-4□□48-□□□□		1	1 unit	1CA	109.000
	2000	2000			3WL1220-4□□48-□□□□		1	1 unit	1CA	109.000
	2500	2500			3WL1225-4□□48-□□□□		1	1 unit	1CA	123.000
	3200	3200			3WL1232-4□□48-□□□□		1	1 unit	1CA	136.000
III	4000	4000	100		3WL1340-4□□48-□□□□		1	1 unit	1CA	190.000

Options				Additional price
Non-automatic air circuit breakers[3]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU15B: Protection functions LI[6]	**BB**		✓
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[4]	**EB**		✓
	ETU45B: Protection functions LSIN[4] with 4-line display	**FB**		✓
	ETU76B: Protection functions LSIN[4] with graphics display	**NB**		✓
	Versions with ground-fault protection			
	ETU27B: Protection functions LSING[4]	**DG**		✓
	ETU45B: Protection functions LSING[4][5]	**EG**		✓
	ETU45B: Protection functions LSING[4][5] with 4-line display	**FG**		✓
	ETU76B: Protection functions LSING[4][5] with graphics display	**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) Z options which are installed on the guide frame are not available.

3) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

4) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58. The internal current transformers for N-conductors can be ordered by adding the supplement "–Z" and the order code "F23", see page 1/47.

5) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

6) ETU15B cannot be used with 3WL1 circuit breakers, size III.

* You can order this quantity or a multiple thereof.

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Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity $I_{cu} = I_{cs}$	DT	I_{cu} 130/150 kA at 500 V, very high breaking capacity C Ⓒ Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Without guide frames[2] (for guide frames, see pages 1/52 to 1/57)										
II	1600	1600	130		3WL1216-5□□45-□□□□		1	1 unit	1CA	83.000
	2000	2000			3WL1220-5□□45-□□□□		1	1 unit	1CA	83.000
	2500	2500			3WL1225-5□□45-□□□□		1	1 unit	1CA	83.000
	3200	3200			3WL1232-5□□45-□□□□		1	1 unit	1CA	83.000
III	4000	4000	130		3WL1340-5□□45-□□□□		1	1 unit	1CA	115.000
	5000	5000			3WL1350-5□□45-□□□□		1	1 unit	1CA	106.000
	6300	6300			3WL1363-5□□45-□□□□		1	1 unit	1CA	108.000
With guide frames, horizontal main circuit connection										
II	1600	1600	130		3WL1216-5□□46-□□□□		1	1 unit	1CA	148.000
	2000	2000			3WL1220-5□□46-□□□□		1	1 unit	1CA	148.000
	2500	2500			3WL1225-5□□46-□□□□		1	1 unit	1CA	148.000
	3200	3200			3WL1232-5□□46-□□□□		1	1 unit	1CA	148.000
III	4000	4000	130		3WL1340-5□□46-□□□□		1	1 unit	1CA	190.000
	5000	5000			3WL1350-5□□46-□□□□		1	1 unit	1CA	190.000
With guide frames, vertical main circuit connection										
II	1600	1600	130		3WL1216-5□□47-□□□□		1	1 unit	1CA	148.000
	2000	2000			3WL1220-5□□47-□□□□		1	1 unit	1CA	148.000
	2500	2500			3WL1225-5□□47-□□□□		1	1 unit	1CA	148.000
	3200	3200			3WL1232-5□□47-□□□□		1	1 unit	1CA	148.000
III	4000	4000	130		3WL1340-5□□47-□□□□		1	1 unit	1CA	190.000
	5000	5000			3WL1350-5□□47-□□□□		1	1 unit	1CA	190.000
	6300	6300			3WL1363-5□□47-□□□□		1	1 unit	1CA	227.000

Options					Additional price
Non-automatic air circuit breakers[3]	Without Electronic Trip Units		**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**				
	ETU15B: Protection functions LI[4]		**BB**		✓
	ETU25B: Protection functions LSI		**CB**		✓
	ETU45B: Protection functions LSIN[5]		**EB**		✓
	ETU45B: Protection functions LSIN[5] with 4-line display		**FB**		✓
	ETU76B: Protection functions LSIN[5] with graphics display		**NB**		✓
	Versions with ground-fault protection				
	ETU27B: Protection functions LSING[5]		**DG**		✓
	ETU45B: Protection functions LSING[5][6]		**EG**		✓
	ETU45B: Protection functions LSING[5][6] with 4-line display		**FG**		✓
	ETU76B: Protection functions LSING[5][6] with graphics display		**NG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO			**1AA2**	**None**
	For further Article No. supplements, see page 1/44				

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code, see page 1/45.

2) Z options which are installed on the guide frame are not available.

3) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see page 1/13.

4) ETU15B cannot be used with 3WL1 circuit breakers, size III.

5) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/58. The internal current transformers for N-conductors can be ordered by adding the supplement "–Z" and the order code "F23", see page 1/47.

6) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/58.

*** You can order this quantity or a multiple thereof.**

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Options

Selection and ordering data

				Article No. supplement 3WL1...-.....- □□□□	Additional price
Operating mechanisms					
Manual operating mechanism with mechanical closing				1	**None**
Manual operating mechanism with mechanical and electrical closing, closing coil suitable for uninterrupted duty, 100 % OP					
50/60 Hz V AC	V DC				
110	110 ... 125			2	✓
230	220			3	✓
Manual/motorized operating mechanism with mechanical and electrical closing, closing coil suitable for uninterrupted duty, 100 % OP					
Motor		Closing solenoid			
50/60 Hz V AC	V DC	50/60 Hz V AC	V DC		
208 ... 240	220 ... 250	230	220	4	✓
110 ... 127	110 ... 125	110	110 ... 125	5	✓
--	24	--	24	6	✓
Note					
To order different voltages for motorized operating mechanism and closing solenoid or closing coil for synchronization purposes: "1" at the 13th digit of the Article No. and order codes, see page 1/46.					
1st auxiliary release					
Type	Condition	U_s 50/60 Hz V AC	U_s V DC		
Without 1st auxiliary release	--	--	--	A	**None**
Shunt release suitable for uninterrupted duty, 100 % OP	Operating range 0.85 ... 1.1 × U_s	--	24	B	✓
		--	30	C	✓
		--	48	D	✓
		--	60	E	✓
		110 ... 127	110 ... 125	F	✓
		208 ... 240	220 ... 250	G	✓
2nd auxiliary release					
Type	Condition	U_s 50/60 Hz V AC	U_s V DC		
Without 2nd auxiliary release	--	--	--	A	**None**
Shunt release suitable for uninterrupted duty, 100 % OP	Operating range 0.85 ... 1.1 × U_s	--	24	B	✓
		--	30	C	✓
		--	48	D	✓
		--	60	E	✓
		110 ... 127	110 ... 125	F	✓
		208 ... 240	220 ... 250	G	✓
Undervoltage release, instantaneous (≤ 80 ms), short-delay (≤ 200 ms)	Operating range 0.85 ... 1.1 × U_s	--	24	J	✓
		--	30	K	✓
		--	48	L	✓
		--	60	U	✓
		110 ... 127	110 ... 125	M	✓
		208 ... 240	220 ... 250	N	✓
		380 ... 415	--	P	✓
Undervoltage release, can be delayed between 0.2 s and 3.2 s	Operating range 0.85 ... 1.1 × U_s	--	48	Q	✓
		110 ... 127	110 ... 125	R	✓
		208 ... 240	220 ... 250	S	✓
		380 ... 415	--	T	✓
Auxiliary switches					
1st auxiliary switch block					
2 NO + 2 NC				2	**None**
1st + 2nd auxiliary switch block					
4 NO + 4 NC				4	✓
6 NO + 2 NC				7	✓
5 NO + 3 NC				8	✓

✓ Additional price

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Add "**-Z**" to the complete Article No. and indicate the appropriate order code(s).			**3WL....-.....-....-Z** ☐☐☐ **+...+...**	Additional price	
Operating manuals					
Printed version	French/Italian		**A 1 1**		✓
	Spanish/Portuguese		**A 1 2**		✓
Rated voltage 1000 V AC and 690 V IT networks				Additional price 3-pole	Additional price 4-pole
Conditions	Size	Rated current I_n			
Only for circuit breakers with high breaking capacity H (8th digit of the Article No. is a "4"). Cannot be combined with rated voltage 1150 V AC order code "A15".	I[1)]	Up to 2000 A	**A 0 5**	✓	✓
	II[1)2)]	Up to 2000 A	**A 0 5**	✓	✓
		2500 A	**A 0 5**	✓	✓
		3200 A	**A 0 5**	✓	✓
	III[1)3)]	4000 A	**A 0 5**	✓	✓
		5000 A	**A 0 5**	✓	✓
		6300 A	**A 0 5**	✓	✓
Rated voltage 1150 V AC					
Conditions	Size	Rated current I_n			
Only for circuit breakers with high breaking capacity H (8th digit of the Article No. is a "4"). Cannot be combined with rated voltage 1000 V AC order code "A05".	II[2)]	Up to 2000 A	**A 1 5**	✓	✓
		2500 A	**A 1 5**	✓	✓
		3200 A	**A 1 5**	✓	✓
		4000 A	**A 1 5**	✓	✓
Note					
For size III select a circuit breaker with very high breaking capacity C, which can be used as standard up to 1150 V AC.					
Rated voltage 690 V AC (+ 20 %)					
Conditions	Size	Rated current I_n			
Only for 3WL11 circuit breakers, size I, with high breaking capacity H (8th digit of the Article No. is a "4").	I	Up to 2000 A	**A 1 6**	✓	✓
Tinned version of the customer's connections on the guide frame[4)5)]					
Conditions	Size				
Only for circuit breakers in withdrawable version with horizontal connection or flange connection. The normal delivery time increases to 15 work days.	I		**A 0 8**	✓	✓
	II		**A 0 8**	✓	✓
	III		**A 0 8**	✓	✓
Special packaging (moisture protection)				Additional price	
Special packaging for extended technical requirements					
Cardboard packaging with water-repellent coating on corrugated cardboard (moisture protection)			**A 6 1**	✓	
Rating plugs				Additional price	
Conditions	Size	Rated current I_nA			
Only one module is possible per circuit breaker (not in conjunction with Electronic Trip Unit ETU15B). As standard the Electronic Trip Units are equipped with a rating plug which is equal to the maximum rated current circuit breaker ($I_{n\,max}$). The rated current of the selected rating plug must be smaller than $I_{n\,max}$.	I, II	250	**B 0 2**	None	
		315	**B 0 3**	None	
		400	**B 0 4**	None	
		500	**B 0 5**	None	
		630	**B 0 6**	None	
		800	**B 0 8**	None	
		1000	**B 1 0**	None	
	I, II, III	1250	**B 1 2**	None	
		1600	**B 1 6**	None	
		2000	**B 2 0**	None	
	II, III	2500	**B 2 5**	None	
		3200	**B 3 2**	None	
		4000	**B 4 0**	None	
	III	5000	**B 5 0**	None	
		6300	**B 6 3**	None	

✓ Additional price

1) If ordering withdrawable circuit breaker and guide frame separately, specify order code "A05" for withdrawable circuit breaker and guide frame.

2) Not possible for circuit breakers with very high breaking capacity C.

3) Not necessary for circuit breakers with very high breaking capacity C as these circuit breakers can be used as standard up to 1150 V AC.

4) Front connections are tinned as standard.

5) The permissible temperature-rise limits according to IEC 60947-2 are 5 K lower for a tin surface than for a silver surface.

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Options

| | | |

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				Add "-Z" to the complete Article No. and indicate the appropriate order code(s).	3WL....-.....-....-Z □□□ +...+...	Additional price
Interlocks, covers, position signaling switches (for fixed-mounted version)						
Mutual mechanical interlockings (interlocking module with Bowden wire 2 m)	Fixed-mounted circuit breakers				S 5 5	✓
Interlocks, covers, position signaling switches (for withdrawable version)						
Mutual mechanical interlockings (interlocking module with Bowden wire 2 m)	Version					
	For withdrawable circuit breakers with guide frame				R 5 5	✓
	For guide frames				R 5 6	✓
	For withdrawable circuit breakers				R 5 7	✓
Arc chute covers Not available for - 1000 V version (order code "A05") - DC version - 4000 A size II - 1150 V version (order code "A15") - 130 kA version, size II - 150 kA version, size III	Number of poles	Size				
	3-pole	I			R 1 0	✓
		II			R 1 0	✓
		III			R 1 0	✓
	4-pole	I			R 1 0	✓
		II			R 1 0	✓
		III			R 1 0	✓
Shutters 2-part lockable with padlocks[1]	Number of poles	Size				
	3-pole	I			R 2 1	✓
		II			R 2 1	✓
		III			R 2 1	✓
	4-pole	I			R 2 1	✓
		II			R 2 1	✓
		III			R 2 1	✓
Position signaling switches for guide frames	Connected position	Test position	Disconnected position			
	1 CO	1 CO	1 CO		R 1 5	✓
	3 CO	2 CO	1 CO		R 1 6	✓
Communication and measurement functions						
Breaker status sensor (BSS)					F 0 1	✓
PROFIBUS-DP communications interface[2]	Including COM15 and breaker status sensor (BSS)				F 0 2	✓
MODBUS-RTU communications interface[2]	Including COM16 and breaker status sensor (BSS)				F 1 2	✓
Measurement function *Plus* (without PROFIBUS/MODBUS communications interface)[3]					F 0 5	✓
Overload and short-circuit protection for neutral conductors						
Internal current transformer for N conductor Only possible with 4-pole circuit breakers with ETU27B to ETU76B	Size					
	I				F 2 3	✓
	II				F 2 3	✓
	III				F 2 3	✓
EMC filters						
EMC filters • Common-mode interference suppressor filters (e.g. in IT networks, caused by frequency converters) • Insertion loss (asymmetric) in the range 40 kHz to 10 MHz >40 dB.					F 3 1	✓

✓ Additional price

1) Padlocks not included in scope of supply.

2) If ordering the withdrawable circuit breaker and guide frame separately, specify order code "F02" or "F12" for the withdrawable circuit breaker only.

3) Additional voltage transformers are required for connection of the *Plus* measurement function, see page 1/67.

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Options

		Add "-Z" to the complete Article No. and indicate the appropriate order code(s).	3WL....-.....-....-Z □□□ +...+...	Additional price
Locking devices (for fixed-mounted versions and withdrawable versions)				
Locking devices against unauthorized closing, in the operator panels The disconnector unit fulfills the requirements for main circuit breakers according to EN 60204-1	Version			
	Made by CES	S 0 1		✓
	Made by IKON	S 0 3		✓
	Assembly kit FORTRESS or Castell[1]	S 0 5		✓
	Assembly kit for padlocks[2]	S 0 7		✓
	Made by Ronis	S 0 8		✓
	Made by Profalux	S 0 9		✓
EMERGENCY-STOP pushbuttons	Mushroom pushbutton instead of the mechanical OFF pushbutton	S 2 4		✓
Locking devices for operating mechanism handles with padlock[2]		S 3 3		✓
Locking devices (for withdrawable version)				
Locking devices against unauthorized closing, for withdrawable circuit breakers The disconnector unit fulfills the requirements for main circuit breakers acc. to EN 60204-1, consisting of a lock in the cabinet door, active in the connected position, function is retained when circuit breaker is replaced. Not possible in combination with order codes "R81", "R85" or "R86".	Version			
	Made by CES	R 6 1		✓
	Made by Ronis	R 6 8		✓
	Made by Profalux	R 6 0		✓
Locking devices to prevent movement of the withdrawable circuit breakers Safety lock for mounting on the circuit breaker	Version			
	Made by CES	S 7 1		✓
	Made by Profalux	S 7 5		✓
	Made by Ronis	S 7 6		✓
Locking mechanisms (for fixed-mounted versions)				
Locking devices Not possible in combination with order codes "R81", "R85" or "R86".	To prevent opening of the cabinet door in ON position	S 3 0		✓
Locking devices (for withdrawable version)				
Locking devices Not possible in combination with order codes "R81", "R85" or "R86".	Version			
	To prevent opening of the cabinet door in connected position	R 3 0		✓
	To prevent activation when the cabinet door is open[3][5]	R 4 0		✓
	To prevent movement with the cabinet door open[4]	R 5 0		✓
Locking mechanism to prevent movement of the withdrawable circuit breakers in disconnected position, consisting of Bowden wire and lock in the cabinet door Not possible in combination with order codes "R30", "R50", "R61", "R68" or "R60".	Version			
	Made by CES	R 8 1		✓
	Made by Ronis	R 8 5		✓
	Made by Profalux	R 8 6		✓
Connection methods for auxiliary conductors (for fixed-mounted and withdrawable versions)				
Connections for screwless terminals (tension spring)	Version			
	Fixed-mounted	N 6 1		✓
	Withdrawable	P 6 1		✓

✓ Additional price

1) Locks must be ordered from the manufacturer

2) Padlock not included in the scope of supply

3) Not available in combination with R50

4) Not available in combination with R40

5) Combination with R81, R85 and R86 on request

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Add "**-Z**" to the complete Article No. and indicate the appropriate order code(s).

3WL....-.....-....-Z
□□□ +...+...

For withdrawable circuit breakers with guide frames or for guide frames[1]							Additional price 3-pole	Additional price 4-pole
Note								
To select this connection method the 12th digit of the Article No. for the circuit breaker must be a "6".								
Connection methods for main connections	Size	Rated current I_n						
Top and bottom:[1] [2] accessible from front, single hole	I	Up to 1600 A	**P**	**0**	**0**		✓	✓
	II	Up to 2000 A	**P**	**0**	**0**		✓	✓
		Up to 2500 A	**P**	**0**	**0**		✓	✓
		Up to 3200 A	**P**	**0**	**0**		✓	✓
	III	Up to 4000 A	**P**	**0**	**0**		✓	✓
Connection methods for main connections	Size	Rated current I_n						
Top and bottom:[1] accessible from front, double hole	I	Up to 2000 A	**P**	**0**	**1**		✓	✓
	II	Up to 2000 A	**P**	**0**	**1**		✓	✓
		Up to 2500 A	**P**	**0**	**1**		✓	✓
		Up to 3200 A	**P**	**0**	**1**		✓	✓
	III	Up to 4000 A	**P**	**0**	**1**		✓	✓
Connection methods for main connections	Size	Rated current I_n						
Top:[1] [2] horizontal Bottom: accessible from front, single hole	I	Up to 1600 A	**P**	**0**	**7**		✓	✓
	II	Up to 2000 A	**P**	**0**	**7**		✓	✓
		Up to 2500 A	**P**	**0**	**7**		✓	✓
		Up to 3200 A	**P**	**0**	**7**		✓	✓
	III	Up to 4000 A	**P**	**0**	**7**		✓	✓
Connection methods for main connections	Size	Rated current I_n						
Top: vertical Bottom: horizontal	I	Up to 2000 A	**P**	**1**	**8**		✓	✓
	II	Up to 2000 A	**P**	**1**	**8**		✓	✓
		Up to 2500 A	**P**	**1**	**8**		✓	✓
		Up to 3200 A	**P**	**1**	**8**		✓	✓
	III	Up to 4000 A	**P**	**1**	**8**		✓	✓
		Up to 5000 A	**P**	**1**	**8**		✓	✓
Connection methods for main connections	Size	Rated current I_n						
Top:[1] connection flange Bottom: horizontal	I	Up to 2000 A	**P**	**1**	**9**		✓	✓
	II	Up to 2000 A	**P**	**1**	**9**		✓	✓
		Up to 2500 A	**P**	**1**	**9**		✓	✓
		Up to 3200 A	**P**	**1**	**9**		✓	✓
	III	Up to 4000 A	**P**	**1**	**9**		✓	✓
Connection methods for main connections	Size	Rated current I_n						
Top: horizontal Bottom: vertical	I	Up to 2000 A	**P**	**2**	**3**		✓	✓
	II	Up to 2000 A	**P**	**2**	**3**		✓	✓
		Up to 2500 A	**P**	**2**	**3**		✓	✓
		Up to 3200 A	**P**	**2**	**3**		✓	✓
	III	Up to 4000 A	**P**	**2**	**3**		✓	✓
		Up to 5000 A	**P**	**2**	**3**		✓	✓
Connection methods for main connections	Size	Rated current I_n						
Top:[1] horizontal Bottom: connecting flange	I	Up to 2000 A	**P**	**2**	**8**		✓	✓
	II	Up to 2000 A	**P**	**2**	**8**		✓	✓
		Up to 2500 A	**P**	**2**	**8**		✓	✓
		Up to 3200 A	**P**	**2**	**8**		✓	✓
	III	Up to 4000 A	**P**	**2**	**8**		✓	✓

✓ Additional price

1) Cannot be used for size II and III circuit breakers with very high breaking capacity C

2) Not for 3WL1 size I with high breaking capacity H

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Options

Add "**-Z**" to the complete Article No. and indicate the appropriate order code(s).

3WL....-.....-....-Z
□□□ **+...+...**

Additional price

For fixed-mounted circuit breakers						Additional price 3-pole	Additional price 4-pole
Note							
To select this connection method, the 12th digit of the Article No. for the circuit breaker must be a "2".							
Connection methods for main connections	Size	Rated current I_n					
Top:[1] horizontal Bottom: accessible from front, single hole	I	Up to 1600 A	**N**	**1**	**1**	✓	✓
	II	Up to 2000 A	**N**	**1**	**1**	✓	✓
		Up to 2500 A	**N**	**1**	**1**	✓	✓
		Up to 3200 A	**N**	**1**	**1**	✓	✓
	III[2]	Up to 4000 A	**N**	**1**	**1**	✓	✓
Connection methods for main connections	Size	Rated current I_n					
Top: vertical Bottom: horizontal	I	Up to 1600 A	**N**	**2**	**0**	✓	✓
		Up to 2000 A	**N**	**2**	**0**	✓	✓
	II	Up to 2000 A	**N**	**2**	**0**	✓	✓
		Up to 2500 A	**N**	**2**	**0**	✓	✓
		Up to 3200 A	**N**	**2**	**0**	✓	✓
	III	Up to 4000 A	**N**	**2**	**0**	✓	✓
		Up to 5000 A	**N**	**2**	**0**	✓	✓
Connection methods for main connections	Size	Rated current I_n					
Top: horizontal Bottom: vertical	I	Up to 1600 A	**N**	**2**	**4**	✓	✓
		Up to 2000 A	**N**	**2**	**4**	✓	✓
	II	Up to 2000 A	**N**	**2**	**4**	✓	✓
		Up to 2500 A	**N**	**2**	**4**	✓	✓
		Up to 3200 A	**N**	**2**	**4**	✓	✓
	III	Up to 4000 A	**N**	**2**	**4**	✓	✓
		Up to 5000 A	**N**	**2**	**4**	✓	✓

✓ Additional price

[1] Not for 3WL1 size I with high breaking capacity H and circuit breakers with very high breaking capacity C.

[2] Not for size III with very high breaking capacity C

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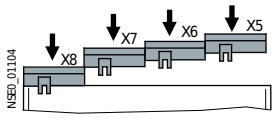
Overview

Determination of the number of auxiliary supply connectors required

This selection is only required if the guide frame is ordered under a separate Article No.



The required number of auxiliary supply connectors depends on the:
- Operating mechanism type
- Electronic Trip Unit with/without current transformer
- Type and number of auxiliary releases
- Number of auxiliary switches
- COM15/COM16 communication interface

		Number of auxiliary supply connectors	Terminal
a	**The first auxiliary supply connector X6 is always required.**	**1**	X6
b	**Operating mechanisms**		
b1	Manual operating mechanism with stored-energy feature with mechanical closing	**0**	
b2	Manual operating mechanism with stored-energy feature with mechanical and electrical closing	**0**	X6
b3	Manual/motorized operating mechanism with stored-energy feature with mechanical and electrical closing	**+1**	X5
c	**Electronic Trip Units**		
c1	Electronic Trip Units ETU15B, ETU25B, ETU27B	**0**	
c2	Electronic Trip Units ETU45B, ETU76B (internal Cubicle**BUS**)	**+1**	X8
	Connections for external current transformers for overload protection in the N conductor and ground-fault protection		
c3	Current transformer installed in the N conductor (required with 3-pole circuit breakers if c2 is not selected)	**+1**	X8
c4	Current transformer in the neutral point of the transformer (required if c2 or c3 is not selected)	**+1**	X8
d	**Auxiliary releases**		
d1	With/without 1st auxiliary release (shunt release F1)	**0**	X6
d2	2nd auxiliary release (shunt release F2, undervoltage release F3, delayable undervoltage release F4)	**+1**	X5
e	**Auxiliary switch blocks**		
e1	1st auxiliary switch block 2 NO + 2 NC	**0**	X6
e2	1st and 2nd auxiliary switch block 4 NO + 4 NC or 6 NO + 2 NC or 5 NO + 3 NC (required if b3 or d2 is not selected)	**+1**	X5
f	**Communication modules**		
f1	Without communication module COM15/COM16	**0**	
f2	With communication module COM15/COM16 – occupies the entire terminal strip X7, making the following options no longer possible: • Tripped signal switch S24 • Stored-energy status indication S21 • Electrical ON button S10 • Signaling switch on first and second auxiliary release S22 + S23	**+1**	X7
g	**Optional signals/accessories**		
g1	Tripped signaling switch S24 (only when f2 not selected)	**+1**	X7
g2	Stored-energy status indicator S21 (only when f2 not selected, required if g1 not selected)	**+1**	X7
g3	Electric ON button S10 (only when f2 not selected, required if g1 or g2 not selected)	**+1**	X7
g4	Signaling switch at first auxiliary release S22 (only when f2 not selected, required if g1, g2 or g3 not selected)	**+1**	X7
g5	Signaling switch at second auxiliary release S23 (only when f2 not selected, required if g1, g2, g3 or g4 not selected)	**+1**	X7
g6	Switch on ready-to-close signaling switch S20	**0**	X6
g7	Motor shutdown switch S12 (only if motorized operating mechanism selected)	**0**	X5
g8	Remote reset solenoid F7 (required if c2 not selected)	**+1**	X8
h	**Total number of auxiliary supply connectors**	**(max. 4)**	

For ordering the auxiliary supply connectors, see under "Accessories and spare parts, Guide frames for AC circuit breakers/ non-automatic air circuit breakers", page 1/52 to page 1/57 and under "Accessories and spare parts, Auxiliary conductor connections, Auxiliary supply connectors", page 1/63.

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Selection and ordering data

Guide frames for AC circuit breakers/non-automatic air circuit breakers

Size	Max. rated circuit breaker current $I_{n\ max.}$	Breaking capacity $I_{cu} = I_{cs}$	DT	Guide frames for 3-pole circuit breakers/ non-automatic air circuit breakers Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	kA							kg
Front main circuit connection, single hole									
I	1000	... 66		3WL9211-1AA□□-□□A1		1	1 unit	1CA	25.000
	1600	... 66		3WL9211-2AA□□-□□A1		1	1 unit	1CA	25.000
II	2000	... 100		3WL9212-3AA□□-□□A1		1	1 unit	1CA	31.000
	2500	... 100		3WL9212-4AA□□-□□A1		1	1 unit	1CA	39.000
	3200	... 100		3WL9212-5AA□□-□□A1		1	1 unit	1CA	45.000
III	4000	... 100		3WL9213-6AA□□-□□A1		1	1 unit	1CA	60.000
Front main circuit connection, double hole									
I	1000	... 66		3WL9211-1AB□□-□□A1		1	1 unit	1CA	25.000
	1600	... 66		3WL9211-2AB□□-□□A1		1	1 unit	1CA	25.000
	2000 [1]	... 85		3WL9211-3AB□□-□□A1		1	1 unit	1CA	25.000
II	2000	... 100		3WL9212-3AB□□-□□A1		1	1 unit	1CA	31.000
	2500	... 100		3WL9212-4AB□□-□□A1		1	1 unit	1CA	39.000
	3200	... 100		3WL9212-5AB□□-□□A1		1	1 unit	1CA	45.000
III	4000	... 100		3WL9213-6AB□□-□□A1		1	1 unit	1CA	60.000
Horizontal main circuit connection									
I	1000	... 66		3WL9211-1AC□□-□□A1		1	1 unit	1CA	25.000
	1600	... 66		3WL9211-2AC□□-□□A1		1	1 unit	1CA	25.000
	2000 [1]	... 85		3WL9211-3AC□□-□□A1		1	1 unit	1CA	25.000
II	2000	... 100		3WL9212-3AC□□-□□A1		1	1 unit	1CA	31.000
	2500	... 100		3WL9212-4AC□□-□□A1		1	1 unit	1CA	39.000
	3200	... 100		3WL9212-5AC□□-□□A1		1	1 unit	1CA	45.000
	3200	... 130		3WL9212-5AC□□-□□C1		1	1 unit	1CA	54.000
III	4000	... 100		3WL9213-6AC□□-□□A1		1	1 unit	1CA	60.000
	5000	... 100		3WL9213-7AC□□-□□A1		1	1 unit	1CA	60.000
	4000	... 150		3WL9213-6AC□□-□□C1		1	1 unit	1CA	63.000
	5000	... 150		3WL9213-7AC□□-□□C1		1	1 unit	1CA	63.000

Options							Additional price
Number of auxiliary supply connectors	None				**0**		**None**
	1 connector				**1**		✓
	2 connectors				**2**		✓
	3 connectors				**3**		✓
	4 connectors				**4**		✓
Note							
For required number of auxiliary supply connectors, see table on page 1/51.							
Type of auxiliary circuit connections	None				**0**		**None**
	With screw connection (SI-GUT, standard)				**1**		✓
	With screwless connection method (tension spring)				**2**		✓
Position signaling switches	None					**0**	**None**
	Option 1: Connected position 1 CO, test position 1 CO, disconnected position 1 CO					**1**	✓
	Option 2: Connected position 3 CO, test position 2 CO, disconnected position 1 CO					**2**	✓
Shutters	None						**A** **None**
	With shutter, 2-part, lockable	Size I					**B** ✓
		Size II					**B** ✓
		Size III					**B** ✓

✓ Additional price

[1] For 3WL1 air circuit breakers size I from 630 A to 2000 A with high breaking capacity H and 3WL1 air circuit breakers size I with rated current I_n = 2000 A.

* You can order this quantity or a multiple thereof.

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	Add "**-Z**" to the complete Article No. and indicate the appropriate order code(s).	**3WL921.-.....-....-Z** □ □ □			Additional price
Rated voltage 1000 V AC and 690 V IT networks					
Size I (breaking capacity H)		**A**	**0**	**5**	✓
Size II, except breaking capacity C and 4000 A (breaking capacity H)		**A**	**0**	**5**	✓
Size III, not necessary with circuit breakers with very high breaking capacity		**A**	**0**	**5**	✓
Rated voltage 1150 V AC					
Size II, except breaking capacity C and 4000 A (breaking capacity H)		**A**	**1**	**5**	✓
Rated voltage 690 V AC (+ 20 %)					
Size I (breaking capacity H)		**A**	**1**	**6**	✓
Tinned version of the customer's connections on guide frame[1)2)] **Only for guide frames with horizontal connection or flange connection**					
Size I		**A**	**0**	**8**	✓
Size II		**A**	**0**	**8**	✓
Size III		**A**	**0**	**8**	✓
Notes					
• For main circuit connection vertical and main circuit connecting flange, see the following page. • All other accessory parts must be ordered by specifying "-Z" and the corresponding order code, see page 1/45 to page 1/50.					

✓ Additional price

1) Front connections are tinned as standard.

2) The permissible temperature-rise limits according to IEC 60947-2 are 5 K lower for a tin surface than for a silver surface.

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Accessories and spare parts

Size	Max. rated circuit breaker current $I_{n\ max.}$	Breaking capacity $I_{cu} = I_{cs}$	DT	Guide frames for 3-pole circuit breakers/ non-automatic air circuit breakers Article No.: www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	kA							kg
Vertical main circuit connection									
I	1000	... 66		3WL9211-1AD□□-□□A1		1	1 unit	1CA	25.000
	1600	... 66		3WL9211-2AD□□-□□A1		1	1 unit	1CA	25.000
	2000[1)]	... 85		3WL9211-3AD□□-□□A1		1	1 unit	1CA	25.000
II	2000	... 100		3WL9212-3AD□□-□□A1		1	1 unit	1CA	31.000
	2500	... 100		3WL9212-4AD□□-□□A1		1	1 unit	1CA	39.000
	3200	... 100		3WL9212-5AD□□-□□A1		1	1 unit	1CA	45.000
	3200	... 130		3WL9212-5AD□□-□□C1		1	1 unit	1CA	54.000
NEW	4000	... 100		3WL9212-6AD□□-□□A1		1	1 unit	1CA	52.000
III	4000	... 100		3WL9213-6AD□□-□□A1		1	1 unit	1CA	60.000
	5000	... 100		3WL9213-7AD□□-□□A1		1	1 unit	1CA	60.000
	6300	... 100		3WL9213-8AD□□-□□A1		1	1 unit	1CA	70.000
	4000	... 150		3WL9213-6AD□□-□□C1		1	1 unit	1CA	63.000
	5000	... 150		3WL9213-7AD□□-□□C1		1	1 unit	1CA	63.000
	6300	... 150		3WL9213-8AD□□-□□C1		1	1 unit	1CA	74.000
Main circuit connection connecting flanges									
I	1000	... 66		3WL9211-1AE□□-□□A1		1	1 unit	1CA	25.000
	1600	... 66		3WL9211-2AE□□-□□A1		1	1 unit	1CA	25.000
	2000[1)]	... 85		3WL9211-3AE□□-□□A1		1	1 unit	1CA	25.000
II	2000	... 100		3WL9212-3AE□□-□□A1		1	1 unit	1CA	31.000
	2500	... 100		3WL9212-4AE□□-□□A1		1	1 unit	1CA	39.000
	3200	... 100		3WL9212-5AE□□-□□A1		1	1 unit	1CA	45.000
III	4000	... 100		3WL9213-6AE□□-□□A1		1	1 unit	1CA	60.000

Options							Additional price
Number of auxiliary supply connectors	None		0				**None**
	1 connector		1				✓
	2 connectors		2				✓
	3 connectors		3				✓
	4 connectors		4				✓
Note							
For required number of auxiliary supply connectors, see table on page 1/51.							
Type of auxiliary circuit connections	None			0			**None**
	With screw connection (SIGUT, standard)			1			✓
	With screwless connection method (tension spring)			2			✓
Position signaling switches	None				0		**None**
	Option 1: Connected position 1 CO, test position 1 CO, disconnected position 1 CO				1		✓
	Option 2: Connected position 3 CO, test position 2 CO, disconnected position 1 CO				2		✓
Shutters	None					A	**None**
	With shutter, 2-part, lockable	Size I				B	✓
		Size II				B	✓
		Size III				B	✓

	Add "**-Z**" to the complete Article No. and indicate the appropriate order code(s).	**3WL921.-.....-....-Z** □ □ □	Additional price
Rated voltage 1000 V AC and 690 V IT networks			
Size I (breaking capacity H)		**A 0 5**	✓
Size II, except breaking capacity C and 4000 A (breaking capacity H)		**A 0 5**	✓
Size III, not necessary with circuit breakers with very high breaking capacity		**A 0 5**	✓
Rated voltage 1150 V AC			
Size II, except breaking capacity C and 4000 A (breaking capacity H)		**A 1 5**	✓
Rated voltage 690 V AC (+ 20 %)			
Size I (breaking capacity H)		**A 1 6**	✓
Tinned version of the customer's connections on guide frame[1)2)] Only for guide frames with horizontal connection or flange connection			
Size I		**A 0 8**	✓
Size II		**A 0 8**	✓
Size III		**A 0 8**	✓
Notes			
• For main circuit connection vertical and main circuit connecting flange, see the following page. • All other accessory parts must be ordered by specifying "-Z" and the corresponding order code, see page 1/45 to page 1/50.			

✓ Additional price

1) For 3WL1 circuit breakers size I from 630 A to 2000 A with high breaking capacity H and 3WL1 circuit breakers size I with rated current I_n = 2000 A.

2) Front connections are tinned as standard.

3) The permissible temperature-rise limits according to IEC 60947-2 are 5 K lower for a tin surface than for a silver surface.

* You can order this quantity or a multiple thereof.

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Size	Max. rated circuit breaker current $I_{n\,max.}$	Breaking capacity $I_{cu} = I_{cs}$	DT	**Guide frames for 4-pole circuit breakers/ non-automatic air circuit breakers** Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	kA							kg
Front main circuit connection, single hole									
I	1000	... 66		3WL9211-1BA□□-□□A1		1	1 unit	1CA	30.000
	1600	... 66		3WL9211-2BA□□-□□A1		1	1 unit	1CA	30.000
II	2000	... 100		3WL9212-3BA□□-□□A1		1	1 unit	1CA	37.000
	2500	... 100		3WL9212-4BA□□-□□A1		1	1 unit	1CA	47.000
	3200	... 100		3WL9212-5BA□□-□□A1		1	1 unit	1CA	54.000
III	4000	... 100		3WL9213-6BA□□-□□A1		1	1 unit	1CA	84.000
Front main circuit connection, double hole									
I	1000	... 66		3WL9211-1BB□□-□□A1		1	1 unit	1CA	30.000
	1600	... 66		3WL9211-2BB□□-□□A1		1	1 unit	1CA	30.000
	2000[1]	... 85		3WL9211-3BB□□-□□A1		1	1 unit	1CA	30.000
II	2000	... 100		3WL9212-3BB□□-□□A1		1	1 unit	1CA	37.000
	2500	... 100		3WL9212-4BB□□-□□A1		1	1 unit	1CA	47.000
	3200	... 100		3WL9212-5BB□□-□□A1		1	1 unit	1CA	54.000
III	4000	... 100		3WL9213-6BB□□-□□A1		1	1 unit	1CA	84.000
Horizontal main circuit connection									
I	1000	... 66		3WL9211-1BC□□-□□A1		1	1 unit	1CA	30.000
	1600	... 66		3WL9211-2BC□□-□□A1		1	1 unit	1CA	30.000
	2000[1]	... 85		3WL9211-3BC□□-□□A1		1	1 unit	1CA	30.000
II	2000	... 100		3WL9212-3BC□□-□□A1		1	1 unit	1CA	37.000
	2500	... 100		3WL9212-4BC□□-□□A1		1	1 unit	1CA	47.000
	3200	... 100		3WL9212-5BC□□-□□A1		1	1 unit	1CA	54.000
	3200	... 130		3WL9212-5BC□□-□□C1		1	1 unit	1CA	65.000
III	4000	... 100		3WL9213-6BC□□-□□A1		1	1 unit	1CA	84.000
	5000	... 100		3WL9213-7BC□□-□□A1		1	1 unit	1CA	84.000
	4000	... 130		3WL9213-6BC□□-□□C1		1	1 unit	1CA	87.000
	5000	... 130		3WL9213-7BC□□-□□C1		1	1 unit	1CA	87.000

Options				Additional price
Number of auxiliary supply connectors	None		**0**	**None**
	1 connector		**1**	✓
	2 connectors		**2**	✓
	3 connectors		**3**	✓
	4 connectors		**4**	✓
Note				
For required number of auxiliary supply connectors, see table on page 1/51.				
Type of auxiliary circuit connections	None		**0**	**None**
	With screw connection (SI-GUT, standard)		**1**	✓
	With screwless connection method (tension spring)		**2**	✓
Position signaling switches	None		**0**	**None**
	Option 1: Connected position 1 CO, test position 1 CO, disconnected position 1 CO		**1**	✓
	Option 2: Connected position 3 CO, test position 2 CO, disconnected position 1 CO		**2**	✓
Shutters	None		**A**	**None**
	With shutter, 2-part, lockable	Size I	**B**	✓
		Size II	**B**	✓
		Size III	**B**	✓

✓ Additional price

[1] For 3WL1 circuit breakers size I from 630 A to 2000 A with high breaking capacity H and 3WL1 circuit breakers size I with rated current I_n = 2000 A.

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Accessories and spare parts

	Add "**-Z**" to the complete Article No. and indicate the appropriate order code(s).	**3WL921.-.....-....-Z** □ □ □	Additional price
Rated voltage 1000 V AC and 690 V IT networks			
Size I (breaking capacity H)		**A 0 5**	✓
Size II, except breaking capacity C and 4000 A (breaking capacity H)		**A 0 5**	✓
Size III, not necessary with circuit breakers with very high breaking capacity		**A 0 5**	✓
Rated voltage 1150 V AC			
Size II, except breaking capacity C and 4000 A (breaking capacity H)		**A 1 5**	✓
Rated voltage 690 V AC (+ 20 %)			
Size I (breaking capacity H)		**A 1 6**	✓
Tinned version of the customer's connections on guide frame[1)2)] Only for guide frames with horizontal connection or flange connection			
Size I		**A 0 8**	✓
Size II		**A 0 8**	✓
Size III		**A 0 8**	✓
Notes			
• For main circuit connection vertical and main circuit connecting flange, see the following page.			
• All other accessory parts must be ordered by specifying "-Z" and the corresponding order code, see page 1/45 to page 1/50.			

✓ Additional price

1) Front connections are tinned as standard.

2) The permissible temperature-rise limits according to IEC 60947-2 are 5 K lower for a tin surface than for a silver surface.

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Size	Max. rated circuit breaker current $I_{n\ max.}$	Breaking capacity $I_{cu} = I_{cs}$	DT	**Guide frames for 4-pole circuit breakers/ non-automatic air circuit breakers** Article No.: www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	kA							kg
Vertical main circuit connection									
I	1000	... 66		3WL9211-1BD□□-□□A1		1	1 unit	1CA	30.000
	1600	... 66		3WL9211-2BD□□-□□A1		1	1 unit	1CA	30.000
	2000[1]	... 85		3WL9211-3BD□□-□□A1		1	1 unit	1CA	30.000
II	2000	... 100		3WL9212-3BD□□-□□A1		1	1 unit	1CA	37.000
	2500	... 100		3WL9212-4BD□□-□□A1		1	1 unit	1CA	47.000
	3200	... 100		3WL9212-5BD□□-□□A1		1	1 unit	1CA	54.000
	3200	... 130		3WL9212-5BD□□-□□C1		1	1 unit	1CA	65.000
NEW	4000	... 100		3WL9212-6BD□□-□□A1		1	1 unit	1CA	62.000
III	4000	... 100		3WL9213-6BD□□-□□A1		1	1 unit	1CA	84.000
	5000	... 100		3WL9213-7BD□□-□□A1		1	1 unit	1CA	84.000
	6300	... 100		3WL9213-8BD□□-□□A1		1	1 unit	1CA	119.000
	4000	... 130		3WL9213-6BD□□-□□C1		1	1 unit	1CA	88.000
	5000	... 130		3WL9213-7BD□□-□□C1		1	1 unit	1CA	88.000
	6300	... 130		3WL9213-8BD□□-□□C1		1	1 unit	1CA	124.000
Main circuit connection connecting flanges									
I	1000	... 66		3WL9211-1BE□□-□□A1		1	1 unit	1CA	30.000
	1600	... 66		3WL9211-2BE□□-□□A1		1	1 unit	1CA	30.000
	2000[1]	... 85		3WL9211-3BE□□-□□A1		1	1 unit	1CA	30.000
II	2000	... 100		3WL9212-3BE□□-□□A1		1	1 unit	1CA	37.000
	2500	... 100		3WL9212-4BE□□-□□A1		1	1 unit	1CA	47.000
	3200	... 100		3WL9212-5BE□□-□□A1		1	1 unit	1CA	54.000
III	4000	... 100		3WL9213-6BE□□-□□A1		1	1 unit	1CA	84.000

Options							Additional price
Number of auxiliary supply connectors	None		**0**				**None**
	1 connector		**1**				✓
	2 connectors		**2**				✓
	3 connectors		**3**				✓
	4 connectors		**4**				✓
Note							
For required number of auxiliary supply connectors, see table on page 1/51.							
Type of auxiliary circuit connections	None			**0**			**None**
	With screw connection (SIGUT, standard)			**1**			✓
	With screwless connection method (tension spring)			**2**			✓
Position signaling switches	None				**0**		**None**
	Option 1: Connected position 1 CO, test position 1 CO, disconnected position 1 CO				**1**		✓
	Option 2: Connected position 3 CO, test position 2 CO, disconnected position 1 CO				**2**		✓
Shutters	None					**A**	**None**
	With shutter, 2-part, lockable	Size I				**B**	✓
		Size II				**B**	✓
		Size III				**B**	✓

Add "**-Z**" to the complete Article No. and indicate the appropriate order code(s).	**3WL921.-.....-....-Z** □ □ □	Additional price
Rated voltage 1000 V AC and 690 V IT networks		
Size I (breaking capacity H)	**A 0 5**	✓
Size II, except breaking capacity C and 4000 A (breaking capacity H)	**A 0 5**	✓
Size III, not necessary with circuit breakers with very high breaking capacity	**A 0 5**	✓
Rated voltage 1150 V AC		
Size II, except breaking capacity C and 4000 A (breaking capacity H)	**A 1 5**	✓
Rated voltage 690 V AC (+ 20 %)		
Size I (breaking capacity H)	**A 1 6**	✓
Tinned version of the customer's connections on guide frame[1)2)] Only for guide frames with horizontal connection or flange connection		
Size I	**A 0 8**	✓
Size II	**A 0 8**	✓
Size III	**A 0 8**	✓
Notes		
• For main circuit connection vertical and main circuit connecting flange, see the following page. • All other accessory parts must be ordered by specifying "-Z" and the corresponding order code, see page 1/45 to page 1/50.		

✓ Additional price

1) For 3WL1 circuit breakers size I from 630 A to 2000 A with high breaking capacity H and 3WL1 circuit breakers size I with rated current I_n = 2000 A.

2) Front connections are tinned as standard.

3) The permissible temperature-rise limits according to IEC 60947-2 are 5 K lower for a tin surface than for a silver surface.

*** You can order this quantity or a multiple thereof.**

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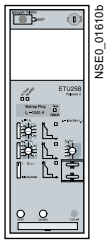
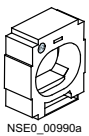
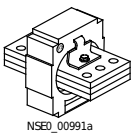
Accessories and spare parts

	Designation			DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
 NSE0_01610b 3WL931.-.AA.0-0AA1	**Protective devices with device holder and optional measurement function**[1]									
	Type	With protection function	Measuring function							
	ETU15B	LI	None		3WL9311-5AA00-0AA2		1	1 unit	1CA	0.720
	ETU25B	LSI	None		3WL9312-5AA00-0AA2		1	1 unit	1CA	0.720
	ETU27B	LSING	None		3WL9312-7AA00-0AA2		1	1 unit	1CA	0.720
	ETU45B (without display)	LSIN(G)	None		3WL9314-5AA00-0AA2		1	1 unit	1CA	0.720
			With measurement function *Plus*		3WL9314-5AA20-0AA2		1	1 unit	1CA	0.720
	ETU76B	LSIN(G)	None		3WL9317-6AA00-0AA2		1	1 unit	1CA	0.720
			With measurement function *Plus*		3WL9317-6AA20-0AA2		1	1 unit	1CA	0.720
NSE0_00992b 3WL9111-0AA64-0AA0	**Rating plugs**[2]									
	Size		Rated current I_n (A)							
	I, II		250		3WL9111-0AA51-0AA0		1	1 unit	1CA	0.010
			315		3WL9111-0AA52-0AA0		1	1 unit	1CA	0.010
			400		3WL9111-0AA53-0AA0		1	1 unit	1CA	0.010
			500		3WL9111-0AA54-0AA0		1	1 unit	1CA	0.010
			630		3WL9111-0AA55-0AA0		1	1 unit	1CA	0.010
			800		3WL9111-0AA56-0AA0		1	1 unit	1CA	0.010
			1000		3WL9111-0AA57-0AA0		1	1 unit	1CA	0.010
	I, II, III		1250		3WL9111-0AA58-0AA0		1	1 unit	1CA	0.010
			1600		3WL9111-0AA61-0AA0		1	1 unit	1CA	0.010
			2000		3WL9111-0AA62-0AA0		1	1 unit	1CA	0.010
	II, III		2500		3WL9111-0AA63-0AA0		1	1 unit	1CA	0.010
			3200		3WL9111-0AA64-0AA0		1	1 unit	1CA	0.010
			4000		3WL9111-0AA65-0AA0		1	1 unit	1CA	0.010
	III		5000		3WL9111-0AA66-0AA0		1	1 unit	1CA	0.010
			6300		3WL9111-0AA67-0AA0		1	1 unit	1CA	0.010
NSE0_01027a 3WL9111-0AT53-0AA0	**Ground-fault modules**[3]									
	Versions									
	• GFM AT 45B (only for ETU45B) alarm and tripping				3WL9111-0AT53-0AA0		1	1 unit	1CA	0.030
	• GFM AT 55B–76B (only for ETU76B) alarm and tripping				3WL9111-0AT56-0AA0		1	1 unit	1CA	0.030
NSE0_01609 3WL9111-0AT81-0AA0	**Displays** • For ETU45B • 4-line				3WL9111-0AT81-0AA0		1	1 unit	1CA	0.060
 NSE0_00990a 3WL9111-0AA2.-0AA0	**Internal current transformers for N conductor** Including wiring kit									
	ETU Release 2		Size							
	--		I		3WL9111-0AA11-0AA0		1	1 unit	1CA	0.200
			II		3WL9111-0AA12-0AA0		1	1 unit	1CA	0.280
			III		3WL9111-0AA13-0AA0		1	1 unit	1CA	0.500
	✓		I		3WL9111-0AA14-0AA0		1	1 unit	1CA	0.200
			II		3WL9111-0AA15-0AA0		1	1 unit	1CA	0.280
			III		3WL9111-0AA16-0AA0		1	1 unit	1CA	0.500
 NSE0_00991a 3WL9111-0AA3.-0AA0	**External current transformers for N conductor** For T5, "Measurement Method" function, see Technical Information at www.siemens.com/lowvoltage/product-support.									
	Copper connection pieces		Size							
	--		I		3WL9111-0AA21-0AA0		1	1 unit	1CA	0.300
			II		3WL9111-0AA22-0AA0		1	1 unit	1CA	0.380
			III		3WL9111-0AA23-0AA0		1	1 unit	1CA	0.680
	✓		I		3WL9111-0AA31-0AA0		1	1 unit	1CA	1.600
			II		3WL9111-0AA32-0AA0		1	1 unit	1CA	4.260
			III		3WL9111-0AA33-0AA0		1	1 unit	1CA	8.500
	EMC filters • Common-mode interference suppressor filters (e.g. in IT networks, caused by frequency converters) • Insertion loss (asymmetric) in the range 40 kHz to 10 MHz >40 dB.									
	Versions									
	• Not for ETU Release 2				3WL9111-0AK32-0AA0		1	1 unit	1CA	0.280
	• Only for ETU Release 2				3WL9111-0AK34-0AA0		1	1 unit	1CA	0.280

1) For replacement in existing circuit breakers please specify the circuit breaker ID No. when ordering.

2) With the rating plug selected, the maximum rated current $I_{n\,max}$ of the circuit breaker must not be exceeded. The following applies $I_n \leq I_{n\,max}$.

3) For direct measurement of the ground-fault current, e.g. in the neutral point of the transformer, a 1200 A/1 A current transformer, class 1, is required. The internal load of the 3WL circuit breaker is 0.11 Ω. If the ground-fault current is to be determined using the vectorial sum of the phases, a transformer must be installed in the neutral conductor.

* You can order this quantity or a multiple thereof.

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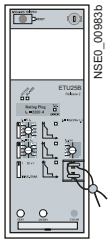
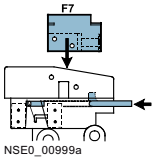
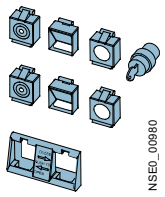
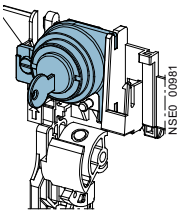
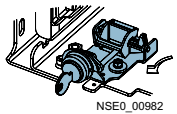
	Designation	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
More accessories for Electronic Trip Units								
 3WL9111-0AT45-0AA0	**Sealable and lockable covers**							
	Versions							
	• For ETU15B to ETU45B		3WL9111-0AT45-0AA0		1	1 unit	1CA	0.050
	• For ETU76		3WL9111-0AT46-0AA0		1	1 unit	1CA	0.050
	Automatic reset of the reclosing lockout Spare part for option **K01,** for "-Z" + order code, see page 1/46.		3WL9111-0AK21-0AA0		1	1 unit	1CA	0.050
 3WL9111-0AK0.-0AA0	**Remote reset coils**[1] • For mechanical tripped indicator • Spare part for options **K10** to **K13,** for "-Z" + order code, see page 1/46.							
	Note							
	Automatic reset of the reclosing lockout 3WL9111-0AK21-0AA0 also needed.							
	Versions							
	• 24 V DC		3WL9111-0AK03-0AA0		1	1 unit	1CA	0.200
	• 48 V DC		3WL9111-0AK04-0AA0		1	1 unit	1CA	0.200
	• 120 V AC/125 V DC		3WL9111-0AK05-0AA0		1	1 unit	1CA	0.200
	• 208-250 V AC/208-250 V DC		3WL9111-0AK06-0AA0		1	1 unit	1CA	0.200
	Retrofittable internal CubicleBUS wiring for connection to terminal X8 • For ETU45B and ETU76B • Without male connector[2]		3WL9111-0AK30-0AA0		1	1 unit	1CA	0.150
	Retrofittable internal wiring for connection of the external N- and G-transformers to terminal X8 • Not for ETU Release 2 • Without male connector		3WL9111-0AK31-0AA0		1	1 unit	1CA	0.020
	Retrofittable internal wiring for connection of the external N- and G-transformers to terminal X8 • For ETU Release 2 • Without male connector		3WL9111-0AK33-0AA0		1	1 unit	1CA	0.020
Locking devices								
 3WL9111-0BA22-0AA0	**Interlocking set for mechanical ON/OFF** • Consisting of 2 transparent covers each for sealing or for attaching padlocks[4], • Cover with 6.35 mm hole (for tool actuation) • Lock mount for safety lock for key operation							
	Versions							
	• Without safety lock		3WL9111-0BA21-0AA0		1	1 unit	1CA	0.100
	• Made by CES		3WL9111-0BA22-0AA0		1	1 unit	1CA	0.300
	• Made by IKON		3WL9111-0BA24-0AA0		1	1 unit	1CA	0.300
 3WL9111-0BA31-0AA0	**Locking devices against unauthorized closing, in the operator panels** • The disconnector unit fulfills the requirements for main circuit breakers acc. to EN 60204-1 • Spare part for options **S01** to **S09,** for "-Z" + order code, see page 1/48.							
	Versions							
	• Assembly kit FORTRESS or CASTELL[3]		3WL9111-0BA31-0AA0		1	1 unit	1CA	0.200
	• Made by Ronis		3WL9111-0BA33-0AA0		1	1 unit	1CA	0.400
	• Made by KIRK-Key[3]		3WL9111-0BA34-0AA0		1	1 unit	1CA	0.270
	• Made by Profalux		3WL9111-0BA35-0AA0		1	1 unit	1CA	0.250
	• Made by CES		3WL9111-0BA36-0AA0		1	1 unit	1CA	0.200
	• Made by IKON		3WL9111-0BA38-0AA0		1	1 unit	1CA	0.200
	• Assembly kit for padlocks[4]		3WL9111-0BA41-0AA0		1	1 unit	1CA	0.360
 3WL9111-0BA53-0AA0	**Locking devices against unauthorized closing, for withdrawable circuit breakers** • The disconnector unit fulfills the requirements for main circuit breakers acc. to EN 60204-1 • Consisting of lock in the cabinet door, active in connected position; function is retained when circuit breaker is replaced • Spare part for options **R60, R61, R68**, for "-Z" + order code, see page 1/48.							
	Versions							
	• Made by CES		3WL9111-0BA51-0AA0		1	1 unit	1CA	0.300
	• Made by IKON		3WL9111-0BA53-0AA0		1	1 unit	1CA	0.300
	• Made by KIRK-Key[3]		3WL9111-0BA57-0AA0		1	1 unit	1CA	0.300
	• Made by Ronis		3WL9111-0BA58-0AA0		1	1 unit	1CA	0.300
	• Made by Profalux		3WL9111-0BA50-0AA0		1	1 unit	1CA	0.227

1) Can only be used in conjunction with "automatic reset of reclosing lockout", e.g. "-Z" + "K01", 3WL9111-0AK21-0AA0.
2) Required if communication is retrofitted.
3) Locks, cylinders and keys must be ordered from the manufacturer.
4) Padlock not included in the scope of supply.

*** You can order this quantity or a multiple thereof.**

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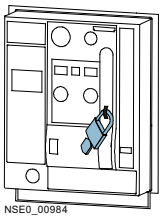
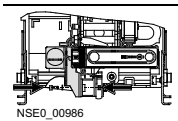
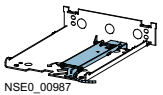
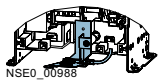
Accessories and spare parts

	Designation	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
 NSE0_00984 3WL9111-0BA71-0AA0	**Locking devices for operating mechanism handle with padlock[1)]** Spare part for option **S33,** for "-Z" + order code, see page 1/48.		**3WL9111-0BA71-0AA0**		1	1 unit	1CA	0.080
 NSE0_00986 3WL9111-0BA76-0AA0	**Locking devices to prevent movement of the withdrawable circuit breakers** • Safety lock for mounting on the circuit breaker • Spare part for options **S71, S75, S76,** for "-Z" + order code, see page 1/48.							
	Versions							
	• Made by CES		**3WL9111-0BA73-0AA0**		1	1 unit	1CA	0.300
	• Made by IKON		**3WL9111-0BA75-0AA0**		1	1 unit	1CA	0.200
	• Made by Profalux		**3WL9111-0BA76-0AA0**		1	1 unit	1CA	0.300
	• Made by Ronis		**3WL9111-0BA77-0AA0**		1	1 unit	1CA	0.300
	• Made by KIRK-Key[2)]		**3WL9111-0BA80-0AA0**		1	1 unit	1CA	0.400
	Interlocking systems • Made by CES • 2 of the same keys for 3 circuit breakers • Locking device in OFF position • Lock in the operator panel • A maximum of 2 circuit breakers can be switched on		**3WL9111-0BA43-0AA0**		1	1 unit	1CA	0.360
Locking mechanisms								
 NSE0_00987 3WL9111-0BA83-0AA0	**Locking devices to prevent movement of the withdrawable circuit breakers in disconnected position** • Consisting of Bowden wire and lock in the cabinet door on the circuit breaker • Spare part for options **R81**, **R85**, **R86,** for "-Z" + order code, see page 1/48.							
	Versions							
	• Made by CES		**3WL9111-0BA81-0AA0**		1	1 unit	1CA	0.800
	• Made by IKON		**3WL9111-0BA83-0AA0**		1	1 unit	1CA	0.800
	• Made by Profalux		**3WL9111-0BA85-0AA0**		1	1 unit	1CA	0.800
	• Made by Ronis		**3WL9111-0BA86-0AA0**		1	1 unit	1CA	0.800
	Note							
	Not possible in combination with "Locking device to prevent opening of the cabinet door" (order code "R30") or "Locking device to prevent movement with the cabinet door open" (order code "R50").							
 NSE0_00988 3WL9111-0BB12-0AA0	**Locking devices to prevent opening of the cabinet door in ON position** • Fixed-mounted • Can be defeated • Spare part for option **S30,** for "-Z" + order code, see page 1/48.		**3WL9111-0BB12-0AA0**		1	1 unit	1CA	0.600
	Locking devices to prevent opening of the cabinet door • Guide frames • Can be defeated • Spare part for option **R30,** for "-Z" + order code, see page 1/48.		**3WL9111-0BB13-0AA0**		1	1 unit	1CA	0.150
	Note							
	Not possible in combination with "Locking device to prevent movement of the withdrawable circuit breakers in disconnected position" (order codes "R81", "R85" or "R86").							
	Locking devices to prevent movement with the cabinet door open • Guide frames • Spare part for option **R50,** for "-Z" + order code, see page 1/48.		**3WL9111-0BB15-0AA0**		1	1 unit	1CA	0.150
	Note							
	Not possible in combination with "Locking device to prevent movement of the withdrawable circuit breakers in disconnected position" (order codes "R81", "R85" or "R86").							

1) Padlock not included in the scope of supply.
2) Locks, cylinders and keys must be ordered from the manufacturer.

* You can order this quantity or a multiple thereof.

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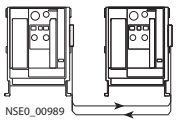
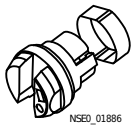
	Designation			DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Interlocks										
 NSE0_00989 3WL9111-0BB21-0AA0	**Mutual mechanical interlocking** with 2000 mm Bowden wire (one required for each circuit breaker)									
	Type	When ordered separately	Spare part for							
	Fixed-mounted circuit breakers	--	Option **S55,** for "-Z" + order code, see page 1/47.		**3WL9111-0BB21-0AA0**		1	1 unit	1CA	2.700
	Module for withdrawable circuit breakers with guide frame	--	Option **R55,** for "-Z" + order code, see page 1/47.		**3WL9111-0BB24-0AA0**		1	1 unit	1CA	1.130
	Module for guide frame	✓	Option **R56,** for "-Z" + order code, see page 1/47.		**3WL9111-0BB22-0AA0**		1	1 unit	1CA	1.100
	Module for withdrawable circuit breaker	✓	Option **R57,** for "-Z" + order code, see page 1/47.		**3WL9111-0BB23-0AA0**		1	1 unit	1CA	0.150
	Adapter for size III withdrawable circuit breaker	✓	--		**3WL9111-0BB30-0AA0**		1	1 unit	1CA	0.100
 NSE0_01886 3WL9112-8HA47-0AA0	**Couplings on the circuit breaker (with ring) for mutual interlocking** Can be used in all circuit breakers				**3WL9112-8AH47-0AA0**		1	1 unit	1CA	0.160
	Bowden wires									
	Versions									
	2000 mm				**3WL9111-0BB45-0AA0**		1	1 unit	1CA	0.150
	3000 mm				**3WL9111-0BB46-0AA0**		1	1 unit	1CA	0.220
	4500 mm				**3WL9111-0BB47-0AA0**		1	1 unit	1CA	0.360
Transfer control devices										
3KC9000-8TL30 3KC9000-8EL10	**3KC ATC5300 and NEW ATC3100 transfer control devices** For combination with two air circuit breakers/molded case circuit breakers for changeover according to IEC 60947-6-1. For further information, see Chapter "Monitoring Devices".									
Test devices										
	Manual tester Release 2 for Electronic Trip Units ETU15B to ETU76B For testing the Electronic Trip Unit functions of all 3WL ETUs (release 1 and release 2)				**3WL9111-0AT32-0AA0**		1	1 unit	1CA	1.100
	Function testers For testing the tripping characteristics for Electronic Trip Units ETU15B to ETU76B				**3WL9111-0AT44-0AA0**		1	1 unit	1CA	8.210
Capacitor storage devices										
	Capacitor storage devices • For shunt releases • Storage time 5 min				**3WL9111-0BA14-0AA0**		1	1 unit	1CA	0.520
	Rated control supply voltage/rated operational voltage									
	50/60 Hz V AC	V DC								
	220 ... 240	220 ... 250								
	Note									
	• Rated control supply voltage must match the rated control supply voltage of the shunt release • Suitable also for 3VL and 3WN circuit breakers									

*** You can order this quantity or a multiple thereof.**

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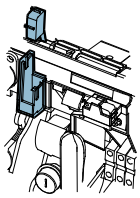
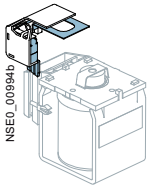
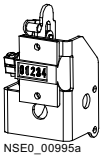
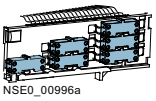
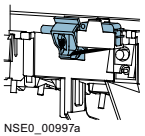
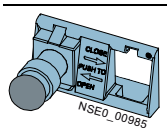
Accessories and spare parts

	Designation	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Indicators, control elements								
 NSE0_00993a 3WL9111-0AH01-0AA0	**Ready-to-close signaling switches (S20)** • 1 NO contact • Spare part for option **C22,** for "-Z" + order code, see page 1/46.		**3WL9111-0AH01-0AA0**		1	1 unit	1CA	0.020
 NSE0_00994b 3WL9111-0AH02-0AA0	**Signaling switches[1)2)] (S22 or S23)** • 1st or 2nd auxiliary release • Spare part for options **C26** and **C27,** for "-Z" + order code, see page 1/46.		**3WL9111-0AH02-0AA0**		1	1 unit	1CA	0.020
	1st tripped signaling switch[1)2)] (S24) • 1 CO contact • Spare part for option **K07,** for "-Z" + order code, see page 1/46.		**3WL9111-0AH14-0AA0**		1	1 unit	1CA	0.080
	2nd tripped signaling switch[1)2)3)] (S25) • 1 NO contact • Spare part for option **K06,** for "-Z" + order code, see page 1/46.		**3WL9111-0AH17-0AA0**		1	1 unit	1CA	0.080
 NSE0_00995a 3WL9111-0AH07-0AA0	**Operating cycles counter** • Mechanical[4)] • Spare part for option **C01,** for "-Z" + order code, see page 1/46.		**3WL9111-0AH07-0AA0**		1	1 unit	1CA	0.100
	Stored energy status signaling switches[1)2)] • 1 NO contact • Spare part for option **C20,** for "-Z" + order code, see page 1/46.		**3WL9111-0AH08-0AA0**		1	1 unit	1CA	0.030
 NSE0_00996a 3WL9111-0AH12-0AA0	**Position signaling switches for guide frames** Spare part for options **R15** and **R16,** for "-Z" + order code, see page 1/47.							
	Versions							
	• 1. block (3 CO contacts) • 2. block (6 CO contacts)		**3WL9111-0AH11-0AA0** **3WL9111-0AH12-0AA0**		1 1	1 unit 1 unit	1CA 1CA	0.200 0.400
 NSE0_00997a 3WL9111-0AJ0.-0AA0	**Electrical ON buttons[1)5)] (S10)** • Button + wiring[2)] • For operator panel • Spare part for options **C11** and **C12**, for "-Z" + order code, see page 1/46.							
	Versions							
	• With sealing cap **C11** • With CES **C12** assembly kit • With IKON assembly kit		**3WL9111-0AJ02-0AA0** **3WL9111-0AJ03-0AA0** **3WL9111-0AJ05-0AA0**		1 1 1	1 unit 1 unit 1 unit	1CA 1CA 1CA	0.150 0.140 0.140
	Note							
	Possible only for circuit breakers with closing coil.							
	Motor shutdown switches[6)] (S12) • Mounting on operator panel • Spare part for option **S25,** for "-Z" + order code, see page 1/46.		**3WL9111-0AJ06-0AA0**		1	1 unit	1CA	0.100
 NSE0_00985 3WL9111-0BA72-0AA0	**EMERGENCY-STOP pushbuttons** • Mushroom pushbutton instead of the mechanical OFF pushbutton • Spare part for option **S24,** for "-Z" + order code, see page 1/46.		**3WL9111-0BA72-0AA0**		1	1 unit	1CA	0.080

1) Not possible with communications interface option, order codes "F02" or "F12".

2) X7 auxiliary supply connector required for circuit breakers or guide frames. If this is not already available, please order additionally (see page 1/51 and page 1/63).

3) Can only be used in combination with 1st tripped signaling switch.

4) Only in conjunction with motorized operating mechanism.

5) Not possible with motor shutdown switch.

6) Not possible with electrical ON button.

* You can order this quantity or a multiple thereof.

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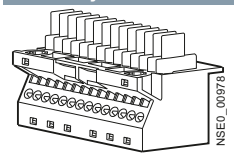
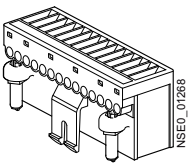
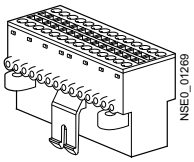
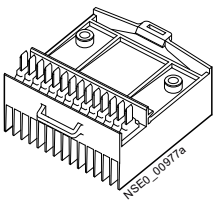
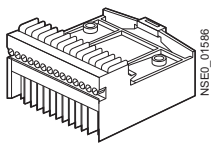
	Designation	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Auxiliary conductor connections								
 3WL9111-0AB01-0AA0	**Male connectors for circuit breakers** ①		**3WL9111-0AB01-0AA0**		1	1 unit	1CA	0.100
	Extension for the 1000 V male connector versions Male connector must be ordered separately.		**3WL9111-0AB02-0AA0**		1	1 unit	1EA	0.150
	Male connectors and extension for 1000 V		**3WL9111-0AB10-0AA0**		1	1 unit	1EA	1.000
 3WL9111-0AB03-0AA0	**Auxiliary supply connectors for circuit breakers or guide frames** ② Versions							
	• Screw connection (SIGUT)		**3WL9111-0AB03-0AA0**		1	1 unit	1CA	0.070
 3WL9111-0AB04-0AA0	• Screwless connection method (tension spring)		**3WL9111-0AB04-0AA0**		1	1 unit	1CA	0.070
3WL9111-0AB07-0AA0	**Coding kits** For fixed-mounted versions (X5 to X8) ③		**3WL9111-0AB07-0AA0**		1	1 unit	1CA	0.020
 3WL9111-0AB08-0AA0	**Sliding contact modules for guide frames** ④		**3WL9111-0AB08-0AA0**		1	1 unit	1CA	0.100
 3WL9111-0AB18-0AA0	**One-part sliding contact modules for guide frames** Screw connection (SIGUT) ⑤		**3WL9111-0AB18-0AA0**		1	1 unit	1CA	0.120
	Blanking blocks for circuit breakers		**3WL9111-0AB12-0AA0**		1	1 unit	1CA	0.030

For a complete auxiliary current connection you must order:

Fixed-mounted version: ① + ② + ③

Withdrawable version: ① + ④ + ② or ① + ⑤

*** You can order this quantity or a multiple thereof.**

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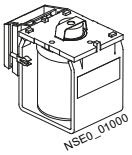
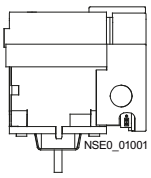
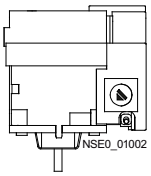
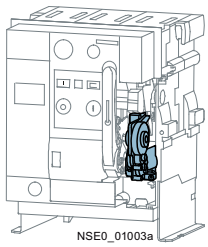
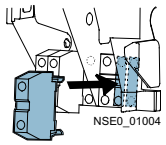
Accessories and spare parts

	Designation	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Auxiliary releases								
 3WL9111-0AD06-0AA0	**Closing coils/shunt releases**							
	Versions / Voltage							
	100 % OP							
	24 V DC		3WL9111-0AD01-0AA0		1	1 unit	1CA	0.700
	30 V DC		3WL9111-0AD02-0AA0		1	1 unit	1CA	0.700
	48 V DC		3WL9111-0AD03-0AA0		1	1 unit	1CA	0.700
	60 V DC		3WL9111-0AD04-0AA0		1	1 unit	1CA	0.700
	110 ... 125 V DC/110 ... 127 V AC		3WL9111-0AD05-0AA0		1	1 unit	1CA	0.700
	220 ... 250 V DC/208 ... 240 V AC		3WL9111-0AD06-0AA0		1	1 unit	1CA	0.700
	5 % OP[1]							
	24 V DC		3WL9111-0AD11-0AA0		1	1 unit	1CA	0.700
	48 V DC		3WL9111-0AD12-0AA0		1	1 unit	1CA	0.700
	110 ... 125 V DC/110 ... 127 V AC		3WL9111-0AD13-0AA0		1	1 unit	1CA	0.700
	220 ... 250 V DC/208 ... 240 V AC		3WL9111-0AD14-0AA0		1	1 unit	1CA	1.800
 3WL9111-0AE0.-0AA0	**Undervoltage releases**							
	Versions / Voltage							
	Instantaneous							
	24 V DC		3WL9111-0AE01-0AA0		1	1 unit	1CA	0.730
	30 V DC		3WL9111-0AE02-0AA0		1	1 unit	1CA	0.730
	48 V DC		3WL9111-0AE03-0AA0		1	1 unit	1CA	0.730
	60 V DC		3WL9111-0AE07-0AA0		1	1 unit	1CA	0.730
	110 ... 125 V DC/110 ... 127 V AC		3WL9111-0AE04-0AA0		1	1 unit	1CA	0.730
	220 ... 250 V DC/208 ... 240 V AC		3WL9111-0AE05-0AA0		1	1 unit	1CA	0.730
	380 ... 415 V AC		3WL9111-0AE06-0AA0		1	1 unit	1CA	0.730
 3WL9111-0AE1.-0AA0	Delayed							
	48 V DC		3WL9111-0AE11-0AA0		1	1 unit	1CA	0.740
	110 ... 125 V DC/110 ... 127 V AC		3WL9111-0AE12-0AA0		1	1 unit	1CA	0.740
	220 ... 250 V DC/208 ... 240 V AC		3WL9111-0AE13-0AA0		1	1 unit	1CA	0.740
	380 ... 415 V AC		3WL9111-0AE14-0AA0		1	1 unit	1CA	0.740
Operating mechanisms								
 3WL9111-0AF0.-0AA0	**Motorized operating mechanisms[2]**							
	Versions							
	• 24 ... 30 V DC		3WL9111-0AF01-0AA0		1	1 unit	1CA	1.510
	• 48 ... 60 V DC		3WL9111-0AF02-0AA0		1	1 unit	1CA	1.510
	• 110 ... 125 V DC/110 ... 127 V AC		3WL9111-0AF03-0AA0		1	1 unit	1CA	1.510
	• 220 ... 250 V DC/208 ... 240 V AC		3WL9111-0AF04-0AA0		1	1 unit	1CA	1.510
Auxiliary contacts								
 3WL9111-0AG03-0AA0	**Auxiliary switch blocks**							
	Versions							
	• 2 NO contacts + 2 NC contacts		3WL9111-0AG01-0AA0		1	1 unit	1CA	0.180
	• 2 NO contacts		3WL9111-0AG02-0AA0		1	1 unit	1CA	0.080
	• 1 NO contact + 1 NC contact		3WL9111-0AG03-0AA0		1	1 unit	1CA	0.070

1) Overexcited, i.e. operating time 50 ms (standard > 80 ms).

2) X5 auxiliary supply connector required for circuit breakers or guide frames. If this is not already available, please order additionally (see page 1/51 and page 1/54).

* You can order this quantity or a multiple thereof.

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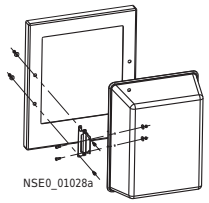
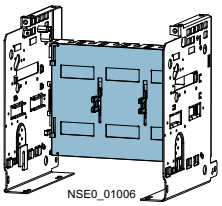
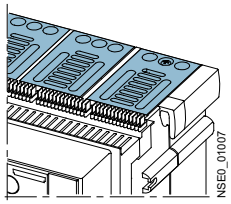
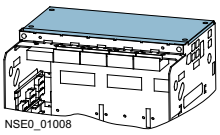
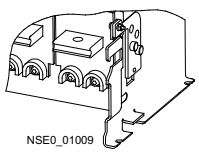
	Designation	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Door sealing frames, hoods, shutters								
	Door sealing frames Spare part for option **T40,** for "-Z" + order code, see page 1/46.		**3WL9111-0AP01-0AA0**		1	1 unit	1CA	0.360
 NSE0_01028a 3WL9111-0AP02-0AA0	**Protective covers** IP55 Notes • Cannot be used in conjunction with door sealing frames • Hood removable and can be opened on both sides		**3WL9111-0AP02-0AA0**		1	1 unit	1CA	1.600
 NSE0_01006 3WL9111-0AP0.-0AA0	**Shutters** Spare part for option **R21,** for "-Z" + order code, see page 1/47.							
	Number of poles: 3-pole; Size: I		**3WL9111-0AP04-0AA0**		1	1 unit	1CA	0.500
	II[1]		**3WL9111-0AP06-0AA0**		1	1 unit	1CA	0.630
	II C		**3WL9111-0AP43-0AA0**		1	1 unit	1CA	0.630
	III		**3WL9111-0AP07-0AA0**		1	1 unit	1CA	0.860
	Number of poles: 4-pole; Size: I		**3WL9111-0AP08-0AA0**		1	1 unit	1CA	0.600
	II[1]		**3WL9111-0AP11-0AA0**		1	1 unit	1CA	0.770
	II C		**3WL9111-0AP44-0AA0**		1	1 unit	1CA	0.770
	III		**3WL9111-0AP12-0AA0**		1	1 unit	1CA	1.070
Arc chutes								
 NSE0_01007 3WL9111-0AS0.-0AA0	**Arc chutes** Versions: 690 V; Size: I		**3WL9111-0AS01-0AA0**		1	1 unit	1CA	1.110
	II[1]		**3WL9111-0AS02-0AA0**		1	1 unit	1CA	1.680
	II C		**3WL9111-0AS10-0AA0**		1	1 unit	1CA	3.520
	III		**3WL9111-0AS03-0AA0**		1	1 unit	1CA	2.980
	Versions: 1000 V/1150 V; Size: II		**3WL9111-0AS05-0AA0**		1	1 unit	1CA	3.140
	III		**3WL9111-0AS06-0AA0**		1	1 unit	1CA	5.620
 NSE0_01008 3WL9111-0AS3.-0AA0	**Arc chute covers**[2] • Parts kit for guide frame • Spare part for option **R10,** for "-Z" + order code, see page 1/47.							
	Number of poles: 3-pole; Size: I		**3WL9111-0AS32-0AA0**		1	1 unit	1CA	1.850
	II		**3WL9111-0AS36-0AA0**		1	1 unit	1CA	2.600
	III		**3WL9111-0AS38-0AA0**		1	1 unit	1CA	4.050
	Number of poles: 4-pole; Size: I		**3WL9111-0AS42-0AA0**		1	1 unit	1CA	2.340
	II		**3WL9111-0AS44-0AA0**		1	1 unit	1CA	3.300
	III		**3WL9111-0AS46-0AA0**		1	1 unit	1CA	5.210
Coding for withdrawable version								
 NSE0_01009 3WL9111-0AR12-0AA0 3WL9111-0AR13-0AA0	**Coding for withdrawable version** By customer, for 36 coding variants Versions: • Sizes I and II		**3WL9111-0AR12-0AA0**		1	1 unit	1CA	0.400
	• Size III		**3WL9111-0AR13-0AA0**		1	1 unit	1CA	0.310

[1] Cannot be used for 3WL1 size II with very high breaking capacity C

[2] Not available for
- 1000 V version (order code "A05")
- 1150 V version (order code "A15")
- DC version
- 4000 A size II
- circuit breaker with very high breaking capacity C

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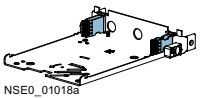
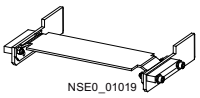
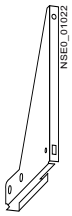
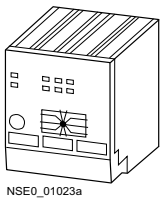
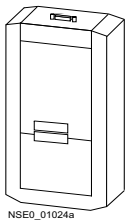
Accessories and spare parts

	Designation		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Grounding connection									
 NSE0_01018a 3WL9111-0BA02-0AA0	**Grounding connection between the guide frame and the withdrawable circuit breaker** • For 30 kA ground short-circuit current[1] • Contacting modules for guide frame								
	Versions								
	• Size I and II[2]			3WL9111-0BA01-0AA0		1	1 unit	1CA	0.330
	• Size III			3WL9111-0BA02-0AA0		1	1 unit	1CA	0.350
 NSE0_01019 3WL9111-0BA07-0AA0	**Contacting modules for withdrawable circuit breakers**								
	Number of poles	Size							
	3-pole	I		3WL9111-0BA05-0AA0		1	1 unit	1CA	1.250
		II[2]		3WL9111-0BA06-0AA0		1	1 unit	1CA	1.530
		III		3WL9111-0BA07-0AA0		1	1 unit	1CA	2.270
	4-pole	I		3WL9111-0BA08-0AA0		1	1 unit	1CA	1.500
		II[2]		3WL9111-0BA04-0AA0		1	1 unit	1CA	1.850
		III		3WL9111-0BA10-0AA0		1	1 unit	1CA	2.950
Support brackets									
 NSE0_01022 3WL9111-0BB50-0AA0	**Support brackets** • For mounting fixed-mounted circuit breakers on vertical plane • Only for sizes I and II (1 set = 2 units)			3WL9111-0BB50-0AA0		1	1 unit	1CA	7.000
CubicleBUS modules[3][6]									
 NSE0_01023a 3WL9111-0AT23-0AA0	**Digital output modules with rotary coding switch, relay outputs**			3WL9111-0AT26-0AA0		1	1 unit	1CA	0.240
	Digital output modules, configurable, relay outputs			3WL9111-0AT20-0AA0		1	1 unit	1CA	0.310
	Digital input modules			3WL9111-0AT27-0AA0		1	1 unit	1CA	0.240
	Analog output modules			3WL9111-0AT23-0AA0		1	1 unit	1CA	0.240
	Zone Selective Interlocking modules			3WL9111-0AT21-0AA0		1	1 unit	1CA	0.240
Parameterization systems[5]									
 NSE0_01024a 3WL9111-0AT28-0AA0	**BDA *Plus*[4][5]** • Parameterization, operation, monitoring and diagnostics of 3WL air circuit breakers using the local interface • Breaker Data Adapter, connection cable to the 3WL air circuit breaker and to the programming device (e.g. notebook) • Can be run with Internet Explorer with JAVA2 VM 1.4.0-01 and higher • With Ethernet interface for connection to Ethernet/Intranet/ Internet			3WL9111-0AT33-0AA0		1	1 unit	1CA	1.200
	Connection cables for BDA *Plus* • Connection cable for connection of BDA *Plus* to terminal X8 of the 3WL air circuit breaker • Required if neither COM15 nor COM16 nor other external **Cubicle**BUS modules are available • Length 2 m			3WL9111-0BC21-0AA0		1	1 unit	1CA	0.350
	powerconfig parameterization software • Parameterization, operation, monitoring and diagnostics of 3WL air circuit breakers using powerconfig software, see Chapter "Software", "Configuring, Visualizing and Controlling with SENTRON". • powerconfig is available free of charge at http://support.automation.siemens.com/WW/view/en/63452759								

1) For 60 kA ground short-circuit current, order 2.

2) Cannot be used for size II with very high breaking capacity C and size II, 4000 A.

3) Each **Cubicle**BUS module is supplied with a 0.2 m factory-fitted cable to connect the modules with each other. A longer factory-fitted cable is required for connection to the circuit breaker.

4) A 24 V DC power supply unit is required.

5) Operation under Windows Vista and Windows 7 possible with restrictions.

6) All communication components, **Cubicle**BUS modules and measurement functions are available for the ETU45B and ETU76B Electronic Trip Units.

* You can order this quantity or a multiple thereof.

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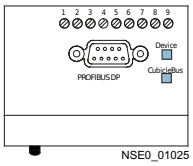
	Designation	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Accessories for communications[3]								
	Preassembled cables for CubicleBUS **modules**							
	Versions							
	• 0.5 m long, for connection to 3WL with COM15/COM16		3WL9111-0BC04-0AA0		1	1 unit	1CA	0.020
	• 1 m long, for connection to 3WL with COM15/COM16		3WL9111-0BC02-0AA0		1	1 unit	1CA	0.050
	• 2 m long, for connection to 3WL with COM15/COM16		3WL9111-0BC03-0AA0		1	1 unit	1CA	0.060
	• 2 m long, for connection to 3WL without COM15/COM16		3WL9111-0BC05-0AA0		1	1 unit	1CA	0.070
	SENTRON manual for communication solutions • Detailed description of the communication functions for circuit breakers. Installation, connection, commissioning, data transmission to the PLC. • Free download from: www.siemens.com/lowvoltage/manuals							
	Voltage transformers • 3-pole, for 3WL circuit breakers with measurement function *Plus*[1] • 380 ... 690 V/100 V, class 0.5		3WL9111-0BB68-0AA0		1	1 unit	1CA	2.600
Retrofitting and spare parts[3]								
	PROFIBUS retrofit kits Retrofit kit for PROFIBUS communications including COM15, BSS and set of cables for all 3WL air circuit breakers with ETU45B and ETU76B Electronic Trip Units		3WL9111-0AT12-0AA0		1	1 unit	1CA	0.260
 3WL9111-0AT15-0AA0	**COM15 PROFIBUS module** For ETU45B and ETU76B Electronic Trip Units		3WL9111-0AT15-0AA0		1	1 unit	1CA	0.140
	COM16 MODBUS modules For ETU45B and ETU76B Electronic Trip Units		3WL9111-0AT17-0AA0		1	1 unit	1CA	0.140
	MODBUS IEC retrofit kits Retrofit kit for MODBUS communications including COM16, BSS and set of cables for all 3WL air circuit breakers with ETU45B and ETU76B Electronic Trip Units		3WL9111-0AT18-0AA0		1	1 unit	1EA	0.260
	Breaker status sensor (BSS) For ETU45B and ETU76B Electronic Trip Units		3WL9111-0AT16-0AA0		1	1 unit	1CA	0.120
	Measurement function *Plus*[2] • For ETUs Release 2 • Voltage transformer required		3WL9111-0AT04-0AA0		1	1 unit	1CA	0.250

1) Is required for operation of the measurement function *Plus*.

2) A measuring accuracy of 3 % is reached if retrofitted.

3) All communication components, **Cubicle**BUS modules and measurement functions are available for the ETU45B and ETU76B Electronic Trip Units.

*** You can order this quantity or a multiple thereof.**

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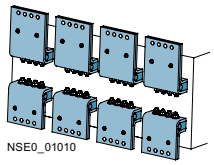
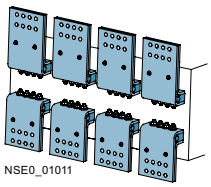
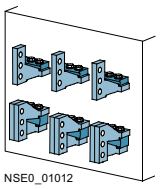
Accessories and spare parts

	Designation		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Main conductor connections, fixed-mounted versions (essential accessory)									
	Specified for each connection								
3WL9111-0AL06-0AA0	**Front-accessible main connections, single hole at top**[1]								
 NSE0_01010	Size	Rated current I_n							
	I	Up to 1000 A		**3WL9111-0AL01-0AA0**		1	1 unit	1CA	1.100
		1250 A to 1600 A		**3WL9111-0AL02-0AA0**		1	1 unit	1CA	1.600
	II[4]	Up to 2000 A		**3WL9111-0AL03-0AA0**		1	1 unit	1CA	2.000
		Up to 2500 A		**3WL9111-0AL04-0AA0**		1	1 unit	1CA	3.600
		Up to 3200 A		**3WL9111-0AL05-0AA0**		1	1 unit	1CA	3.500
	III	Up to 4000 A		**3WL9111-0AL06-0AA0**		1	1 unit	1CA	6.100
3WL9111-0AL56-0AA0	**Front-accessible main connections, single hole at bottom**[1]								
	Size	Rated current I_n							
	I	Up to 1000 A		**3WL9111-0AL51-0AA0**		1	1 unit	1CA	1.000
		1250 A to 1600 A		**3WL9111-0AL52-0AA0**		1	1 unit	1CA	1.300
	II[4]	Up to 2000 A		**3WL9111-0AL53-0AA0**		1	1 unit	1CA	1.800
		Up to 2500 A		**3WL9111-0AL54-0AA0**		1	1 unit	1CA	3.100
		Up to 3200 A		**3WL9111-0AL55-0AA0**		1	1 unit	1CA	3.000
	III	Up to 4000 A		**3WL9111-0AL56-0AA0**		1	1 unit	1CA	5.200
3WL9111-0AL14-0AA0	**Front-accessible main connections according to DIN 43673, double hole at top**								
 NSE0_01011	Size	Rated current I_n							
	I	Up to 1000 A [1]		**3WL9111-0AL07-0AA0**		1	1 unit	1CA	1.400
		1250 A to 2000 A		**3WL9111-0AL08-0AA0**		1	1 unit	1CA	2.000
	II[4]	Up to 2000 A		**3WL9111-0AL11-0AA0**		1	1 unit	1CA	2.400
		Up to 2500 A		**3WL9111-0AL12-0AA0**		1	1 unit	1CA	4.500
		Up to 3200 A		**3WL9111-0AL13-0AA0**		1	1 unit	1CA	4.400
	III	Up to 4000 A		**3WL9111-0AL14-0AA0**		1	1 unit	1CA	7.800
3WL9111-0AL64-0AA0	**Front-accessible main connections according to DIN 43673, double hole at bottom**								
	Size	Rated current I_n							
	I	Up to 1000 A [1]		**3WL9111-0AL57-0AA0**		1	1 unit	1CA	1.300
		1250 A to 2000 A		**3WL9111-0AL58-0AA0**		1	1 unit	1CA	1.700
	II[4]	Up to 2000 A		**3WL9111-0AL61-0AA0**		1	1 unit	1CA	2.000
		Up to 2500 A		**3WL9111-0AL62-0AA0**		1	1 unit	1CA	3.700
		Up to 3200 A		**3WL9111-0AL63-0AA0**		1	1 unit	1CA	3.600
	III	Up to 4000 A		**3WL9111-0AL64-0AA0**		1	1 unit	1CA	6.400
 NSE0_01012 3WL9111-0AM03-0AA0	**Rear vertical main connections**								
	Size	Rated current I_n							
	I[2]	Up to 2000 A		**3WL9111-0AM01-0AA0**		1	1 unit	1CA	0.500
	II[3]	Up to 3200 A		**3WL9111-0AM02-0AA0**		1	1 unit	1CA	2.200
	III	Up to 6300 A		**3WL9111-0AM03-0AA0**		1	1 unit	1CA	5.000

1) Not for 3WL1 size I with high breaking capacity H.

2) In the case of vertical connection size I with breaking capacity N and S, up to 1000 A one 3WL9111–0AM01-0AA0 vertical connection is required, up to 2000 A or with breaking capacity H two 3WL9111-0AM01-0AA0 vertical connections are required.

3) In the case of vertical connection size II, up to 2500 A one 3WL9111–0AM02-0AA0 vertical connection is required, up to 3200 A two 3WL9111-0AM02-0AA0 vertical connections are required.

4) Not for circuit breakers with very high breaking capacity C.

* You can order this quantity or a multiple thereof.

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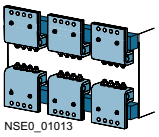
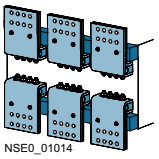
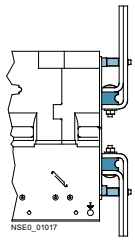
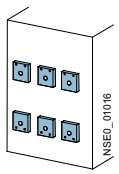
	Designation		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Main conductor connections, withdrawable versions (essential accessory)									
	Specified for each connection								
 NSE0_01013 3WL9111-0AN06-0AA0	**Front-accessible main connections, single hole at top or at bottom[1] [2]**								
	Size	Rated current I_n							
	I	Up to 1000 A		3WL9111-0AN01-0AA0		1	1 unit	1CA	1.000
		1250 A to 1600 A		3WL9111-0AN02-0AA0		1	1 unit	1CA	1.300
	II[3]	Up to 2000 A		3WL9111-0AN03-0AA0		1	1 unit	1CA	1.800
		Up to 2500 A		3WL9111-0AN04-0AA0		1	1 unit	1CA	3.100
		Up to 3200 A		3WL9111-0AN05-0AA0		1	1 unit	1CA	3.000
	III	Up to 4000 A		3WL9111-0AN06-0AA0		1	1 unit	1CA	5.200
 NSE0_01014 3WL9111-0AN14-0AA0	**Front-accessible main connections according to DIN 43673, double hole at top or at bottom[1]**								
	Size	Rated current I_n							
	I	Up to 1000 A[2]		3WL9111-0AN07-0AA0		1	1 unit	1CA	1.300
		1250 A to 2000 A		3WL9111-0AN08-0AA0		1	1 unit	1CA	1.700
	II[3]	Up to 2000 A		3WL9111-0AN11-0AA0		1	1 unit	1CA	2.000
		Up to 2500 A		3WL9111-0AN12-0AA0		1	1 unit	1CA	3.700
		Up to 3200 A		3WL9111-0AN13-0AA0		1	1 unit	1CA	3.600
	III	Up to 4000 A		3WL9111-0AN14-0AA0		1	1 unit	1CA	6.400
 NSE0_01017 3WL9111-0AN41-0AA0	**Supports for front and DIN connecting bars**								
	Number of poles	Size							
	3-pole for 3 bars	I		3WL9111-0AN41-0AA0		1	1 unit	1CA	0.700
		II		3WL9111-0AN42-0AA0		1	1 unit	1CA	1.350
		III		3WL9111-0AN43-0AA0		1	1 unit	1CA	2.420
	4-pole for 4 bars	I		3WL9111-0AN44-0AA0		1	1 unit	1CA	1.200
		II		3WL9111-0AN45-0AA0		1	1 unit	1CA	2.200
		III		3WL9111-0AN46-0AA0		1	1 unit	1CA	3.200
NSE0_0101[illegible] 3WL9111-0AN23-0AA0	**Rear vertical main connections**								
	Size	Rated current I_n							
	I	Up to 1000 A[2]		3WL9111-0AN15-0AA0		1	1 unit	1CA	0.660
		1250 A to 2000 A		3WL9111-0AN16-0AA0		1	1 unit	1CA	0.870
	II	Up to 2000 A [3]		3WL9111-0AN17-0AA0		1	1 unit	1CA	1.150
		Up to 2500 A[3]		3WL9111-0AN18-0AA0		1	1 unit	1CA	1.490
		Up to 3200 A[3]		3WL9111-0AN21-0AA0		1	1 unit	1CA	2.580
		1600 ... 3200 A[4]		3WL9111-0AN38-0AA0		1	1 unit	1CA	2.600
	III	Up to 5000 A		3WL9111-0AN22-0AA0		1	1 unit	1CA	6.380
		Up to 6300 A, 3 busbar connection pieces for 3-pole circuit breakers		3WL9111-0AN23-0AA0		1	1 unit	1CA	19.170
		Up to 6300 A, at top, 4 busbar connection pieces for 4-pole circuit breakers		3WL9111-0AN20-0AA0		1	1 unit	1CA	18.410
		Up to 6300 A, at bottom, 4 busbar connection pieces for 4-pole circuit breakers		3WL9111-0AN10-0AA0		1	1 unit	1CA	18.300
	Rear horizontal main connections								
	Size	Rated current I_n							
	I	Up to 1000 A[2]		3WL9111-0AN32-0AA0		1	1 unit	1CA	0.630
		1250 A to 2000 A		3WL9111-0AN33-0AA0		1	1 unit	1CA	0.770
	II	Up to 2000 A [3]		3WL9111-0AN34-0AA0		1	1 unit	1CA	1.020
		Up to 2500 A[3]		3WL9111-0AN35-0AA0		1	1 unit	1CA	1.240
		Up to 3200 A[3]		3WL9111-0AN36-0AA0		1	1 unit	1CA	2.170
		1600 ... 3200 A[4]		3WL9111-0AN47-0AA0		1	1 unit	1CA	2.150
	III	Up to 5000 A		3WL9111-0AN37-0AA0		1	1 unit	1CA	3.860
 NSE0_01016 3WL9111-0AN24-0AA0	**Connecting flange**								
	Size	Rated current I_n							
	I	Up to 1000 A[2]		3WL9111-0AN24-0AA0		1	1 unit	1CA	0.610
		1250 A to 2000 A		3WL9111-0AN25-0AA0		1	1 unit	1CA	0.640
	II[3]	Up to 2000 A		3WL9111-0AN26-0AA0		1	1 unit	1CA	0.980
		Up to 2500 A		3WL9111-0AN27-0AA0		1	1 unit	1CA	1.020
		Up to 3200 A		3WL9111-0AN28-0AA0		1	1 unit	1CA	1.310
	III	Up to 4000 A		3WL9111-0AN31-0AA0		1	1 unit	1CA	2.370

1) When using front-accessible mains connections (withdrawable circuit breakers) supports are required.
2) Not for 3WL1 size I with high breaking capacity H.
3) Not for circuit breakers with very high breaking capacity C.
4) Only for circuit breakers with very high breaking capacity C.

*** You can order this quantity or a multiple thereof.**

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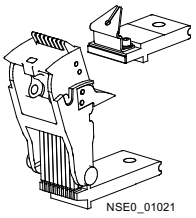
Accessories and spare parts

Conversion sets

Conversion set for converting fixed-mounted circuit breakers into withdrawable circuit breakers[1]
Guide frames and sliding contact modules must be ordered separately.

Number of poles	Size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
3-pole	I		3WL9111-0BC11-0AA0		1	1 unit	1CA	5.100
	II		3WL9111-0BC12-0AA0		1	1 unit	1CA	5.900
	III		3WL9111-0BC13-0AA0		1	1 unit	1CA	8.100
4-pole	I		3WL9111-0BC14-0AA0		1	1 unit	1CA	6.400
	II		3WL9111-0BC15-0AA0		1	1 unit	1CA	6.450
	III		3WL9111-0BC16-0AA0		1	1 unit	1CA	10.700

Main contact elements


NSE0_01021

Main contact elements[2][4]

Size	$I_{n\,max}$	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
I	Up to 1600 A		3WL9111-0AM90 L1Y[3]		1	1 unit	1CA	2.800
II	Up to 2500 A		3WL9111-0AM91 L1Y[3]		1	1 unit	1CA	5.870
II	Up to 4000 A		3WL9111-0AM92 L1Y[3]		1	1 unit	1CA	7.700
III	Up to 6300 A		3WL9111-0AM93 L1Y[3]		1	1 unit	1CA	13.740

Notes

- The circuit breaker ID No. must be specified when ordering
- Specified for each connection (depending on the number of poles on the circuit breaker, order 3 or 4 units)
- Article No. is automatically adapted to the circuit breaker ID No.

1) Conversion from fixed-mounted to withdrawable is not possible for 3WL1 circuit breakers with very high breaking capacity C.

2) Not for circuit breakers with very high breaking capacity C.

3) Please specify the circuit breaker ID No. in plain text when ordering.

4) Replacement of the main contact elements for 3WL1 circuit breakers with very high breaking capacity C is only possible at the factory.

*** You can order this quantity or a multiple thereof.**

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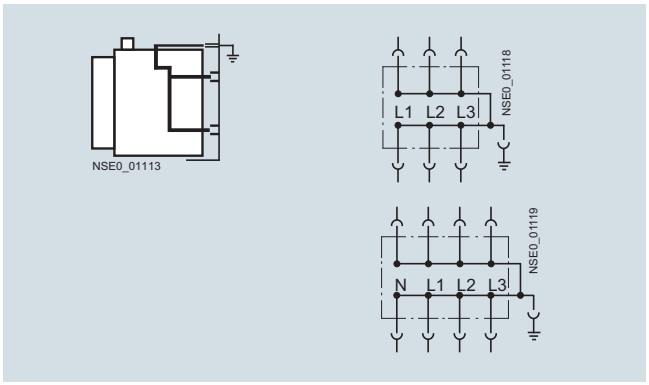
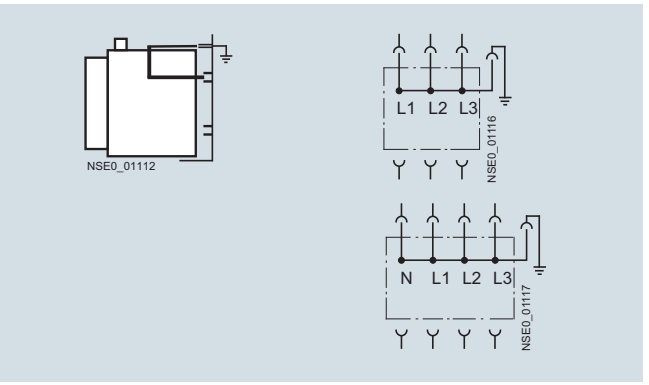
Version	Size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Withdrawable short-circuiting, grounding and bridging units								
Withdrawable short-circuiting, grounding and bridging units Top and bottom system components are short-circuited and grounded.								
Number of poles	Rated current I_n	Size						
3-pole	Up to 1600 A	I	3WL9111-0BD01-0AA0		1	1 unit	1CA	30.000
	Up to 3200 A	II	3WL9111-0BD03-0AA0		1	1 unit	1CA	40.500
	Up to 6300 A	III	3WL9111-0BD05-0AA0		1	1 unit	1CA	65.000
4-pole	Up to 1600 A	I	3WL9111-0BD02-0AA0		1	1 unit	1CA	35.000
	Up to 3200 A	II	3WL9111-0BD04-0AA0		1	1 unit	1CA	46.000
	Up to 6300 A	III	3WL9111-0BD06-0AA0		1	1 unit	1CA	70.000

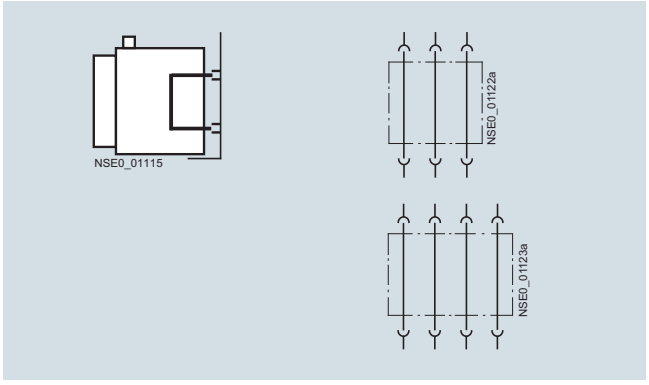
Conversion for the following applications is possible



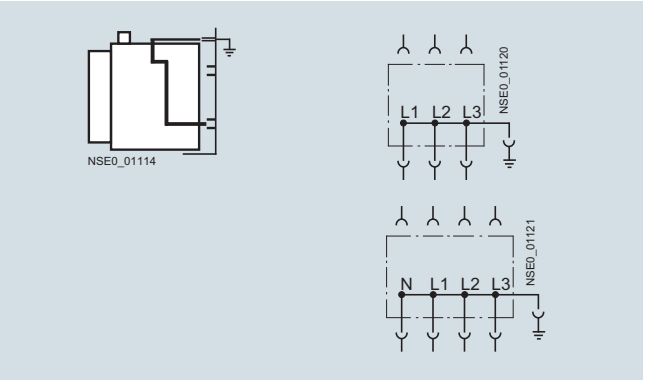
Top and bottom system components are short-circuited and grounded (as-supplied state)



Top system component is short-circuited and grounded, infeed from bottom



Withdrawable bridging unit, infeed and outgoing sides are permanently connected to each other



Bottom system component is short-circuited and grounded, infeed from top

*** You can order this quantity or a multiple thereof.**

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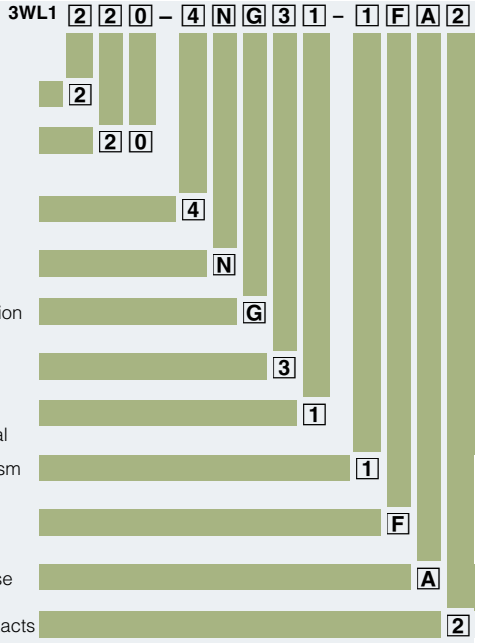
Options

Structure of the Article No.



Example		
5th position:	Size	Size II
6th and 7th positions:	Max. rated circuit breaker current $I_{n\,max}$	$I_{n\,max}$ = 2000 A
8th position:	Breaking capacity class	High breaking capacity "H": 100 kA
9th position:	Electronic Trip Units	ETU76B with graphics display ...
10th position:	Electronic Trip Unit supplement	... with ground-fault protection
11th position:	Number of poles	Three-pole
12th position:	Installation type	Fixed-mounted, main connections on rear, vertical
13th position:	Operating mechanisms	Manual operating mechanism with mechanical closing
14th position:	1st auxiliary release	Shunt release 50/60 Hz 110 V AC
15th position:	2nd auxiliary release	Without 2nd auxiliary release
16th position:	Auxiliary switches	2 NO contacts + 2 NC contacts

An important prerequisite for electronic order processing is that article numbers must be structured according to standardized criteria.

They are used as an unambiguous means of communication for various purposes:

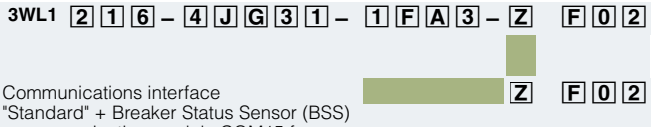
- Offer processing
  Selection and configuration
- Order processing
  Orders
  Order confirmation
  Processing of products for storage
  Order processing in supply locations
  Supply and dispatch
- Reporting and planning
- Service and warranty

The standardized structure ensures that only one Article No. has to be administered for one device.

This saves time and effort during planning, configuring, ordering and in stock keeping, and consequently above all it saves costs.

The example opposite explains the various positions within an Article No.

Accessories: With first order (components are already mounted)



Example

"-Z" with order code

Communications interface
"Standard" + Breaker Status Sensor (BSS)
+ communication module COM15 for
connection to PROFIBUS DP

Additional accessory components can be ordered ready-mounted.

These supplements are identified by **"–Z"**.

Even with additional components, one Article No. is sufficient.

Accessories: For retrofitting (components for subsequent fitting)

Example

3WL9 1 1 1 – 0 B A 2 1 – 0 A A 0

Interlocking set for mechanical ON/OFF
without lock

Additional accessories which are not intended to be ready-mounted in the factory, such as spare parts for storage, can also be ordered separately from the circuit breaker.

Accessories for retrofitting are identified by the Article No. stem 3WL9.

Documentation

Operating manual	German/English	Article No.	**3ZX18 12-0WL00-0AN2**
Complete set	French/Italian	Article No.	**3ZX18 12-0WL00-0AJ2**
	Spanish/Portuguese	Article No.	**3ZX18 12-0WL00-0AL2**
PROFIBUS manual	German	Article No.	**A5E0151347**
Communication	English	Article No.	**A5E0151353**
MODBUS manual	German	Article No.	**3ZX1012-0WL10-1AB1**
Communication	English	Article No.	**3ZX1012-0WL10-1AC1**

Delivery time class C
On request
On request

Free download of documentation from
www.siemens.com/lowvoltage/manuals

More information

Up-to-date information on the Internet at:
www.siemens.com/sentron

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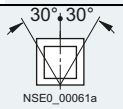
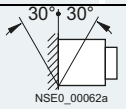
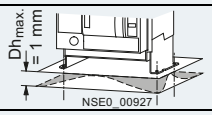
Technical specifications

Size			I	II		
Type			**3WL1120**	**3WL1210**	**3WL1220**	**3WL1240**
Rated current I_n at 40 °C Main conductor		A	2000	... 1000	2000	4000
Rated operational voltage U_e (1000 V version, order code "A05")		V DC	1000	... 600/1000	... 600/1000	... 600/1000
Rated insulation voltage U_i		V DC	1000	1000	1000	1000
Rated impulse withstand voltage U_{imp}						
• Main conducting paths		kV	12	12	12	12
• Auxiliary circuits		kV	4	4	4	4
• Control circuits		kV	2.5	2.5	2.5	2.5
Isolating function acc. to EN 60947-2			Yes	Yes	Yes	Yes
Utilization category				B		
Permissible ambient temperature						
• Operation		°C	–25/+70	–25/+70	–25/+70	–25/+70
• Storage		°C	–40/+70	–40/+70	–40/+70	–40/+70
Permissible load	Up to 40 °C	A	2000	1000	2000	4000
At rear horizontal main	Up to 55 °C	A	1910	1000	2000	3640
connections	Up to 60 °C	A	1850	1000	2000	3500
(Cu painted black)	Up to 70 °C	A	1710	1000	1950	3250
Power loss at I_n for symmetrical loads Withdrawable circuit breakers		W	150	280	770	1640
Switching times						
• Make time		ms	35	35	35	35
• Opening time		ms	38	34	34	34
• Electrical make time (through activation solenoid)[1]		ms	100	100	100	100
• Electrical opening time (through shunt release)		ms	73	73	73	73
• Electrical opening time (instantaneous undervoltage release)		ms	73	73	73	73
Endurance[3]						
• Mechanical (without maintenance)		Operating cycles	10 000	10000	10000	10000
• Mechanical (with maintenance)[2]		Operating cycles	15 000	15000	15000	15000
• Electrical (without maintenance)		Operating cycles	1000	6000	6000	4000
• 1000 V version		Operating cycles	1000	1000	1000	1000
• Electrical (with maintenance)[2]		Operating cycles	2000	15000	15000	15000
Switching frequency						
• 600 V version		1/h	--	60	60	60
• 1000 V version		1/h	20	20	20	20
Mounting position				 and/or  		
Degree of protection				IP20 without cabinet door, IP41 with door sealing frame, IP55 with cover		
Auxiliary conductors (Cu)	Standard connection = strain-relief clamp					
Max. number	• Without end sleeve			2 × 0.5 mm² (AWG 20) ... 2 × 1.5 mm² (AWG 16); 1 × 2.5 mm² (AWG 14)		
Auxiliary conductors ×	• With end sleeve acc. to DIN 46228 Part 2			1 × 0.5 mm² (AWG 20) ... 1 × 1.5 mm² (AWG 16)		
cross-section	• With twin end sleeve			2 × 0.5 mm² (AWG 20) ... 2 × 1.5 mm² (AWG 16)		
(solid/stranded)	Optional connection = tension spring					
	• Without end sleeve			2 × 0.5 mm² (AWG 20) ... 2 × 2.5 mm² (AWG 14)		
	• With end sleeve acc. to DIN 46228 Part 2			2 × 0.5 mm² (AWG 20) ... 2 × 1.5 mm² (AWG 16)		
Weights	3-pole • Fixed-mounted circuit breakers	kg	43	56	56	64
	• Withdrawable circuit breakers	kg	--	60	60	68
	• Guide frames	kg	--	31	31	45
	4-pole • Fixed-mounted circuit breakers	kg	50	67	67	77
	• Withdrawable circuit breakers	kg	--	72	72	82
	• Guide frames	kg	--	37	37	54

1) Make-time through activation solenoid for synchronization purposes (short-time excited) 50 ms.

2) Maintenance means: replace main contact elements and arc chutes (see Operating Manual).

3) Further technical specifications on request.

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General data

Breaking capacity

Size		I (DC)	II (DC)
Type		**3WL11**	**3WL12**
Breaking capacity		**DC**	**DC**
Short-circuit breaking capacity			
Up to 220 V DC I_{cc}	kA	20	35
Up to 300 V DC I_{cc}	kA	20	30
Up to 600 V DC I_{cc}	kA	20	25
Up to 1000 V DC I_{cc}	kA	20	20
Rated short-time withstand current I_{cw}			
0.5 s	kA	--	--
1 s	kA	20	35[1]/30[2]/25[3]/20[4]
2 s	kA	--	--
3 s	kA	--	--

(N) Circuit breakers with ECO breaking capacity N
(S) Circuit breakers with standard breaking capacity S
(H) Circuit breakers with high breaking capacity H
(C) Circuit breakers with very high breaking capacity C
(DC) Non-automatic air circuit breakers with DC breaking capacity

These breaking capacities are indicated in the corresponding tables by the symbols shown on orange backgrounds.

Note:

For further technical specifications, see the configuration manual "Air Circuit Breakers". Free download from: www.siemens.com/lowvoltage/manuals

Abbreviations* (functions)	English long text	Explanation
L	Long Time Delay	Overload protection
S	Short Time Delay	Short-circuit protection (short-time delayed)
I	Instantaneous	Short-circuit protection (instantaneous)
N	Neutral Protection	Neutral conductor protection
G	Ground Fault	Ground-fault protection

* Designations according to IEC 60947-2, Appendix K.

[1] At U_e = 220 V DC.
[2] At U_e = 300 V DC.
[3] At U_e = 600 V DC.
[4] At U_e = 1000 V DC.

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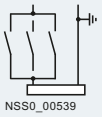
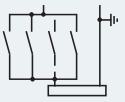
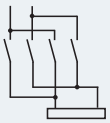
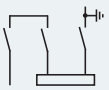
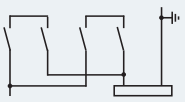
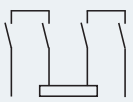
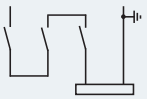
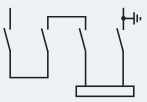
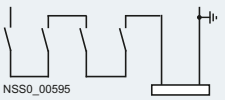
Application examples

Rated operational voltage	**Required series-connected contact gaps at rated voltage**	**For 3-pole non-automatic air circuit breakers** (operational currents up to 4000 A/conducting path)	**For 4-pole non-automatic air circuit breakers** (operational currents up to 4000 A/conducting path)
Up to 300 V + 10 %		 NSS0_00539 1-pole, 2 parallel conducting paths, only with grounded system 2-pole	 1-pole, 3 parallel conducting paths, only with grounded system  2-pole 2 parallel conducting paths
Over 300 V + 10 % Up to 600 V + 10 %		 2-pole, only with grounded system	 1-pole, 2 parallel conducting paths, only with grounded system  2-pole
Over 600 V + 10 % Up to 1000 V + 10 % (version for 1000 V required, order with "-Z" and order code A05)		 1-pole, only with grounded system	 2-pole, only with grounded system  NSS0_00595 1-pole, only with grounded system

Connection to the circuit breakers is independent of the direction and polarity; the circuit diagrams can be converted analogously. If the parallel or series connections are established directly to the connecting bars, for thermal reasons the circuit breakers may only be subjected continuously to 80 % of the permissible operational current. If the parallel or series connection is made at a distance of 1 m from the connecting bars, the circuit breaker can be used at full operational current load.

⊣⊪ grounded system
▭ load

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3- and 4-pole, fixed-mounted versions

Selection and ordering data

For general data, see page 1/8.

Size	Max. rated circuit breaker current $I_{n\,max}$	DT	3-pole non-automatic air circuit breakers (DC) Article No.: www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A							kg
Horizontal main circuit connection								
II	1000		3WL1210-8□□32-□□□□		1	1 unit	1CA	56.000
	2000		3WL1220-8□□32-□□□□		1	1 unit	1CA	56.000
	4000[1]		3WL1240-8□□32-□□□□		1	1 unit	1CA	64.000
Vertical main circuit connection								
II	1000		3WL1210-8□□31-□□□□		1	1 unit	1CA	56.000
	2000		3WL1220-8□□31-□□□□		1	1 unit	1CA	56.000
	4000[1]		3WL1240-8□□31-□□□□		1	1 unit	1CA	85.000
Front main circuit connection, single hole								
II	1000		3WL1210-8□□33-□□□□		1	1 unit	1CA	56.000
	2000		3WL1220-8□□33-□□□□		1	1 unit	1CA	56.000
Front main circuit connection, double hole								
II	1000		3WL1210-8□□34-□□□□		1	1 unit	1CA	56.000
	2000		3WL1220-8□□34-□□□□		1	1 unit	1CA	56.000

Options			Add. price
Non-automatic air circuit breakers[2]	Without Electronic Trip Units	**AA**	**None**
Operating mechanisms	Manual operating mechanism with mechanical closing	**1AA2**	**None**
	For further Article No. supplements, see page 1/44		

Size	Max. rated circuit breaker current $I_{n\,max}$	DT	4-pole non-automatic air circuit breakers (DC) Article No.: www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A							kg
Horizontal main circuit connection								
I[3]	2000		3WL1120-8□□42-□□□□		1	1 unit	1CA	50.000
II	1000		3WL1210-8□□42-□□□□		1	1 unit	1CA	67.000
	2000		3WL1220-8□□42-□□□□		1	1 unit	1CA	67.000
	4000[1]		3WL1240-8□□42-□□□□		1	1 unit	1CA	77.000
Vertical main circuit connection								
I[3]	2000		3WL1120-8□□41-□□□□		1	1 unit	1CA	50.000
II	1000		3WL1210-8□□41-□□□□		1	1 unit	1CA	75.000
	2000		3WL1220-8□□41-□□□□		1	1 unit	1CA	75.000
	4000[1]		3WL1240-8□□41-□□□□		1	1 unit	1CA	103.000
Front main circuit connection, single hole								
II	1000		3WL1210-8□□43-□□□□		1	1 unit	1CA	67.000
	2000		3WL1220-8□□43-□□□□		1	1 unit	1CA	67.000
Front main circuit connection, double hole								
II	1000		3WL1210-8□□44-□□□□		1	1 unit	1CA	67.000
	2000		3WL1220-8□□44-□□□□		1	1 unit	1CA	67.000

Options			Add. price
Non-automatic air circuit breakers[2]	Without Electronic Trip Units	**AA**	**None**
Operating mechanisms	Manual operating mechanism with mechanical closing	**1AA2**	**None**
	For further Article No. supplements see page 1/44		

Add "**-Z**" to the complete Article No. and indicate the appropriate order code(s).

3WL12.0-8....-....-Z
□ □ □

Condition	Size	Rated current I_n				Additional price 3-pole	Additional price 4-pole
Rated voltage 1000 V DC	II	Up to 2000 A	**A**	**0**	**5**	✓	✓
		Up to 4000 A	**A**	**0**	**5**	✓	✓

Note

For voltages over 600 V use the version for 1000 V DC rated voltage for size II: Order with "-Z" and order code "A05". All other accessory parts must be ordered by specifying "-Z" and the corresponding order code, see "3WL1 Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC), IEC", "Options", from page 1/45. An external overload and short-circuit protection device is available from the company "mat" for the 3WL1 non-automatic air circuit breakers. Available only directly from the company "mat" – Maschinen- und Anlagentechnik (for the address, see page 1/78).

1) Provisions to dissipate heat must be made on the line side.
2) For permissible rated short-time current I_{cw} and short-circuit breaking capacity I_{cc} for non-automatic air circuit breakers, see page 1/13.
3) 3WL1120-8 DC non-automatic air circuit breakers are designed for a rated voltage of 1000 V DC.
✓ Additional price

* You can order this quantity or a multiple thereof.

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Selection and ordering data

Size	Max. rated circuit breaker current $I_{n\,max}$	DT	3-pole non-automatic air circuit breakers (DC) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A							kg
Without guide frames (for guide frames, see page 1/79)								
II	1000		3WL1210-8□□35-□□□□		1	1 unit	1CA	60.000
	2000		3WL1220-8□□35-□□□□		1	1 unit	1CA	60.000
	4000[1]		3WL1240-8□□35-□□□□		1	1 unit	1CA	68.000
With guide frames, horizontal main circuit connection								
II	1000		3WL1210-8□□36-□□□□		1	1 unit	1CA	91.000
	2000		3WL1220-8□□36-□□□□		1	1 unit	1CA	91.000
	4000[1]		3WL1240-8□□36-□□□□		1	1 unit	1CA	113.000
With guide frames, vertical main circuit connection								
II	1000		3WL1210-8□□37-□□□□		1	1 unit	1CA	91.000
	2000		3WL1220-8□□37-□□□□		1	1 unit	1CA	91.000
	4000[1]		3WL1240-8□□37-□□□□		1	1 unit	1CA	121.000
With guide frames, connecting flanges								
II	1000		3WL1210-8□□38-□□□□		1	1 unit	1CA	91.000
	2000		3WL1220-8□□38-□□□□		1	1 unit	1CA	91.000
	4000[1]		3WL1240-8□□38-□□□□		1	1 unit	1CA	113.000

Options				Add. price
Non-automatic air circuit breakers[2]	Without Electronic Trip Units	**AA**		**None**
Operating mechanisms	Manual operating mechanism with mechanical closing		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

Add "**-Z**" to the complete Article No. and indicate the appropriate order code(s).			**3WL12.0-8..3.-....-Z** □ □ □	Additional price 3-pole
Condition	Size	Rated current I_n		
Rated voltage 1000 V DC	II[4]	Up to 2000 A	**A 0 5**	✓
		Up to 4000 A	**A 0 5**	✓
Tinned version of the customer's connections on the guide frame[3] Only for circuit breakers in withdrawable version with horizontal connection or flange connection. The normal delivery time increases to 15 work days.	II		**A 0 8**	✓

Note

For voltages over 600 V use the version for 1000 V DC rated voltage: Order with "-Z" and order code "A05".

All other accessory parts must be ordered by specifying "-Z" and the corresponding order code, see "3WL1 Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC), IEC", "Options", from page 1/45.

An external overload and short-circuit protection device is available from the company "mat" for the 3WL1 non-automatic air circuit breakers.

Available only directly from the company "mat" – Maschinen- und Anlagentechnik (for the address, see page 1/78).

✓ Additional price

1) Provisions to dissipate heat must be made on the line side.

2) For permissible rated short-time current I_{cw} and short-circuit breaking capacity I_{cc} for non-automatic air circuit breakers, see page 1/13.

3) The permissible temperature-rise limits according to IEC 60947-2 are 5 K lower for a tin surface than for a silver surface.

4) If ordering withdrawable circuit breaker and guide frame separately, specify order code "A05" for withdrawable circuit breaker and guide frame.

*** You can order this quantity or a multiple thereof.**

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3- and 4-pole, withdrawable versions

Selection and ordering data

Size	Max. rated circuit breaker current $I_{n\,max}$	DT	4-pole non-automatic air circuit breakers (DC) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A							kg
Without guide frames (for guide frames, see page 1/79)								
II	1000		3WL1210-8□□45-□□□□		1	1 unit	1CA	75.000
	2000		3WL1220-8□□45-□□□□		1	1 unit	1CA	75.000
	4000[1]		3WL1240-8□□45-□□□□		1	1 unit	1CA	82.000
With guide frames, horizontal main circuit connection								
II	1000		3WL1210-8□□46-□□□□		1	1 unit	1CA	109.000
	2000		3WL1220-8□□46-□□□□		1	1 unit	1CA	109.000
	4000[1]		3WL1240-8□□46-□□□□		1	1 unit	1CA	136.000
With guide frames, vertical main circuit connection								
II	1000		3WL1210-8□□47-□□□□		1	1 unit	1CA	109.000
	2000		3WL1220-8□□47-□□□□		1	1 unit	1CA	109.000
	4000[1]		3WL1240-8□□47-□□□□		1	1 unit	1CA	146.000
With guide frames, connecting flanges								
II	1000		3WL1210-8□□48-□□□□		1	1 unit	1CA	109.000
	2000		3WL1220-8□□48-□□□□		1	1 unit	1CA	109.000
	4000[1]		3WL1240-8□□48-□□□□		1	1 unit	1CA	136.000

Options				Add. price
Non-automatic air circuit breakers[2]	Without Electronic Trip Units	**AA**		**None**
Operating mechanisms	Manual operating mechanism with mechanical closing		**1AA2**	**None**
	For further Article No. supplements, see page 1/44			

Add "**-Z**" to the complete Article No. and indicate the appropriate order code(s).			**3WL12.0-8..4.-....-Z** □ □ □	Additional price 4-pole
Condition	Size	Rated current I_n		
Rated voltage 1000 V DC	II[4]	Up to 2000 A	**A 0 5**	✓
		Up to 4000 A	**A 0 5**	✓
Tinned version of the customer's connections on the guide frame[3] Only for circuit breakers in withdrawable version with horizontal connection or flange connection. The normal delivery time increases to 15 work days.	II		**A 0 8**	✓

Note

For voltages over 600 V use the version for 1000 V DC rated voltage: Order with "-Z" and order code "A05".

All other accessory parts must be ordered by specifying "-Z" and the corresponding order code, see "3WL1 Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC), IEC", "Options", from page 1/45.

An external overload and short-circuit protection device is available from the company "mat" for the 3WL1 non-automatic air circuit breakers.

Available only directly from the company "mat" – Maschinen- und Anlagentechnik[5].

✓ Additional price

1) Provisions to dissipate heat must be made on the line side.

2) For permissible rated short-time current I_{cw} and short-circuit breaking capacity I_{cc} for non-automatic air circuit breakers, see page 1/13.

3) The permissible temperature-rise limits according to IEC 60947-2 are 5 K lower for a tin surface than for a silver surface.

4) If ordering withdrawable circuit breaker and guide frame separately, specify order code "A05" for withdrawable circuit breaker and guide frame.

5) **mat – Maschinen- und Anlagentechnik**
Dr. Becker GmbH
Rudolf-Diesel-Strasse 22
D-22941 Bargteheide
Tel.: +49 (45 32) 20-2101
Fax: +49 (45 32) 20-2121
E-mail: info@m-a-t.de
Internet: www.m-a-t.de

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Selection and ordering data

Guide frames for DC non-automatic air circuit breakers

Size	Max. rated circuit breaker current $I_{n\,max}$	DT	**Guide frames for 3-pole non-automatic air circuit breakers** Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A							kg
Front main circuit connection, single hole								
II	2000		3WL9212-3DA□□-□□A1		1	1 unit	1CA	31.000
Front main circuit connection, double hole								
II	2000		3WL9212-3DB□□-□□A1		1	1 unit	1CA	31.000
Horizontal main circuit connection								
II	2000		3WL9212-3DC□□-□□A1		1	1 unit	1CA	31.000
	4000		3WL9212-6DC□□-□□A1		1	1 unit	1CA	60.000
Vertical main circuit connection								
II	2000		3WL9212-3DD□□-□□A1		1	1 unit	1CA	31.000
	4000		3WL9212-6DD□□-□□A1		1	1 unit	1CA	60.000
Main circuit connection connecting flanges								
II	2000		3WL9212-3DE□□-□□A1		1	1 unit	1CA	31.000
	4000		3WL9212-6DE□□-□□A1		1	1 unit	1CA	60.000

Options						Add. price 3-pole
Number of auxiliary supply connectors	None	**0**				**None**
	1 connector	**1**				
	2 connectors	**2**				✓
	3 connectors	**3**				✓
	4 connectors	**4**				✓
Note						
For table for required number of auxiliary supply connectors, see page 1/51.						
Type of auxiliary circuit connections	None		**0**			**None**
	With screw connection (SI-GUT, standard)		**1**			✓
	With screwless connection method (tension spring)		**2**			✓
Position signaling switches	None			**0**		**None**
	Option 1: Connected position 1 CO, test position 1 CO, disconnected position 1 CO			**1**		✓
	Option 2: Connected position 3 CO, test position 2 CO, disconnected position 1 CO			**2**		✓
Shutters	None				**A**	**None**
	With shutter, 2-part, lockable				**B**	✓

	Add "**-Z**" to the complete Article No. and indicate the appropriate order code(s).	**3WL9212-.....-..A1-Z** □ □ □	Additional price
Rated voltage 1000 V DC			
Size II		**A 0 5**	✓
Tinned version of the customer's connections on the guide frame[1] Only for guide frames with horizontal connection or flange connection			
Size II		**A 0 8**	✓
Notes			
• For guide frames for 4-pole DC non-automatic air circuit breakers, see the following page. • All other accessory parts must be ordered by specifying "–Z" and the corresponding order code, see "3WL1 Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC), IEC", "Options", page 1/45 onwards.			

✓ Additional price

1) The permissible temperature-rise limits according to IEC 60947-2 are 5 K lower for a tin surface than for a silver surface.

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Accessories and spare parts

Size	Max. rated circuit breaker current $I_{n\,max}$	DT	**Guide frames for 4-pole non-automatic air circuit breakers** Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A							kg
Front main circuit connection, single hole								
II	2000		3WL9212-3EA□□-□□A1		1	1 unit	1CA	37.000
Front main circuit connection, double hole								
II	2000		3WL9212-3EB□□-□□A1		1	1 unit	1CA	37.000
Horizontal main circuit connection								
II	2000		3WL9212-3EC□□-□□A1		1	1 unit	1CA	37.000
II	4000		3WL9212-6EC□□-□□A1		1	1 unit	1CA	84.000
Vertical main circuit connection								
II	2000		3WL9212-3ED□□-□□A1		1	1 unit	1CA	37.000
II	4000		3WL9212-6ED□□-□□A1		1	1 unit	1CA	84.000
Main circuit connection connecting flanges								
II	2000		3WL9212-3EE□□-□□A1		1	1 unit	1CA	37.000
II	4000		3WL9212-6EE□□-□□A1		1	1 unit	1CA	84.000

Options							Add. price 4-pole
Number of auxiliary supply connectors	None	**0**					**None**
	1 connector	**1**					
	2 connectors	**2**					✓
	3 connectors	**3**					✓
	4 connectors	**4**					✓
Note							
For table for required number of auxiliary supply connectors, see page 1/51.							
Type of auxiliary circuit connections	None		**0**				**None**
	With screw connection (SI-GUT, standard)		**1**				✓
	With screwless connection method (tension spring)		**2**				✓
Position signaling switches	None			**0**			**None**
	Option 1: Connected position 1 CO, test position 1 CO, disconnected position 1 CO			**1**			✓
	Option 2: Connected position 3 CO, test position 2 CO, disconnected position 1 CO			**2**			✓
Shutters	None				**A**		**None**
	With shutter, 2-part, lockable				**B**		✓

	Add "**-Z**" to the complete Article No. and indicate the appropriate order code(s).	**3WL9212-.....-..A1-Z** □ □ □	Additional price
Rated voltage 1000 V DC			
Size II		**A 0 5**	✓
Tinned version of the customer's connections on the guide frame[1] Only for guide frames with horizontal connection or flange connection			
Size II		**A 0 8**	✓
Notes			
• For guide frames for 3-pole DC non-automatic air circuit breakers see previous page. • All other accessory parts must be ordered by specifying "–Z" and the corresponding order code, see "3WL1 Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC), IEC", "Options", page 1/45 onwards.			

[1] The permissible temperature-rise limits according to IEC 60947-2 are 5 K lower for a tin surface than for a silver surface.

* You can order this quantity or a multiple thereof.

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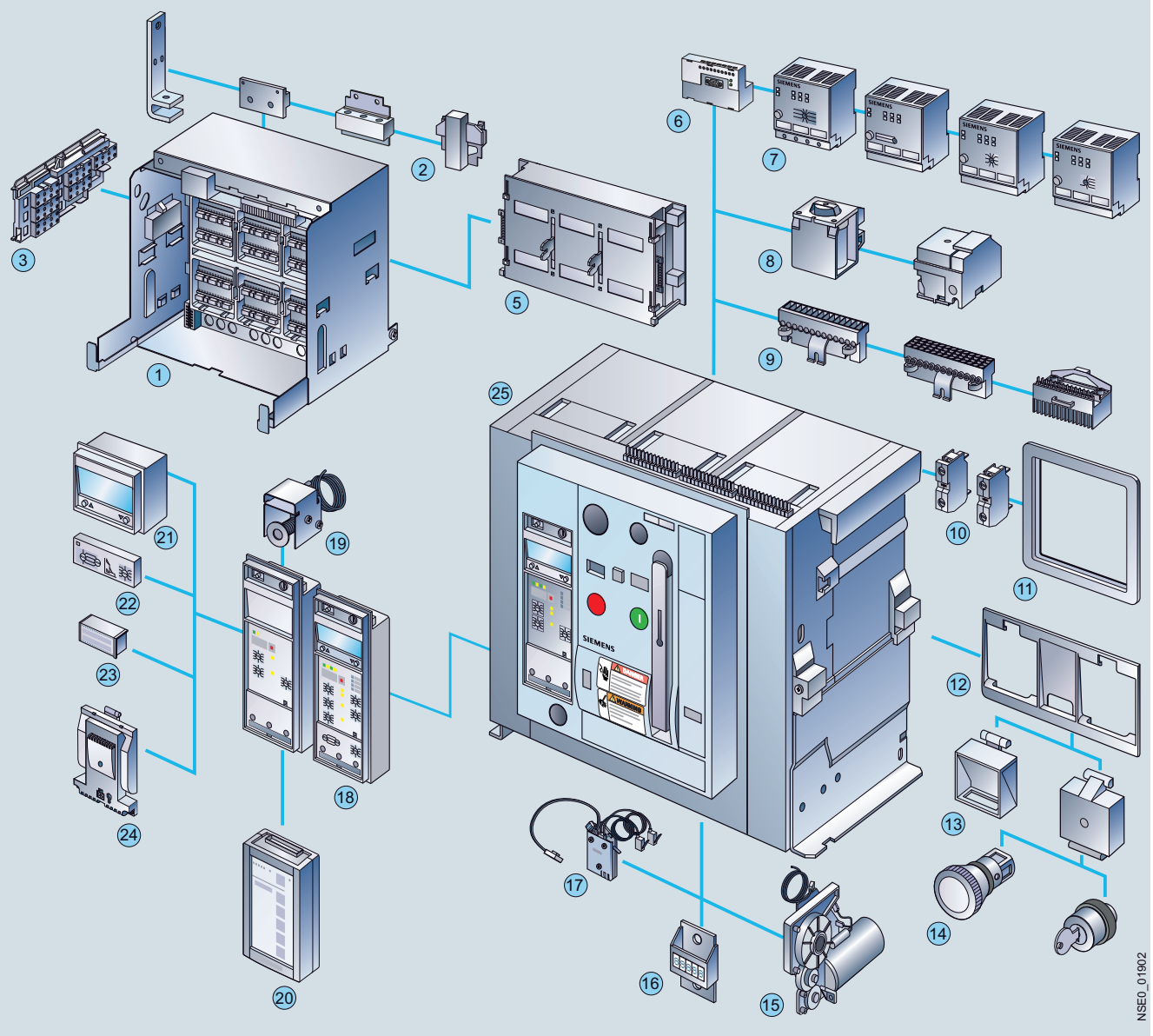
Overview

3WL5:
Superior individual products integrated into uniform power distribution systems – up to and including industry-specific industrial and infrastructure solutions



① Guide frame, see page 1/102
② Main circuit connection front, flange, horizontal, vertical see page 1/98 and page 1/114
③ Position signaling switch, see page 1/97 and page 1/108
⑤ Shutters, see page 1/97
⑥ COM15 PROFIBUS module or COM16 MODBUS module, see page 1/113
⑦ External **Cubicle**BUS modules, see page 1/112
⑧ Closing coil, auxiliary release, see page 1/95
⑨ Auxiliary conductor plug-in system, see page 1/98
⑩ Auxiliary switch block, see page 1/95
⑪ Door sealing frame, see page 1/96
⑫ Interlocking set for mechanical ON/OFF, see page 1/105
⑬ Transparent panel, function insert, see page 1/105
⑭ EMERGENCY-STOP pushbutton, key operated, see page 1/108
⑮ Motorized operating mechanism, see page 1/97
⑯ Operating cycles counter, see page 1/96
⑰ Breaker Status Sensor (BSS), see page 1/98
⑱ Protective devices with device holder, Electronic Trip Unit (ETU) see page 1/104
⑲ Remote reset solenoid, see page 1/96
⑳ Breaker Data Adapter (BDA Plus), see page 1/112
㉑ Four-line display, see page 1/104
㉒ Ground-fault protection module, see page 1/104
㉓ Rating plug, see page 1/96
㉔ Metering function module, see page 1/98
㉕ Air circuit breaker, see page 1/89 to page 1/94

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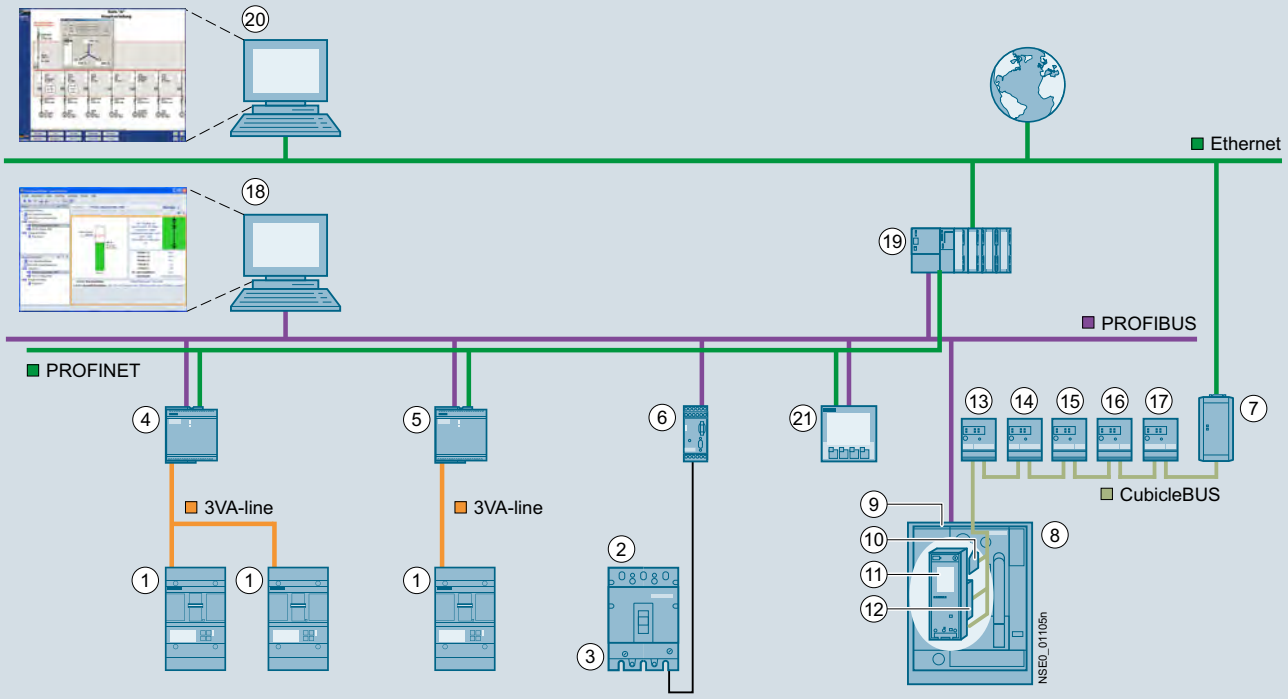
Introduction

Communication-capable circuit breakers (with ETU45B Electronic Trip Unit)



1 3VA molded case circuit breakers
2 3VL molded case circuit breakers
3 Electronic trip unit ETU / LCD ETU
4 COM800 breaker data server
5 COM100 breaker data server
6 COM20 Release 2 PROFIBUS module including Zone Selective Interlocking
7 BDA *Plus* with Ethernet interface
8 3WL air circuit breaker
9 COM15 PROFIBUS module
10 Breaker status sensor (BSS)
11 Electronic trip unit (ETU)
12 Measurement function *Plus*
13 Zone Selective Interlocking module
14 Digital output module with relay contacts
15 Digital output module with relay contacts, configurable
16 Analog output modules
17 Digital input modules
18 Configuration software powerconfig V2.3 and higher
19 PLC, e.g. SIMATIC S7
20 E.g. SIMATIC powerrate
21 7KM PAC measuring devices

Characteristics

- Coordinated communication concept using the PROFIBUS DP or MODBUS, ranging from 16 A to 5000 A with 3VL molded case circuit breakers and 3WL5 air circuit breakers
- The high level of modularity of circuit breakers and accessories allows easy retrofitting of all communication components
- Significant additional benefits for the switchgear due to the possibility of linking up external input and output modules to the circuit breaker-internal **Cubicle**BUS of the 3WL5 air circuit breaker
- Innovative software products for parameterization, operation, monitoring, and diagnostics of circuit breakers, both locally or via PROFIBUS DP, MODBUS or Ethernet/Intranet/Internet
- Complete integration of the circuit breakers into the Totally Integrated Power and Totally Integrated Automation solutions

Communication:

- For air circuit breakers with optional communication function (ETU45B Electronic Trip Units) see page 1/104.
- For accessories, see page 1/101 to page 1/116.
- For more information, See chapter "Measuring Devices and Power Monitoring".

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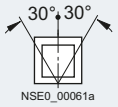
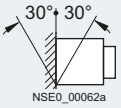
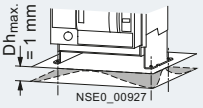
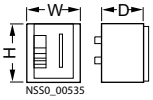
Technical specifications

Size			I		II
Type			**3WL5110**	**3WL5116**	**3WL5120**
Number of poles			3-pole, 4-pole		
Rated current I_n at 50/60 Hz					
Main conductor	At 40 °C	A	Up to 1000	1600	2000
	At 55 °C	A	1000	1600	2000
	At 60 °C	A	1000	1600	2000
Rated voltage U_e at 50/60 Hz		V AC	600 Y/347	600 Y/347	600
Rated ultimate short-circuit breaking capacity at 500 V AC		kA	65 (480 V)		100 (480 V)
Ambient temperature of the system		°C	–25/+40	–25/+40	–25/+40
Power loss at rated current					
With 3-phase symmetrical load					
• Fixed-mounted circuit breakers		W	100	150	180
• Withdrawable circuit breakers		W	195	350	320
Switching times					
• Make time		ms	35	35	35
• Opening time		ms	38	38	34
• Electrical make time (through activation solenoid)[1]		ms	80	80	100
• Electrical opening time (through shunt release)		ms	73	73	73
• Electrical opening time (instantaneous undervoltage release)		ms	73	73	73
• Opening time due to ETU, instantaneous short-circuit release		ms	50	50	50
Endurance					
• Mechanical (without maintenance)		Operating cycles	10000	10000	10000
• Electrical (without maintenance)		Operating cycles	4000	4000	4000
Switching frequency		1/h	60	60	60
Minimum interval between tripping operation by electronic trip unit and next making operation of the circuit breaker (only with autom. mechanical resetting of the lockout device)		ms	80	80	80
Minimum dimension of circuit breaker compartment					
Width × Height × Depth	3-pole	mm	400 × 460 × 380	400 × 460 × 380	500 × 460 × 380
	4-pole	mm	500 × 460 × 380	500 × 460 × 380	600 × 460 × 380
Degree of protection					
• With cover			IP55		
• Without cover (with door sealing frame)			IP41		
Mounting position			 NSE0_00061a and/or  NSE0_00062a		 NSE0_00927
Main conductor minimum cross-sections		Unit(s) mm² inches	2 6.4 × 76.2 1/4 × 3	2 6.4 × 76.2 1/4 × 3	2 6.4 × 102 1/4 × 4
Auxiliary conductors (Cu)	Standard connection = strain-relief clamp				
Max. number Auxiliary conductors × cross-section (solid/stranded)	• Without end sleeve		2 × 0.5 mm² (AWG 20) to 2 × 1.5 mm² (AWG 16); 1 × 2.5 mm² (AWG 14)		
	• With end sleeve acc. to DIN 46228 Part 2[2]		1 × 0.5 mm² (AWG 20) to 1 × 1.5 mm² (AWG 16)		
	• With twin end sleeve		2 × 0.5 mm² (AWG 20) to 2 × 1.5 mm² (AWG 16)		
	Optional connection = tension spring				
	• Without end sleeve		2 × 0.5 mm² (AWG 20) to 2 × 2.5 mm² (AWG 14)		
	• With end sleeve acc. to DIN 46228 Part 2		2 × 0.5 mm² (AWG 20) to 2 × 1.5 mm² (AWG 16)		
Weights					
3-pole	• Fixed-mounted circuit breakers	kg	43	43	56
	• Withdrawable circuit breakers	kg	45	45	60
	• Guide frames	kg	25	25	31
4-pole	• Fixed-mounted circuit breakers	kg	50	50	67
	• Withdrawable circuit breakers	kg	54	54	72
	• Guide frames	kg	30	30	37
Dimensions 3-/4-pole					
 NSS0_00535		W mm	320/410		460/590
	Fixed-mounted	H mm	434		434
		D mm	291		291
	Withdrawable	H mm	465.5		465.5
		D mm	471		471

[1] Make-time through activation solenoid for synchronization purposes (short-time excited): 50 ms.

[2] Notice: Approval of end sleeves.

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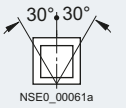
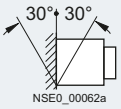
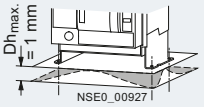
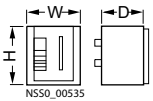
1

General data

Size			II			III	
Type			**3WL5225**	**3WL5230**	**3WL5232**	**3WL5340**	**3WL5350**
Number of poles			3-pole, 4-pole				
Rated current I_n at 50/60 Hz							
Main conductor	At 40 °C	A	2500	3000	3200	4000	5000
	At 55 °C	A	2500	3000	3200	4000	5000
	At 60 °C	A	2500	3000	3200	4000	5000
Rated voltage U_e at 50/60 Hz		V AC	600	600	600	Up to 600 Y/347	Up to 600 Y/347
Rated limit short-circuit breaking capacity at 500 V AC		kA	100 (480 V)			100 (480 V)	
Ambient temperature of the system		°C	–25/+40	–25/+40	–25/+40	–25/+40	–25/+40
Power loss at rated current							
With 3-phase symmetrical load							
• Fixed-mounted circuit breakers		W	270	410	410	520	630
• Withdrawable circuit breakers		W	520	710	710	810	1050
Switching times							
• Make time		ms	35	35	35	35	35
• Opening time		ms	34	34	34	34	34
• Electrical make time (through activation solenoid)[1]		ms	100	100	100	100	100
• Electrical opening time (through shunt release)		ms	73	73	73	73	73
• Electrical opening time (instantaneous undervoltage release)		ms	73	73	73	73	73
• Opening time due to ETU, instantaneous short-circuit release		ms	50	50	50	50	50
Endurance							
• Mechanical (without maintenance)	Operating cycles		10000	10000	10000	10000	10000
• Electrical (without maintenance)	Operating cycles		4000	4000	4000	1000	1000
Switching frequency		1/h	60	60	60	60	60
Minimum interval between tripping operation by electronic trip unit and next making operation of the circuit breaker (only with autom. mechanical resetting of the lockout device)		ms	80	80	80	80	80
Minimum dimension							
Circuit breaker compartment Width × Height × Depth	3-pole without A17	mm	500 × 460 × 380	500 × 460 × 380	500 × 460 × 380	800 × 460 × 380	800 × 460 × 380
	3-pole with A17	mm	560 × 570 × 500	--	560 × 570 × 500	810 × 570 × 500	--
	4-pole	mm	600 × 460 × 380	--	560 × 570 × 500	1000 × 460 × 380	1000 × 460 × 380
Degree of protection							
• With cover			IP55				
• Without cover (with door sealing frame)			IP41				
Mounting position			 NSE0_00061a and/or  NSE0_00062a			 NSE0_00927	
Main conductor minimum cross-sections		Unit(s)	2 4	4	4	4	4
		mm²	6.4 × 127 6.4 × 63.5	6.4 × 102	6.4 × 102	10 × 120	10 × 120
		inches	1/4 × 5 1/4 × 2–1/2	1/4 × 4	1/4 × 4	1/4 × 5[2]	1/4 × 5[2]
Auxiliary conductors (Cu) Max. number of auxiliary conductors × cross-section (solid/stranded)	Standard connection = strain-relief clamp						
	• Without end sleeve		2 × 0.5 mm² (AWG 20) to 2 × 1.5 mm² (AWG 16); 1 × 2.5 mm² (AWG 14)				
	• With end sleeve acc. to DIN 46228 Part 2		1 × 0.5 mm² (AWG 20) to 1 × 1.5 mm² (AWG 16)				
	• With twin end sleeve		2 × 0.5 mm² (AWG 20) to 2 × 1.5 mm² (AWG 16)				
	Optional connection = tension spring						
	• Without end sleeve		2 × 0.5 mm² (AWG 20) to 2 × 2,5 mm² (AWG 14)				
	• With end sleeve acc. to DIN 46228 Part 2		2 × 0.5 mm² (AWG 20) to 2 × 1.5 mm² (AWG 16)				
Weights							
3-pole	• Fixed-mounted circuit breakers	kg	59	64	64	82	82
	• Withdrawable circuit breakers	kg	63	68	--	88	88
	• Guide frames	kg	39	45	--	60	60
4-pole	• Fixed-mounted circuit breakers	kg	71	77	77	99	99
	• Withdrawable circuit breakers	kg	76	82	--	106	106
	• Guide frames	kg	47	54	--	84	84
Dimensions 3-/4-pole							
 NSS0_00535		W mm	460/590			704/914	
	Fixed-mounted	H mm	434			434	
		D mm	291			291	
	Withdrawable	H mm	465.5			465.5	
		D mm	471			471	

[1] Make-time through activation solenoid for synchronization purposes (short-time excited) 50 ms.

[2] 1/4 × 5 for fixed-mounted circuit breakers on request.

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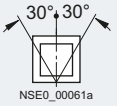
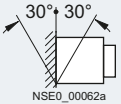
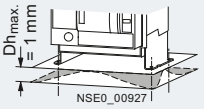
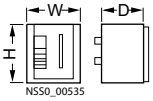
Size			**I**	**II**
Type			**3WL5120-8AA...**	**3WL5232-8AA...**
No. of poles			4-pole	3-pole
Rated current I_n at DC according to IEC 60947-2				
Main conductor	At 40 °C	A	2000	3200
	At 55 °C	A	2000	3200
	At 60 °C	A	2000	3200
Rated current I_n at DC according to UL 489B				
Main conductor	At 40 °C	A	1600	3200
	At 55 °C	A	1600	3200
	At 60 °C	A	1600	3200
Rated voltage U_e at 50/60 Hz		V AC	1000	690
Ambient temperature of the system		°C	–25/+40	–25/+40
Power loss at rated current				
With 3-phase symmetrical load				
• Fixed-mounted circuit breakers		W	100	410
• Withdrawable circuit breakers		W	--	--
Switching times				
• Make time		ms	35	35
• Opening time		ms	38	34
• Electrical make time (through activation solenoid)[1]		ms	80	100
• Electrical opening time (through shunt release)		ms	73	73
• Electrical opening time (instantaneous undervoltage release)		ms	73	73
• Opening time due to ETU, instantaneous short-circuit release		ms	50	50
Endurance				
• Mechanical (without maintenance)		Operating cycles	10000	10000
• Electrical (without maintenance)		Operating cycles	1000	1000
Switching frequency		1/h	60	60
Minimum interval between tripping operation by electronic trip unit and next making operation of the circuit breaker (only with autom. mechanical resetting of the lockout device)		ms	80	80
Minimum dimension				
Circuit breaker compartment				
Width × Height × Depth		mm	560 × 570 × 500	560 × 570 × 500
Degree of protection				
• With cover			IP55	
• Without cover (with door sealing frame)			IP41	
Mounting position			 NSE0_00061a and/or  NSE0_00062a  NSE0_00927	
Main conductor minimum cross-sections		Unit(s) mm² inches	2 6.4 × 76.2 1/4 × 3	4 6.4 × 102 1/4 × 4
Auxiliary conductors (Cu)	Standard connection = strain-relief clamp			
Max. number of auxiliary conductors × cross-section (solid/stranded)	• Without end sleeve		2 × 0.5 mm² (AWG 20) to 2 × 1.5 mm² (AWG 16); 1 × 2.5 mm² (AWG 14)	
	• With end sleeve acc. to DIN 46228 Part 2		1 × 0.5 mm² (AWG 20) to 1 × 1.5 mm² (AWG 16)	
	• With twin end sleeve		2 × 0.5 mm² (AWG 20) to 2 × 1.5 mm² (AWG 16)	
	Optional connection = tension spring			
	• Without end sleeve		2 × 0.5 mm² (AWG 20) to 2 × 2,5 mm² (AWG 14)	
	• With end sleeve acc. to DIN 46228 Part 2		2 × 0.5 mm² (AWG 20) to 2 × 1.5 mm² (AWG 16)	
Weights				
3-pole	• Fixed-mounted circuit breakers	kg	50	64
Dimensions 3-/4-pole				
 NSS0_00535		W mm	320/410	460/590
	Fixed-mounted	H mm	434	434
		D mm	291	291
	Withdrawable	H mm	465.5	465.5
		D mm	471	471

[1] Make-time through activation solenoid for synchronization purposes (short-time excited) 50 ms.

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General data

Size		I	II	III
Type		**3WL51**	**3WL52**	**3WL53**
Breaking capacity class		**S** (S)	**H** (H)	**H** (H)
Short-circuit breaking capacity $I_{cu} = I_{cs}$ according to UL 489				
Up to 480 V AC	kA	65	100	100
Up to 600 V Y/347 V AC	kA	50	85[1)]	85
Up to 600 V AC	kA	--	85	--
Rated short-time withstand current according to UL 489				
At max. delay time t_{sd} = 0.4 s	kA	65	85	85
Short-circuit breaking capacity $I_{cu} = I_{cs}$ according to IEC 60947-2				
Up to 500 V AC	kA	65	100	100
I_{cm} at 500 V AC	kA	143	220	220
Up to 690 V AC	kA	50	85	85
I_{cm} at 690 V AC	kA	105	187	187
Rated short-time withstand current I_{cw} according to IEC 60947-2				
0.5 s	kA	65	85	85
1 s	kA	50	80	80

1) 600 V AC (delta) covered by test.

(S)	Circuit breakers with standard breaking capacity S ($I_{cu} = I_{cs}$ up to 65 kA at 480 V)
(H)	Circuit breakers with high breaking capacity H ($I_{cu} = I_{cs}$ up to 100 kA at 480 V)
	These circuit breakers are shown in the technical specifications on orange backgrounds.

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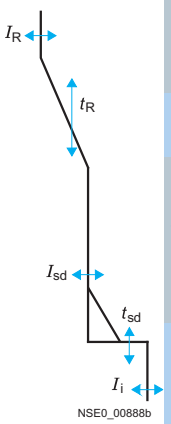
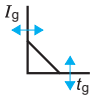
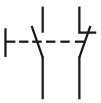
Protection functions Parameterization by			ETU25B D	ETU45B D & S
Function overview of the electronic trip system				
 NSE0_00888b	L	**Overload protection**	✓	✓
		Setting range $I_R = I_n \times$ ...	0.4-0.45-0.5-0.55-0.6-0.65-0.7-0.8-0.9-1	0.4-0.45-0.5-0.55-0.6-0.65-0.7-0.8-0.9-1
		Switchable overload protection (I^2t- or I^4t-dependent function)	--	✓
		Setting range for time-lag class t_R at I^2t	10 s fixed	2-3-5-5.5-8-10-14-17-21-25-30 s
		Setting range for time-lag class t_R at I^4t	--	1-2-3-4-5 s
		Thermal image can be switched on/off	--	✓
		Phase failure sensitivity	At t_{sd} = 20 ms (M)	At t_{sd} = 20 ms (M)
	N	**N-conductor protection**	--	✓
		Function can be switched on/off	--	✓
		N conductor setting range $I_N = I_n \times$ ...	--	0,5 ... 1
	S	**Short-time delayed short-circuit protection**	✓	✓
		Function can be switched on/off	--	✓
		Setting range $I_{sd} = I_n \times$ ...	1.25-1.5-2-2.5-3-4-6-8-10-12	1.25-1.5-2-2.5-3-4-6-8-10-12
		Setting range for delay time t_{sd}	0-M-100-200-300-400 ms	M-100-200-300-400 ms
		Switchable short-time delayed short-circuit protection (I^2t-dependent function)	--	✓
		Setting range for delay time t_{sd} at I^2t	--	100-200-300-400 ms
		ZSI function	--	By **Cubicle**BUS module
	I	**Instantaneous short-circuit protection**	✓	✓
		Function can be switched on/off	--	✓
		Setting range $I_i = I_n \times$ ...	Fixed for $I_i \geq 20 \times I_n$, max. 50 kA	1.5-2.2-3-4-6-8-10-12-0.8 × I_{cs}
 NSE0_00889a	G	**Ground-fault protection**	--	❑ Module can be retrofitted
		Tripping and alarm functions	--	✓
		Tripping function can be switched on/off	--	✓
		Recording of the ground-fault current via summation current formation with internal or external N-conductor transformer	--	✓
		Recording of the ground-fault current via external transformer	--	✓
		Setting range of the operating current I_g for tripping	--	A-B-C-D-E
		Setting range of the operating current I_g for alarm	--	A-B-C-D-E
		Setting range of the delay time t_g	--	100-200-300-400-500 ms
		Switchable ground-fault protection characteristic curve (I^2t-dependent function)	--	✓
		Setting range for delay time t_g at I^2t	--	100-200-300-400-500 ms
		ZSI-G function	--	By **Cubicle**BUS module
LCD				
		Alphanumeric LCD (4-line)	--	❑
Communication				
		CubicleBUS integrated	--	✓
		Communications capability via PROFIBUS DP	--	✓
		Communications capability via MODBUS	--	✓
Measuring function				
		Measurement function *Plus*	--	❑
LED display				
		Electronic trip unit active	✓	✓
		Alarm	✓	✓
		ETU fault	✓	✓
NSE0_00890		L tripping operation	✓	✓
		S tripping operation	✓	✓
		I tripping operation	✓	✓
		N tripping operation	--	✓
		G tripping operation	--	✓ (Only with ground-fault protection module)
		G alarm	--	✓ (Only with ground-fault protection module)
		Tripping operation as a result of extended protection function	--	✓
		Communication	--	✓
Signals from signaling switches with external CubicleBUS **module (relay)**				
		Overload warning	--	✓
		Load shedding, load absorbing	--	✓
		Leading signal overload trip 200 ms	--	✓
		Temperature alarm	--	✓
 NSE0_00891		Phase unbalance	--	✓
		Instantaneous short-circuit trip	--	✓
		Short-time delayed short-circuit trip	--	✓
		Overload trip	--	✓
		Neutral conductor trip	--	✓
		Ground-fault protection trip	--	✓ (Only with ground-fault protection module)
		Ground-fault alarm	--	✓ (Only with ground-fault protection module)
		Auxiliary relay	--	✓
		ETU fault	--	✓

Delay time figures given in ms.
M = Motor protection, corresponds to 20 ms.
D = Rotary coding switch
D & S = Rotary coding and slide switch
✓ Available.
-- Not available.
❑ Optional.

Setting range of the operating current I_g		
	Size I and size II	**Size III**
A	100 A	400 A
B	300 A	600 A
C	600 A	800 A
D	900 A	1000 A
E	1200 A	1200 A

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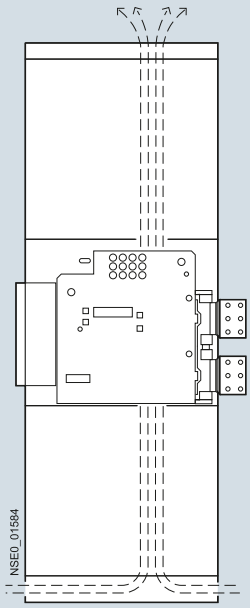
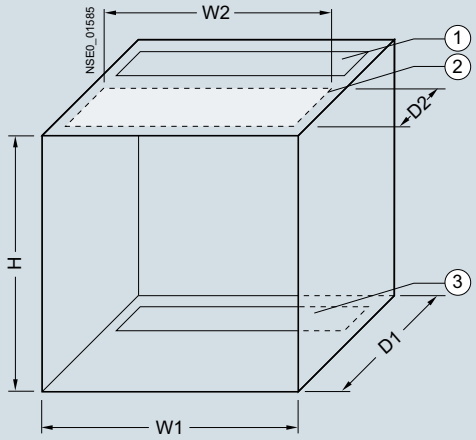
General data

Installation conditions for UL circuit breakers





① Ventilation opening on top
② Insulation plate, e.g. NEMA GPO-3 material, min. 2.3 mm thick
③ Ventilation opening on bottom

Size	$I_{n\ max}$	Minimum dimensions of the installation space			Dimensions of the insulation plate		Ventilation
		Width W1 3/4-pole	Height H	Depth D1	Width W2 3/4-pole	Depth D2	
	A						
I	800, 1000	400/500	460[1)]	380	350/450	300	Not required
I	1250, 1600	400/500	460[1)]	380	350/450	300	
II	800, 1600, 2000	500/600	460[1)]	380	450/550	300	Not required
II	2000	500/600	460[1)]	380	450/550	300	
II	3000/3200	500/600	460[1)]	380	450/550	300	
III	4000	800/1000	460[1)]	380	750/900	300	Not required
III	5000	800/1000	460[1)]	380	750/900	300	

[1)] Height of installation compartment applies in case of roof insulation or for guide frame with arcing space cover.

UL certificate

3WL5 circuit breakers are not listed by Underwriters Laboratories (UL) under the Article No. but as individual components with their corresponding article numbers.

The UL designation of the basic circuit breaker (without electronic trip unit, auxiliary release, auxiliary switch, ...) is visible on the operator panel.

Designation of basic circuit breaker:

3WL5106-3 F 3 2
① ②③④

Digit	Meaning		
①	Article No.	1st to 8th digit	
②	Version	F: Fixed-mounted	D: Withdrawable versions
③	Number of poles		
④	12th digit	1, 2, 3, 4: Fixed-mounted connection types	5, 6, 7, 8: Withdrawable version connection types

The file numbers are:

E231263 for circuit breakers
E236088 for accessories
E236299 for guide frames

The file number can be called up at the following Internet site:

http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/gfilenbr.html

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Benefits

Low space requirements

The 3WL5 air circuit breakers require very little space. Size I devices (up to 1600 A) fit into a 400 mm wide switchboard panel. Size III devices (up to 5000 A) are the smallest of their kind and with their construction width of 704 mm fit into an 800 mm wide switchboard panel.

Modular design

Components such as auxiliary releases, motorized operating mechanisms, electronic trip units, current sensors, auxiliary circuit signaling switches, automatic reset devices, interlocks and engagement operating mechanisms can all be exchanged or retrofitted at a later stage, thus allowing the circuit breaker to be adapted to new, changing requirements.

Retrofittable modules for Electronic Trip Units

Modularity is one of the main features of the new 3WL5 circuit breakers.
Special LCDs, ground-fault modules, rating plugs and communication modules for the Electronic Trip Units are available for fast and easy retrofitting and adaptation to changing requirements.

Communication

The use of modern communication-capable circuit breakers opens up completely new possibilities in terms of start-up, parameterization, diagnostics, maintenance and operation. This allows many different ways of reducing costs and improving productivity in industrial plants, buildings and infrastructure projects to be achieved.

- Timely information and response can prevent plant stoppages
- Effective diagnostics management
- Measured values are the basis for efficient load management, for drawing up power demand profiles and for allocating energy to cost centers
- Preventive maintenance reduces the risk of expensive plant downtimes

Application

- As incoming-feeder, distribution, tie, and outgoing-feeder circuit breakers in electrical installations.
- For switching and protecting motors, capacitors, generators, transformers, busbars and cables.

When connected to an electronic I&C system, the 3WL5 air circuit breakers offer a wide range of options for monitoring network events.

The extensive, coordinated SENTRON range of devices covers applications between 16 A and 5000 A with molded case and air circuit breakers.

Standards

3WL5 circuit breakers comply with:

- UL 489, UL 489B
- IEC 60947-2
- IEC 60947-2 Appendix F/CISPR 11/22 Class B
- DIN VDE 0660 Part 101
- Climate-proof according to IEC 60068-2-30
- CCC requirements

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3-pole, fixed-mounted versions

Selection and ordering data

Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity 480 V	DT	Article No. www.siemens.com/product?Article No. Article No. supplements see page 1/95	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Horizontal main circuit connection										
I	1000	1000	65		3WL5110-3□□32-□□□□		1	1 unit	1CA	43.000
I	1600	1600	65		3WL5116-3□□32-□□□□		1	1 unit	1CA	43.000
II	2000	2000	100		3WL5220-4□□32-□□□□		1	1 unit	1CA	56.000
II	2500	2500	100		3WL5225-4□□32-□□□□		1	1 unit	1CA	59.000
II	3000	3000	100		3WL5230-4□□32-□□□□		1	1 unit	1CA	64.000
III	4000	4000	100		3WL5340-4□□32-□□□□		1	1 unit	1CA	82.000
III	5000	5000	100		3WL5350-4□□32-□□□□		1	1 unit	1CA	82.000
Vertical main circuit connection										
I	1000	1000	65		3WL5110-3□□31-□□□□		1	1 unit	1CA	43.000
I	1600	1600	65		3WL5116-3□□31-□□□□		1	1 unit	1CA	43.000
II	2000	2000	100		3WL5220-4□□31-□□□□		1	1 unit	1CA	56.000
II	2500	2500	100		3WL5225-4□□31-□□□□		1	1 unit	1CA	59.000
II	3000	3000	100		3WL5230-4□□31-□□□□		1	1 unit	1CA	64.000
II[2]	3200	3200	100		3WL5232-4□□31-□□□□		1	1 unit	1CA	64.000
III	4000	4000	100		3WL5340-4□□31-□□□□		1	1 unit	1CA	82.000
III	5000	5000	100		3WL5350-4□□31-□□□□		1	1 unit	1CA	82.000
Front main circuit connection, single hole										
I	1000	1000	65		3WL5110-3□□33-□□□□		1	1 unit	1CA	43.000
I	1600	1600	65		3WL5116-3□□33-□□□□		1	1 unit	1CA	43.000
II	2000	2000	100		3WL5220-4□□33-□□□□		1	1 unit	1CA	56.000
II	2500	2500	100		3WL5225-4□□33-□□□□		1	1 unit	1CA	59.000
II	3000	3000	100		3WL5230-4□□33-□□□□		1	1 unit	1CA	64.000
III	4000	4000	100		3WL5340-4□□33-□□□□		1	1 unit	1CA	82.000
Front main circuit connection, double hole										
I	1000	1000	65		3WL5110-3□□34-□□□□		1	1 unit	1CA	43.000
I	1600	1600	65		3WL5116-3□□34-□□□□		1	1 unit	1CA	43.000
II	2000	2000	100		3WL5220-4□□34-□□□□		1	1 unit	1CA	56.000
II	2500	2500	100		3WL5225-4□□34-□□□□		1	1 unit	1CA	59.000
II	3000	3000	100		3WL5230-4□□34-□□□□		1	1 unit	1CA	64.000
III	4000	4000	100		3WL5340-4□□34-□□□□		1	1 unit	1CA	82.000

Options				Additional price
Non-automatic air circuit breakers[3]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[4]	**EB**		✓
	ETU45B: Protection functions LSIN[4] with 4-line display	**FB**		✓
	ETU45B: Protection functions LSING[4][5]	**EG**		✓
	ETU45B: Protection functions LSING[4][5] with 4-line display	**FG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/95			

Note: Max. voltage for auxiliary circuits 240 V.

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the rated current. If a lower rated current is required, see adaptation by rating plug on page 1/96.

2) Z-Option A17 must usually be ordered in addition.

3) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see Technical Specifications, page 1/83.

4) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/104.

5) For ETU45B with ground-fault protection module GFM AT (alarm and tripping), see page 1/104.

* You can order this quantity or a multiple thereof.

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Selection and ordering data

Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity 480 V	DT	Article No. www.siemens.com/product?Article No. Article No. supplements see page 1/95	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Without guide frames (for guide frames, see page 1/102)										
I	1000	1000	65		3WL5110-3□□35-□□□□		1	1 unit	1CA	45.000
I	1600	1600	65		3WL5116-3□□35-□□□□		1	1 unit	1CA	45.000
II	2000	2000	100		3WL5220-4□□35-□□□□		1	1 unit	1CA	60.000
II	2500	2500	100		3WL5225-4□□35-□□□□		1	1 unit	1CA	63.000
II	3000	3000	100		3WL5230-4□□35-□□□□		1	1 unit	1CA	68.000
III	4000	4000	100		3WL5340-4□□35-□□□□		1	1 unit	1CA	88.000
III	5000	5000	100		3WL5350-4□□35-□□□□		1	1 unit	1CA	88.000
With guide frames, horizontal main circuit connection										
I	1000	1000	65		3WL5110-3□□36-□□□□		1	1 unit	1CA	70.000
I	1600	1600	65		3WL5116-3□□36-□□□□		1	1 unit	1CA	70.000
II	2000	2000	100		3WL5220-4□□36-□□□□		1	1 unit	1CA	91.000
II	2500	2500	100		3WL5225-4□□36-□□□□		1	1 unit	1CA	102.000
II	3000	3000	100		3WL5230-4□□36-□□□□		1	1 unit	1CA	113.000
III	4000	4000	100		3WL5340-4□□36-□□□□		1	1 unit	1CA	148.000
III	5000	5000	100		3WL5350-4□□36-□□□□		1	1 unit	1CA	148.000
With guide frames, vertical main circuit connection										
I	1000	1000	65		3WL5110-3□□37-□□□□		1	1 unit	1CA	70.000
I	1600	1600	65		3WL5116-3□□37-□□□□		1	1 unit	1CA	70.000
II	2000	2000	100		3WL5220-4□□37-□□□□		1	1 unit	1CA	91.000
II	2500	2500	100		3WL5225-4□□37-□□□□		1	1 unit	1CA	102.000
II	3000	3000	100		3WL5230-4□□37-□□□□		1	1 unit	1CA	113.000
III	4000	4000	100		3WL5340-4□□37-□□□□		1	1 unit	1CA	148.000
III	5000	5000	100		3WL5350-4□□37-□□□□		1	1 unit	1CA	148.000
With guide frames, connecting flanges										
I	1000	1000	65		3WL5110-3□□38-□□□□		1	1 unit	1CA	70.000
I	1600	1600	65		3WL5116-3□□38-□□□□		1	1 unit	1CA	70.000
II	2000	2000	100		3WL5220-4□□38-□□□□		1	1 unit	1CA	91.000
II	2500	2500	100		3WL5225-4□□38-□□□□		1	1 unit	1CA	102.000
II	3000	3000	100		3WL5230-4□□38-□□□□		1	1 unit	1CA	113.000
III	4000	4000	100		3WL5340-4□□38-□□□□		1	1 unit	1CA	148.000

Options				Additional price
Non-automatic air circuit breakers[2]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[3]	**EB**		✓
	ETU45B: Protection functions LSIN[3] with 4-line display	**FB**		✓
	ETU45B: Protection functions LSING[3][4]	**EG**		✓
	ETU45B: Protection functions LSING[3][4] with 4-line display	**FG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/95			

Note: Max. voltage for auxiliary circuits 240 V.

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, see adaptation by rating plug on page 1/95.

2) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see Technical Specifications, page 1/83.

3) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/104.

4) For ETU45B with ground-fault protection module GFM AT (alarm and tripping), see page 1/104.

*** You can order this quantity or a multiple thereof.**

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4-pole, fixed-mounted versions

Selection and ordering data

Size	Max. rated circuit breaker current $I_{n\ max.}$	Rated current[1] I_n	Breaking capacity 480 V		Article No. www.siemens.com/product?Article No. Article No. supplements see page 1/95	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA	DT						kg
Horizontal main circuit connection										
I	1000	1000	65		3WL5110-3□□42-□□□□		1	1 unit	1CA	43.000
I	1600	1600	65		3WL5116-3□□42-□□□□		1	1 unit	1CA	43.000
II	2000	2000	100		3WL5220-4□□42-□□□□		1	1 unit	1CA	56.000
II	2500	2500	100		3WL5225-4□□42-□□□□		1	1 unit	1CA	59.000
II	3000	3000	100		3WL5230-4□□42-□□□□		1	1 unit	1CA	64.000
III	4000	4000	100		3WL5340-4□□42-□□□□		1	1 unit	1CA	82.000
III	5000	5000	100		3WL5350-4□□42-□□□□		1	1 unit	1CA	82.000
Vertical main circuit connection										
I	1000	1000	65		3WL5110-3□□41-□□□□		1	1 unit	1CA	43.000
I	1600	1600	65		3WL5116-3□□41-□□□□		1	1 unit	1CA	43.000
II	2000	2000	100		3WL5220-4□□41-□□□□		1	1 unit	1CA	56.000
II	2500	2500	100		3WL5225-4□□41-□□□□		1	1 unit	1CA	59.000
II	3000	3000	100		3WL5230-4□□41-□□□□		1	1 unit	1CA	64.000
III	4000	4000	100		3WL5340-4□□41-□□□□		1	1 unit	1CA	82.000
III	5000	5000	100		3WL5350-4□□41-□□□□		1	1 unit	1CA	82.000
Front main circuit connection, single hole										
I	1000	1000	65		3WL5110-3□□43-□□□□		1	1 unit	1CA	43.000
I	1600	1600	65		3WL5116-3□□43-□□□□		1	1 unit	1CA	43.000
II	2000	2000	100		3WL5220-4□□43-□□□□		1	1 unit	1CA	56.000
II	2500	2500	100		3WL5225-4□□43-□□□□		1	1 unit	1CA	59.000
II	3000	3000	100		3WL5230-4□□43-□□□□		1	1 unit	1CA	64.000
III	4000	4000	100		3WL5340-4□□43-□□□□		1	1 unit	1CA	82.000
Front main circuit connection, double hole										
I	1000	1000	65		3WL5110-3□□44-□□□□		1	1 unit	1CA	43.000
I	1600	1600	65		3WL5116-3□□44-□□□□		1	1 unit	1CA	43.000
II	2000	2000	100		3WL5220-4□□44-□□□□		1	1 unit	1CA	56.000
II	2500	2500	100		3WL5225-4□□44-□□□□		1	1 unit	1CA	59.000
II	3000	3000	100		3WL5230-4□□44-□□□□		1	1 unit	1CA	64.000
III	4000	4000	100		3WL5340-4□□44-□□□□		1	1 unit	1CA	82.000

Options				Additional price
Non-automatic air circuit breakers[2]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[3]	**EB**		✓
	ETU45B: Protection functions LSIN[3] with 4-line display	**FB**		✓
	ETU45B: Protection functions LSING[3][4]	**EG**		✓
	ETU45B: Protection functions LSING[3][4] with 4-line display	**FG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/95			

Note: Max. voltage for auxiliary circuits 240 V.

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the rated current. If a lower rated current is required, see adaptation by rating plug on page 1/96.

2) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see Technical Specifications, page 1/83.

3) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/104. The internal current transformers for N-conductors can be ordered by adding the supplement "–Z" and the order code "F23", see page 1/98.

4) For ETU45B with ground-fault protection module GFM AT (alarm and tripping), see page 1/104.

*** You can order this quantity or a multiple thereof.**

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Selection and ordering data

Size	Max. rated circuit breaker current $I_{n\,max.}$	Rated current[1] I_n	Breaking capacity 480 V	DT	Article No. www.siemens.com/product?Article No. Article No. supplements see page 1/95	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	kA							kg
Without guide frames (for guide frames, see page 1/102)										
I	1000	1000	65		3WL5110-3□□45-□□□□		1	1 unit	1CA	45.000
I	1600	1600	65		3WL5116-3□□45-□□□□		1	1 unit	1CA	45.000
II	2000	2000	100		3WL5220-4□□45-□□□□		1	1 unit	1CA	60.000
II	2500	2500	100		3WL5225-4□□45-□□□□		1	1 unit	1CA	63.000
II	3000	3000	100		3WL5230-4□□45-□□□□		1	1 unit	1CA	68.000
III	4000	4000	100		3WL5340-4□□45-□□□□		1	1 unit	1CA	88.000
III	5000	5000	100		3WL5350-4□□45-□□□□		1	1 unit	1CA	88.000
With guide frames, horizontal main circuit connection										
I	1000	1000	65		3WL5110-3□□46-□□□□		1	1 unit	1CA	70.000
I	1600	1600	65		3WL5116-3□□46-□□□□		1	1 unit	1CA	70.000
II	2000	2000	100		3WL5220-4□□46-□□□□		1	1 unit	1CA	91.000
II	2500	2500	100		3WL5225-4□□46-□□□□		1	1 unit	1CA	102.000
II	3000	3000	100		3WL5230-4□□46-□□□□		1	1 unit	1CA	113.000
III	4000	4000	100		3WL5340-4□□46-□□□□		1	1 unit	1CA	148.000
III	5000	5000	100		3WL5350-4□□46-□□□□		1	1 unit	1CA	148.000
With guide frames, vertical main circuit connection										
I	1000	1000	65		3WL5110-3□□47-□□□□		1	1 unit	1CA	70.000
I	1600	1600	65		3WL5116-3□□47-□□□□		1	1 unit	1CA	70.000
II	2000	2000	100		3WL5220-4□□47-□□□□		1	1 unit	1CA	91.000
II	2500	2500	100		3WL5225-4□□47-□□□□		1	1 unit	1CA	102.000
II	3000	3000	100		3WL5230-4□□47-□□□□		1	1 unit	1CA	113.000
III	4000	4000	100		3WL5340-4□□47-□□□□		1	1 unit	1CA	148.000
III	5000	5000	100		3WL5350-4□□47-□□□□		1	1 unit	1CA	148.000
With guide frames, connecting flanges										
I	1000	1000	65		3WL5110-3□□48-□□□□		1	1 unit	1CA	70.000
I	1600	1600	65		3WL5116-3□□48-□□□□		1	1 unit	1CA	70.000
II	2000	2000	100		3WL5220-4□□48-□□□□		1	1 unit	1CA	91.000
II	2500	2500	100		3WL5225-4□□48-□□□□		1	1 unit	1CA	102.000
II	3000	3000	100		3WL5230-4□□48-□□□□		1	1 unit	1CA	113.000
III	4000	4000	100		3WL5340-4□□48-□□□□		1	1 unit	1CA	148.000

Options				Additional price
Non-automatic air circuit breakers[2]	Without Electronic Trip Units	**AA**		**None**
Electronic Trip Units	**Versions without ground-fault protection**			
	ETU25B: Protection functions LSI	**CB**		✓
	ETU45B: Protection functions LSIN[3]	**EB**		✓
	ETU45B: Protection functions LSIN[3] with 4-line display	**FB**		✓
	ETU45B: Protection functions LSING[3][4]	**EG**		✓
	ETU45B: Protection functions LSING[3][4] with 4-line display	**FG**		✓
Operating mechanism, auxiliary release, auxiliary switch	Manual operating mechanism with mechanical closing, without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO		**1AA2**	**None**
	For further Article No. supplements, see page 1/95			

Note: Max. voltage for auxiliary circuits 240 V.

✓ Additional price

1) The rated current is determined by the rating plug. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, see adaptation by rating plug on page 1/96.

2) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers, see Technical Specifications, page 1/83.

3) Current transformers for protection of the N-conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/104. The internal current transformers for N-conductors can be ordered by adding the supplement "–Z" and the order code "F23", see page 1/98.

4) For ETU45B with ground-fault protection module GFM AT (alarm and tripping), see page 1/104.

*** You can order this quantity or a multiple thereof.**

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Fixed-mounted versions

Selection and ordering data[1)]

Size	Max. rated circuit breaker current $I_{n\ max.}$	No. of poles	Rated current I_n	Breaking capacity 690 V	DT	Article No. www.siemens.com/product?Article No. Article No. supplements see page 1/95	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A		A	kA							kg
Horizontal main circuit connection											
I	1600[2)]	4p	1600[2)]	20[3)]		**3WL5120-8AA42-□□□□**		1	1 unit	1CA	50.000
II[4)5)]	3200	3p	3200	22		**3WL5232-8AA32-□□□□**		1	1 unit	1CA	64.000
Vertical main circuit connection											
I	1600[2)]	4p	1600[2)]	20[3)]		**3WL5120-8AA41-□□□□**		1	1 unit	1CA	50.000
II[4)5)]	3200	3p	3200	25		**3WL5232-8AA31-□□□□**		1	1 unit	1CA	85.000

For further Article No. supplements see page 1/95.

1) For permissible rated breaking capacity for non-automatic air circuit breakers, see Technical Specifications, page 1/83.
2) According to IEC 60947-2 the rated current is 2000 A.
3) I_{cc} = 20 kA up to U_e = 1000 V DC + 10%.
4) Can also be used at variable frequencies of 0 ... 30 Hz.
5) Z-Option A17 must usually be ordered in addition.

* You can order this quantity or a multiple thereof.

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Selection and ordering data

				Article No. supplement 3WL5...-.....- □□□□	Additional price
Operating mechanisms					
Manual operating mechanism with mechanical closing				**1**	**None**
Manual operating mechanism with mechanical and electrical closing, closing coil suitable for uninterrupted duty, 100 % OP					
50/60 Hz V AC	V DC				
110	110 ... 125			**2**	✓
240	220			**3**	✓
Manual/motorized operating mechanism with mechanical and electrical closing, closing coil suitable for uninterrupted duty, 100 % OP					
Motor		Closing solenoid			
50/60 Hz V AC	V DC	50/60 Hz V AC	V DC		
208 ... 240	220 ... 250	230	220	**4**	✓
110 ... 127	110 ... 125	110	110 ... 125	**5**	✓
--	24	--	24	**6**	✓
Note					
To order different voltages for motorized operating mechanism and closing solenoid or closing coil for synchronization purposes: "1" at the 13th digit of the Article No. and order codes, see page 1/97.					
1st auxiliary release					
Type	Condition	U_s 50/60 Hz V AC	U_s V DC		
Without 1st auxiliary release	--	--	--	**A**	**None**
Shunt release suitable for uninterrupted duty, 100 % OP	Operating range 0.85 ... 1.1 × U_s	--	24	**B**	✓
		--	30	**C**	✓
		--	48	**D**	✓
		--	60	**E**	✓
		110 ... 127	110 ... 125	**F**	✓
		208 ... 240	220 ... 250	**G**	✓
2nd auxiliary release					
Type	Condition	U_s 50/60 Hz V AC	U_s V DC		
Without 2nd auxiliary release	--	--	--	**A**	**None**
Shunt release suitable for uninterrupted duty, 100 % OP	Operating range 0.85 ... 1.1 × U_s	--	24	**B**	✓
		--	30	**C**	✓
		--	48	**D**	✓
		--	60	**E**	✓
		110 ... 127	110 ... 125	**F**	✓
		208 ... 240	220 ... 250	**G**	✓
Undervoltage release, instantaneous (≤ 80 ms), short-delay (≤ 200 ms)	Operating range 0.85 ... 1.1 × U_s	--	24	**J**	✓
		--	30	**K**	✓
		--	48	**L**	✓
		--	60	**U**	✓
		110 ... 127	110 ... 125	**M**	✓
		208 ... 240	220 ... 250	**N**	✓
		380 ... 415	--	**P**	✓
Undervoltage release, can be delayed between 0.2 s and 3.2 s	Operating range 0.85 ... 1.1 × U_s	--	48	**Q**	✓
		110 ... 127	110 ... 125	**R**	✓
		208 ... 240	220 ... 250	**S**	✓
		380 ... 415	--	**T**	✓
Auxiliary switches					
1st auxiliary switch block					
2 NO + 2 NC				**2**	**None**
1st + 2nd auxiliary switch block					
4 NO + 4 NC				**4**	✓
6 NO + 2 NC				**7**	✓
5 NO + 3 NC				**8**	✓

✓ Additional price

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Options

Add "**-Z**" to the complete Article No. and indicate the appropriate order code(s).

			3WL....-.....-....-Z □□□ +...+...	Additional price
IT network capability at 690 V AC + 10 % according to IEC 60947-2 Appendix H				
Conditions	Size	Rated voltage V		
3WL5225-4□□31-...	II	AC	**A 1 7**	✓
3WL5225-4□□32-...			**A 1 7**	✓
3WL5232-4□□31-...			**A 1 7**	✓
3WL5232-8AA31-...		DC	**A 1 7**	✓
3WL5232-8AA32-...			**A 1 7**	✓
3WL5340-4□□31-...	III	AC	**A 1 7**	✓
3WL5340-4□□32-...			**A 1 7**	✓
3WL5350-4□□31-...[6]	III	AC	**A 1 7**	**On request**
3WL5350-4□□32-...[6]			**A 1 7**	**On request**
Special packaging (moisture protection)				
Special packaging for extended technical requirements				
Cardboard packaging with water-repellent coating on corrugated cardboard (moisture protection)			**A 6 1**	✓
Rating plugs				
Conditions	Size	Rated current I_nA		
Only one module is possible per circuit breaker. As standard the electronic trip units are equipped with a rating plug which is equal to the maximum rated current circuit breaker ($I_{n\,max}$). The rated current of the selected rating plug must be smaller than $I_{n\,max}$.	I, II	250	**B 0 2**	**None**
		315	**B 0 3**	**None**
		400	**B 0 4**	**None**
		500	**B 0 5**	**None**
		630	**B 0 6**	**None**
		800	**B 0 8**	**None**
		1000	**B 1 0**	**None**
	I, II, III	1250	**B 1 2**	**None**
		1600	**B 1 6**	**None**
	II, III	2000	**B 2 0**	**None**
		2500	**B 2 5**	**None**
		3000	**B 3 0**	**None**
		3200	**B 3 2**	**None**
	III	4000	**B 4 0**	**None**
		5000	**B 5 0**	**None**
Indication/operator control elements, door sealing frames				
5-digit mechanical operating cycles counter[1]			**C 0 1**	✓
Electrical ON button S10 in the operator panel[2] Possible only for circuit breakers with closing coil.	Button with sealing cap		**C 1 1**	✓
	Key operation with lock CES		**C 1 2**	✓
Storage status signaling switches[2] **(S21)**	1 NO contact		**C 2 0**	✓
Ready-to-close signaling switches (S20)	1 NO contact		**C 2 2**	✓
Signaling switches[2]	For the first auxiliary release (S22)		**C 2 6**	✓
	For the second auxiliary release (S23)		**C 2 7**	✓
Motor shutdown switch in the operator panel[3] **(S12)**			**S 2 5**	✓
EMERGENCY-STOP pushbuttons	Mushroom pushbutton instead of the mechanical OFF pushbutton		**S 2 4**	✓
Door sealing frames			**T 4 0**	✓
Reclosing lockout and remote resets				
Automatic reset of the reclosing lockout			**K 0 1**	✓
1st tripped signaling switch[2][4] **(S24)**	1 CO contact		**K 0 7**	✓
2nd tripped signaling switch[2][4][5] **(S25)**	1 NO contact		**K 0 6**	✓
Type	50/60 Hz V AC	V DC		
Remote reset solenoid for displays and reset buttons including automatic reset of the reclosing lockout	--	24	**K 1 0**	✓
	--	48	**K 1 1**	✓
	120	125	**K 1 2**	✓
	208 ... 250	208 ... 250	**K 1 3**	✓

✓ Additional price

1) Only possible with motorized operating mechanism.
2) Not possible with communications interface option, order codes "F02" or "F12".
3) Only for breakers with motorized operating mechanism, not possible with order codes "C11", "C12".
4) Not available for non-automatic air circuit breakers.
5) Only possible with option "K07".
6) 3WL5350-... available with A17 as from 01/2016.

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				3WL....-.....-....-Z ☐☐☐ +...+...				Additional price
Add **"-Z"** to the complete Article No. and indicate the appropriate order code(s).								
Motorized operating mechanisms and closing/opening coils								
Type	Conditions	Motor						
		50/60 Hz V AC	V DC					
Motorized operating mechanism	Only possible if the 13th digit of the Article No. = "1"	--	24 ... 30	**M**	**0**	**1**		✓
		--	48 ... 60	**M**	**0**	**3**		✓
		110 ... 127	110 ... 125	**M**	**0**	**5**		✓
		208 ... 240	220 ... 250	**M**	**0**	**6**		✓
Type	Conditions	Activation coils						
		50/60 Hz V AC	V DC					
Closing coil suitable for uninterrupted duty, 100 % OP	Only possible if the 13th digit of the Article No. = "1"	--	24	**M**	**2**	**1**		✓
		--	30	**M**	**2**	**2**		✓
		--	48	**M**	**2**	**3**		✓
		--	60	**M**	**2**	**4**		✓
		110 ... 127	110 ... 125	**M**	**2**	**5**		✓
		208 ... 240	220 ... 250	**M**	**2**	**6**		✓
Type	Conditions	Activation coils						
		50/60 Hz V AC	V DC					
Closing coil[1] not suitable for uninterrupted duty, 5 % OP, synchronizable	Only possible if the 13th digit of the Article No. = "1"	--	24	**M**	**3**	**1**		✓
		--	48	**M**	**3**	**3**		✓
		110 ... 127	110 ... 125	**M**	**3**	**5**		✓
		208 ... 240	220 ... 250	**M**	**3**	**6**		✓
Type	Conditions	Activation coils						
		50/60 Hz V AC	V DC					
Opening coils (shunt release)[2][3]	Not suitable for uninterrupted duty, 5 % OP, synchronizable	--	24	**M**	**4**	**1**		✓
		--	48	**M**	**4**	**3**		✓
		110 ... 127	110 ... 125	**M**	**4**	**5**		✓
		208 ... 240	220 ... 250	**M**	**4**	**6**		✓
Interlocks, covers, position signaling switches (for fixed-mounted version)								
Mutual mechanical interlockings (interlocking module with Bowden wire 2 m)	Fixed-mounted circuit breakers			**S**	**5**	**5**		✓
Interlocks, covers, position signaling switches (for withdrawable version)								
Mutual mechanical interlockings (interlocking module with Bowden wire 2 m)	Version							
	For withdrawable circuit breakers with guide frame			**R**	**5**	**5**		✓
	For guide frames			**R**	**5**	**6**		✓
	For withdrawable circuit breakers			**R**	**5**	**7**		✓
Shutters 2-part lockable with padlocks[4]	Number of poles	Size						
	3-pole	I		**R**	**2**	**1**		✓
		II		**R**	**2**	**1**		✓
		III		**R**	**2**	**1**		✓
	4-pole	I		**R**	**2**	**1**		✓
		II		**R**	**2**	**1**		✓
		III		**R**	**2**	**1**		✓
Position signaling switches for guide frames	Connected position	Test position	Disconnected position					
	1 CO	1 CO	1 CO	**R**	**1**	**5**		✓
	3 CO	2 CO	1 CO	**R**	**1**	**6**		✓

✓ Additional price

1) Overexcited, i.e. operating time 50 ms (standard > 80 ms).
2) Only possible if the 14th position of the Article No. for the circuit breaker is "A", i.e. "without 1st auxiliary release".
3) Overexcited, i.e. operating time 50 ms (standard > 80 ms).
4) Padlocks not included in scope of supply.

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Options

		3WL....-.....-....-Z □□□ +...+...				Additional price
Communication and measurement functions						
Breaker status sensor (BSS)		F	0	1		✓
PROFIBUS-DP communications interface[1]	Including COM15 and breaker status sensor (BSS)	F	0	2		✓
MODBUS-RTU communications interface[1]	Including COM16 and breaker status sensor (BSS)	F	1	2		✓
Measurement function *Plus* (without PROFIBUS/ MODBUS communications interface)[2]		F	0	5		✓
Overload and short-circuit protection for neutral conductors						
Internal current transformer for N conductor Only possible with 4-pole circuit breakers with ETU45B	Size					
	I	F	2	3		✓
	II	F	2	3		✓
	III	F	2	3		✓
EMC filters						
EMC filters • Common-mode interference suppressor filters (e.g. in IT networks, caused by frequency converters) • Insertion loss (asymmetric) in the range 40 kHz to 10 MHz >40 dB.		F	3	1		✓
Locking devices (for fixed-mounted versions and withdrawable versions)						
Locking devices against unauthorized closing, in the operator panels The disconnector unit fulfills the requirements for main circuit breakers according to EN 60204-1	Version					
	Made by CES	S	0	1		✓
	Made by IKON	S	0	3		✓
	Assembly kit FORTRESS or Castell[3]	S	0	5		✓
	Assembly kit for padlocks[4]	S	0	7		✓
	Made by Ronis	S	0	8		✓
	Made by Profalux	S	0	9		✓
EMERGENCY-STOP pushbuttons	Mushroom pushbutton instead of the mechanical OFF pushbutton	S	2	4		✓
Locking devices for operating mechanism handles with padlock[4]		S	3	3		✓
Locking devices (for withdrawable version)						
Locking devices against unauthorized closing, for withdrawable circuit breakers The disconnector unit fulfills the requirements for main circuit breakers acc. to EN 60204-1, consisting of a lock in the cabinet door, active in the connected position, function is retained when circuit breaker is replaced. Not possible in combination with order codes "R81", "R85" or "R86".	Version					
	Made by CES	R	6	1		✓
	Made by Ronis	R	6	8		✓
	Made by Profalux	R	6	0		✓
Locking devices to prevent movement of the withdrawable circuit breakers Safety lock for mounting on the circuit breaker	Version					
	Made by CES	S	7	1		✓
	Made by Profalux	S	7	5		✓
	Made by Ronis	S	7	6		✓
Locking mechanisms (for fixed-mounted versions)						
Locking devices Not possible in combination with order codes "R81", "R85" or "R86".	To prevent opening of the cabinet door in ON position	S	3	0		✓
Locking devices (for withdrawable version)						
Locking devices Not possible in combination with order codes "R81", "R85" or "R86".	Version					
	To prevent opening of the cabinet door in connected position	R	3	0		✓
	To prevent movement with the cabinet door open	R	5	0		✓
Locking mechanism to prevent movement of the withdrawable circuit breakers in disconnected position, consisting of Bowden wire and lock in the cabinet door Not possible in combination with order codes "R30", "R50", "R61", "R68" or "R60".	Version					
	Made by CES	R	8	1		✓
	Made by Ronis	R	8	5		✓
	Made by Profalux	R	8	6		✓
Connection methods for auxiliary conductors (for fixed-mounted and withdrawable versions)						
Connections for screwless terminals (tension spring)	Version					
	Fixed-mounted	N	6	1		✓
	Withdrawable	P	6	1		✓

✓ Additional price

1) If ordering the withdrawable circuit breaker and guide frame separately, specify order code "F02" or "F12" for the withdrawable circuit breaker only.

2) Additional voltage transformers are required for connection of the *Plus* measurement function, see 1/113.

3) Locks must be ordered from the manufacturer.

4) Padlock not included in the scope of supply.

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Add "**-Z**" to the complete Article No. and indicate the appropriate order code(s).

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For "withdrawable circuit breakers with guide frames" or for "guide frames"							Additional price 3-pole	Additional price 4-pole
Note								
To select this connection method the 12th digit of the Article No. for the circuit breaker must be a "6".								
Connection methods for main connections	Size	Rated current I_n						
Top and bottom: accessible from front, single hole	I	Up to 1600 A	**P**	**0**	**0**		✓	✓
	II	Up to 2000 A	**P**	**0**	**0**		✓	✓
		Up to 2500 A	**P**	**0**	**0**		✓	✓
		Up to 3200 A	**P**	**0**	**0**		✓	✓
	III	Up to 4000 A	**P**	**0**	**0**		✓	✓
Connection methods for main connections	Size	Rated current I_n						
Top and bottom: accessible from front, double hole	I	Up to 1600 A	**P**	**0**	**1**		✓	✓
	II	Up to 2000 A	**P**	**0**	**1**		✓	✓
		Up to 2500 A	**P**	**0**	**1**		✓	✓
		Up to 3200 A	**P**	**0**	**1**		✓	✓
	III	Up to 4000 A	**P**	**0**	**1**		✓	✓
Connection methods for main connections	Size	Rated current I_n						
Top: horizontal Bottom: accessible from front, single hole	I	Up to 1600 A	**P**	**0**	**7**		✓	✓
	II	Up to 2000 A	**P**	**0**	**7**		✓	✓
		Up to 2500 A	**P**	**0**	**7**		✓	✓
		Up to 3200 A	**P**	**0**	**7**		✓	✓
	III	Up to 4000 A	**P**	**0**	**7**		✓	✓
Connection methods for main connections	Size	Rated current I_n						
Top: vertical Bottom: horizontal	I	Up to 1600 A	**P**	**1**	**8**		✓	✓
	II	Up to 2000 A	**P**	**1**	**8**		✓	✓
		Up to 2500 A	**P**	**1**	**8**		✓	✓
		Up to 3200 A	**P**	**1**	**8**		✓	✓
	III	Up to 4000 A	**P**	**1**	**8**		✓	✓
		Up to 5000 A	**P**	**1**	**8**		✓	✓
Connection methods for main connections	Size	Rated current I_n						
Top: connecting flange Bottom: horizontal	I	Up to 1600 A	**P**	**1**	**9**		✓	✓
	II	Up to 2000 A	**P**	**1**	**9**		✓	✓
		Up to 2500 A	**P**	**1**	**9**		✓	✓
		Up to 3200 A	**P**	**1**	**9**		✓	✓
	III	Up to 4000 A	**P**	**1**	**9**		✓	✓
Connection methods for main connections	Size	Rated current I_n						
Top: horizontal Bottom: vertical	I	Up to 1600 A	**P**	**2**	**3**		✓	✓
	II	Up to 2000 A	**P**	**2**	**3**		✓	✓
		Up to 2500 A	**P**	**2**	**3**		✓	✓
		Up to 3200 A	**P**	**2**	**3**		✓	✓
	III	Up to 4000 A	**P**	**2**	**3**		✓	✓
		Up to 5000 A	**P**	**2**	**3**		✓	✓
Connection methods for main connections	Size	Rated current I_n						
Top: horizontal Bottom: connecting flange	I	Up to 1600 A	**P**	**2**	**8**		✓	✓
	II	Up to 2000 A	**P**	**2**	**8**		✓	✓
		Up to 2500 A	**P**	**2**	**8**		✓	✓
		Up to 3200 A	**P**	**2**	**8**		✓	✓
	III	Up to 4000 A	**P**	**2**	**8**		✓	✓

✓ Additional price

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Options

Add "**-Z**" to the complete Article No. and indicate the appropriate order code(s).

3WL....-.....-....-Z
□□□ **+...+...**

For fixed-mounted circuit breakers							Additional price 3-pole	Additional price 4-pole
Note								
To select this connection method, the 12th digit of the Article No. for the circuit breaker must be a "2".								
Connection methods for main connections[1]	Size	Rated current I_n						
Top: horizontal Bottom: accessible from front, single hole	I	Up to 1600 A	**N**	**1**	**1**		✓	✓
	II	Up to 2000 A	**N**	**1**	**1**		✓	✓
		Up to 2500 A	**N**	**1**	**1**		✓	✓
		Up to 3200 A	**N**	**1**	**1**		✓	✓
	III	Up to 4000 A	**N**	**1**	**1**		✓	✓
Connection methods for main connections	Size	Rated current I_n						
Top: vertical Bottom: horizontal	I	Up to 1600 A	**N**	**2**	**0**		✓	✓
		Up to 2000 A	**N**	**2**	**0**		✓	✓
	II	Up to 2000 A	**N**	**2**	**0**		✓	✓
		Up to 2500 A	**N**	**2**	**0**		✓	✓
		Up to 3200 A	**N**	**2**	**0**		✓	✓
	III	Up to 4000 A	**N**	**2**	**0**		✓	✓
		Up to 5000 A	**N**	**2**	**0**		✓	✓
Connection methods for main connections	Size	Rated current I_n						
Top: horizontal Bottom: vertical	I	Up to 1600 A	**N**	**2**	**4**		✓	✓
		Up to 2000 A	**N**	**2**	**4**		✓	✓
	II	Up to 2000 A	**N**	**2**	**4**		✓	✓
		Up to 2500 A	**N**	**2**	**4**		✓	✓
		Up to 3200 A	**N**	**2**	**4**		✓	✓
	III	Up to 4000 A	**N**	**2**	**4**		✓	✓
		Up to 5000 A	**N**	**2**	**4**		✓	✓

✓ Additional price

[1] A17 cannot be used for DC non-automatic air circuit breakers and circuit breakers with the Z option.

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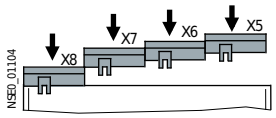
Overview

Determination of the number of auxiliary supply connectors required

This selection is only required if the guide frame is ordered under a separate Article No.



The required number of auxiliary supply connectors depends on the:
- Operating mechanism type
- Electronic Trip Unit with/without current transformer
- Type and number of auxiliary releases
- Number of auxiliary switches
- COM15/COM16 communication interface

		Number of auxiliary supply connectors	Terminal
a	**The first auxiliary supply connector X6 is always required.**	**1**	X6
b	**Operating mechanisms**		
b1	Manual operating mechanism with stored-energy feature with mechanical closing	**0**	
b2	Manual operating mechanism with stored-energy feature with mechanical and electrical closing	**0**	X6
b3	Manual/motorized operating mechanism with stored-energy feature with mechanical and electrical closing	**+1**	X5
c	**Electronic Trip Units**		
c1	Electronic Trip Units, ETU25B,	**0**	
c2	Electronic Trip Units ETU45B, (internal **Cubicle**BUS)	**+1**	X8
	Connections for external current transformers for overload protection in the N-conductor and ground-fault protection		
c3	Current transformer installed in the N-conductor (required with 3-pole circuit breakers if c2 is not selected)	**+1**	X8
c4	Current transformer in the neutral point of the transformer (required if c2 or c3 is not selected)	**+1**	X8
d	**Auxiliary releases**		
d1	With/without 1st auxiliary release (shunt release F1)	**0**	X6
d2	2nd auxiliary release (shunt release F2, undervoltage release F3, delayable undervoltage release F4)	**+1**	X5
e	**Auxiliary switch blocks**		
e1	1st auxiliary switch block 2 NO + 2 NC	**0**	X6
e2	1st and 2nd auxiliary switch block 4 NO + 4 NC or 6 NO + 2 NC or 5 NO + 3 NC (required if b3 or d2 is not selected)	**+1**	X5
f	**Communication modules**		
f1	Without communication module COM15/COM16	**0**	
f2	With communication module COM15/COM16 – occupies the entire terminal strip X7, making the following options no longer possible: • 1st tripped signal switch S24 • 2nd tripped signal switch S25 • Stored-energy status indication S21 • Electrical ON button S10 • Signaling switch on first and second auxiliary release S22 + S23	**+1**	X7
g	**Optional signals/accessories**		
g1	Tripped signaling switch S24 (only when f2 not selected)	**+1**	X7
g2	Stored-energy status indicator S21 (only when f2 not selected, required if g1 not selected)	**+1**	X7
g3	Electric ON button S10 (only when f2 not selected, required if g1 or g2 not selected)	**+1**	X7
g4	Signaling switch at first auxiliary release S22 (only when f2 not selected, required if g1, g2 or g3 not selected)	**+1**	X7
g5	Signaling switch at second auxiliary release S23 (only when f2 not selected, required if g1, g2, g3 or g4 not selected)	**+1**	X7
g6	Switch on ready-to-close signaling switch S20	**0**	X6
g7	Motor shutdown switch S12 (only if motorized operating mechanism selected)	**0**	X5
g8	Remote reset solenoid F7 (required if c2 not selected)	**+1**	X8
h	**Total number of auxiliary supply connectors**	**(max. 4)**	

For ordering the auxiliary supply connectors see under "Accessories and spare parts, Guide frames for AC circuit breakers/ non-automatic air circuit breakers", page 1/102 onwards and under "Accessories and spare parts, Auxiliary conductor connections, Auxiliary supply connectors", page 1/109.

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Selection and ordering data

Guide frames for AC circuit breakers/non-automatic air circuit breakers approved according to UL 489

Size	Max. rated circuit breaker current $I_{n\,max.}$	Breaking capacity $I_{cu} = I_{cs}$	DT	Guide frames for 3-pole circuit breakers/ non-automatic air circuit breakers Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	kA							kg
Front main circuit connection, single hole									
I	1000	... 66		3WL9251-1AA□□-□□A1		1	1 unit	1CA	25.000
	1600	... 66		3WL9251-2AA□□-□□A1		1	1 unit	1CA	25.000
II	2000	... 100		3WL9252-3AA□□-□□A1		1	1 unit	1CA	31.000
	2500	... 100		3WL9252-4AA□□-□□A1		1	1 unit	1CA	39.000
	3000	... 100		3WL9252-5AA□□-□□A1		1	1 unit	1CA	45.000
III	4000	... 100		3WL9253-6AA□□-□□A1		1	1 unit	1CA	60.000
Front main circuit connection, double hole									
I	1000	... 66		3WL9251-1AB□□-□□A1		1	1 unit	1CA	25.000
	1600	... 66		3WL9251-2AB□□-□□A1		1	1 unit	1CA	25.000
II	2000	... 100		3WL9252-3AB□□-□□A1		1	1 unit	1CA	31.000
	2500	... 100		3WL9252-4AB□□-□□A1		1	1 unit	1CA	39.000
	3000	... 100		3WL9252-5AB□□-□□A1		1	1 unit	1CA	45.000
III	4000	... 100		3WL9253-6AB□□-□□A1		1	1 unit	1CA	60.000
Horizontal main circuit connection									
I	1000	... 66		3WL9251-1AC□□-□□A1		1	1 unit	1CA	25.000
	1600	... 66		3WL9251-2AC□□-□□A1		1	1 unit	1CA	25.000
II	2000	... 100		3WL9252-3AC□□-□□A1		1	1 unit	1CA	31.000
	2500	... 100		3WL9252-4AC□□-□□A1		1	1 unit	1CA	39.000
	3000	... 100		3WL9252-5AC□□-□□A1		1	1 unit	1CA	45.000
III	4000	... 100		3WL9253-6AC□□-□□A1		1	1 unit	1CA	60.000
	5000	... 100		3WL9253-7AC□□-□□A1		1	1 unit	1CA	60.000
Vertical main circuit connection									
I	1000	... 66		3WL9251-1AD□□-□□A1		1	1 unit	1CA	25.000
	1600	... 66		3WL9251-2AD□□-□□A1		1	1 unit	1CA	25.000
II	2000	... 100		3WL9252-3AD□□-□□A1		1	1 unit	1CA	31.000
	2500	... 100		3WL9252-4AD□□-□□A1		1	1 unit	1CA	39.000
	3000	... 100		3WL9252-5AD□□-□□A1		1	1 unit	1CA	45.000
III	4000	... 100		3WL9253-6AD□□-□□A1		1	1 unit	1CA	60.000
	5000	... 100		3WL9253-7AD□□-□□A1		1	1 unit	1CA	60.000
Main circuit connection connecting flanges									
I	1000	... 66		3WL9251-1AE□□-□□A1		1	1 unit	1CA	25.000
	1600	... 66		3WL9251-2AE□□-□□A1		1	1 unit	1CA	25.000
II	2000	... 100		3WL9252-3AE□□-□□A1		1	1 unit	1CA	31.000
	2500	... 100		3WL9252-4AE□□-□□A1		1	1 unit	1CA	39.000
	3000	... 100		3WL9252-5AE□□-□□A1		1	1 unit	1CA	45.000
III	4000	... 100		3WL9253-6AE□□-□□A1		1	1 unit	1CA	60.000

Options							Additional price
Number of auxiliary supply connectors	None		**0**				**None**
	1 connector		**1**				✓
	2 connectors		**2**				✓
	3 connectors		**3**				✓
	4 connectors		**4**				✓
Note							
For required number of auxiliary supply connectors, see table on page 1/101.							
Type of auxiliary circuit connections	None			**0**			**None**
	With screw connection (SIGUT, standard)			**1**			✓
	With screwless connection method (tension spring)			**2**			✓
Position signaling switches	None				**0**		**None**
	Option 1: Connected position 1 CO, test position 1 CO, disconnected position 1 CO				**1**		✓
	Option 2: Connected position 3 CO, test position 2 CO, disconnected position 1 CO				**2**		✓
Shutters	None					**A**	**None**
	With shutter, 2-part, lockable	Size I				**B**	✓
		Size II				**B**	✓
		Size III				**B**	✓

✓ Additional price

* You can order this quantity or a multiple thereof.

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Size	Max. rated circuit breaker current $I_{n\ max.}$	Breaking capacity $I_{cu} = I_{cs}$	DT	**Guide frames for 4-pole circuit breakers/ non-automatic air circuit breakers** Article No. www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	kA							kg
Front main circuit connection, single hole									
I	1000	... 66		3WL9251-1BA□□-□□A1		1	1 unit	1CA	30.000
	1600	... 66		3WL9251-2BA□□-□□A1		1	1 unit	1CA	30.000
II	2000	... 100		3WL9252-3BA□□-□□A1		1	1 unit	1CA	37.000
	2500	... 100		3WL9252-4BA□□-□□A1		1	1 unit	1CA	47.000
	3000	... 100		3WL9252-5BA□□-□□A1		1	1 unit	1CA	54.000
III	4000	... 100		3WL9253-6BA□□-□□A1		1	1 unit	1CA	84.000
Front main circuit connection, double hole									
I	1000	... 66		3WL9251-1BB□□-□□A1		1	1 unit	1CA	30.000
	1600	... 66		3WL9251-2BB□□-□□A1		1	1 unit	1CA	30.000
II	2000	... 100		3WL9252-3BB□□-□□A1		1	1 unit	1CA	37.000
	2500	... 100		3WL9252-4BB□□-□□A1		1	1 unit	1CA	47.000
	3000	... 100		3WL9252-5BB□□-□□A1		1	1 unit	1CA	54.000
III	4000	... 100		3WL9253-6BB□□-□□A1		1	1 unit	1CA	84.000
Horizontal main circuit connection									
I	1000	... 66		3WL9251-1BC□□-□□A1		1	1 unit	1CA	30.000
	1600	... 66		3WL9251-2BC□□-□□A1		1	1 unit	1CA	30.000
II	2000	... 100		3WL9252-3BC□□-□□A1		1	1 unit	1CA	37.000
	2500	... 100		3WL9252-4BC□□-□□A1		1	1 unit	1CA	47.000
	3000	... 100		3WL9252-5BC□□-□□A1		1	1 unit	1CA	54.000
III	4000	... 100		3WL9253-6BC□□-□□A1		1	1 unit	1CA	84.000
	5000	... 100		3WL9253-7BC□□-□□A1		1	1 unit	1CA	84.000
Vertical main circuit connection									
I	1000	... 66		3WL9251-1BD□□-□□A1		1	1 unit	1CA	30.000
	1600	... 66		3WL9251-2BD□□-□□A1		1	1 unit	1CA	30.000
II	2000	... 100		3WL9252-3BD□□-□□A1		1	1 unit	1CA	37.000
	2500	... 100		3WL9252-4BD□□-□□A1		1	1 unit	1CA	47.000
	3000	... 100		3WL9252-5BD□□-□□A1		1	1 unit	1CA	54.000
III	4000	... 100		3WL9253-6BD□□-□□A1		1	1 unit	1CA	84.000
	5000	... 100		3WL9253-7BD□□-□□A1		1	1 unit	1CA	84.000
Main circuit connection connecting flanges									
I	1000	... 66		3WL9251-1BE□□-□□A1		1	1 unit	1CA	30.000
	1600	... 66		3WL9251-2BE□□-□□A1		1	1 unit	1CA	30.000
II	2000	... 100		3WL9252-3BE□□-□□A1		1	1 unit	1CA	37.000
	2500	... 100		3WL9252-4BE□□-□□A1		1	1 unit	1CA	47.000
	3000	... 100		3WL9252-5BE□□-□□A1		1	1 unit	1CA	54.000
III	4000	... 100		3WL9253-6BE□□-□□A1		1	1 unit	1CA	84.000

Options								Additional price
Number of auxiliary supply connectors	None					**0**		**None**
	1 connector					**1**		✓
	2 connectors					**2**		✓
	3 connectors					**3**		✓
	4 connectors					**4**		✓
Note								
For required number of auxiliary supply connectors, see table on page 1/101.								
Type of auxiliary circuit connections	None						**0**	**None**
	With screw connection (SIGUT, standard)						**1**	✓
	With screwless connection method (tension spring)						**2**	✓
Position signaling switches	None							**0** ✓
	Option 1: Connected position 1 CO, test position 1 CO, disconnected position 1 CO							**1** ✓
	Option 2: Connected position 3 CO, test position 2 CO, disconnected position 1 CO							**2** ✓
Shutters	None							**A** **None**
	With shutter, 2-part, lockable	Size I						**B** ✓
		Size II						**B** ✓
		Size III						**B** ✓

✓ Additional price

*** You can order this quantity or a multiple thereof.**

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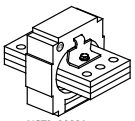
	Designation			DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
NSE0_01610b 3WL931.-.AA.0-0AA1	**Protective devices with device holder and optional measurement function**[1]									
	Type	With protection function	Measuring function							
	ETU25B	LSI	None		3WL9352-5AA00-0AA1		1	1 unit	1CA	0.720
	ETU45B (without display)	LSIN(G)	None		3WL9354-5AA00-0AA1		1	1 unit	1CA	0.720
			With measurement function *Plus*		3WL9354-5AA20-0AA1		1	1 unit	1CA	0.720
NSE0_00992b 3WL9111-0AA64-0AA0	**Rating plugs**[2]									
	Size		Rated current I_n (A)							
	I, II		250		3WL9111-2AA51-0AA0		1	1 unit	1CA	0.010
			315		3WL9111-2AA52-0AA0		1	1 unit	1CA	0.010
			400		3WL9111-2AA53-0AA0		1	1 unit	1CA	0.010
			500		3WL9111-2AA54-0AA0		1	1 unit	1CA	0.010
			630		3WL9111-2AA55-0AA0		1	1 unit	1CA	0.010
			800		3WL9111-2AA56-0AA0		1	1 unit	1CA	0.010
			1000		3WL9111-2AA57-0AA0		1	1 unit	1CA	0.010
	I, II, III		1250		3WL9111-2AA58-0AA0		1	1 unit	1CA	0.010
			1600		3WL9111-2AA61-0AA0		1	1 unit	1CA	0.010
	II, III		2000		3WL9111-2AA62-0AA0		1	1 unit	1CA	0.010
			2500		3WL9111-2AA63-0AA0		1	1 unit	1CA	0.010
			3000		3WL9111-2AA77-0AA0		1	1 unit	1CA	0.010
			3200		3WL9111-2AA64-0AA0		1	1 unit	1CA	0.010
	III		4000		3WL9111-2AA65-0AA0		1	1 unit	1CA	0.010
			5000		3WL9111-2AA66-0AA0		1	1 unit	1CA	0.010
NSE0_01027a 3WL9111-0AT53-0AA0	**Ground-fault modules**[3]									
	Versions									
	• GFM AT 45B (only for ETU45B) alarm and tripping				3WL9111-2AT53-0AA0		1	1 unit	1CA	0.200
NSE0_01609 3WL9111-0AT81-0AA0	**Displays** • For ETU45B • 4-line				3WL9111-1AT81-0AA0		1	1 unit	1EA	0.061
 NSE0_00991a 3WL9111-0AA3.-0AA0	**External current transformers for N conductor** For T5, "Measurement Method" function, see Technical Information at www.siemens.com/lowvoltage/product-support.									
	Copper connection pieces		Size							
	--		I		3WL9111-0AA21-0AA0		1	1 unit	1CA	0.300
			II		3WL9111-0AA22-0AA0		1	1 unit	1CA	0.380
			III		3WL9111-0AA23-0AA0		1	1 unit	1CA	0.680
	✓		I		3WL9111-0AA31-0AA0		1	1 unit	1CA	1.600
			II		3WL9111-0AA32-0AA0		1	1 unit	1CA	4.260
			III		3WL9111-0AA33-0AA0		1	1 unit	1CA	8.500
	EMC filters • Common-mode interference suppressor filters (e.g. in IT networks, caused by frequency converters) • Insertion loss (asymmetric) in the range 40 kHz to 10 MHz >40 dB.				3WL9111-0AK32-0AA0		1	1 unit	1CA	0.280

1) For replacement in existing circuit breakers please specify the circuit breaker ID No. when ordering.

2) With the rating plug selected, the maximum rated current $I_{n\,max}$ of the circuit breaker must not be exceeded. The following applies $I_n \leq I_{n\,max}$.

3) For direct measurement of the ground-fault current, e.g. in the neutral point of the transformer, a 1200 A/1 A current transformer, class 1, is required. The internal load of the 3WL circuit breaker is 0.11 Ω. If the ground-fault current is to be determined using the vectorial sum of the phases, a transformer must be installed in the neutral conductor.

* You can order this quantity or a multiple thereof.

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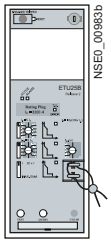
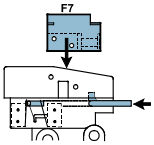
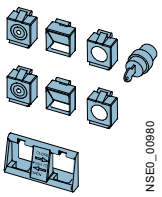
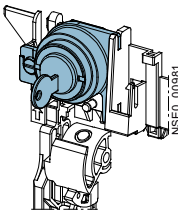
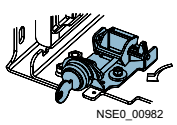
	Designation	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	More accessories for Electronic Trip Units							
 3WL9111-0AT45-0AA0	**Sealable and lockable covers**							
	Version							
	• For ETU25B and ETU45B		3WL9111-0AT45-0AA0		1	1 unit	1CA	0.050
	Automatic reset of the reclosing lockout Spare part for option **K01,** for "-Z" + order code, see page 1/96.		3WL9111-0AK21-0AA0		1	1 unit	1CA	0.050
 3WL9111-0AK0.-0AA0	**Remote reset coils**[1] • For mechanical tripped indicator • Spare part for options **K10** to **K13,** for "-Z" + order code, see page 1/96.							
	Note							
	Automatic reset of the reclosing lockout 3WL9111-0AK21-0AA0 also needed.							
	Versions							
	• 24 V DC		3WL9111-0AK03-0AA0		1	1 unit	1CA	0.200
	• 48 V DC		3WL9111-0AK04-0AA0		1	1 unit	1CA	0.200
	• 120 V AC/125 V DC		3WL9111-0AK05-0AA0		1	1 unit	1CA	0.200
	• 208-250 V AC/208-250 V DC		3WL9111-0AK06-0AA0		1	1 unit	1CA	0.200
	Retrofittable internal CubicleBUS wiring for connection to terminal X8 • For ETU45B • Without male connector[2]		3WL9111-0AK30-0AA0		1	1 unit	1CA	0.150
	Retrofittable internal wiring for connection of the external N- and G-transformers to terminal X8 • Not for ETU Release 2 • Without male connector		3WL9111-0AK31-0AA0		1	1 unit	1CA	0.020
	Locking devices							
 3WL9111-0BA22-0AA0	**Interlocking set for mechanical ON/OFF** • Consisting of 2 transparent covers each for sealing or for attaching padlocks[4], • Cover with 6.35 mm hole (for tool actuation) • Lock mount for safety lock for key operation							
	Versions							
	• Without safety lock		3WL9111-0BA21-0AA0		1	1 unit	1CA	0.100
	• Made by CES		3WL9111-0BA22-0AA0		1	1 unit	1CA	0.300
	• Made by IKON		3WL9111-0BA24-0AA0		1	1 unit	1CA	0.300
 3WL9111-0BA31-0AA0	**Locking devices against unauthorized closing, in the operator panels** • The disconnector unit fulfills the requirements for main circuit breakers acc. to EN 60204-1 • Spare part for options **S01** to **S09,** for "-Z" + order code, see page 1/98.							
	Versions							
	• Assembly kit FORTRESS or CASTELL[3]		3WL9111-0BA31-0AA0		1	1 unit	1CA	0.200
	• Made by Ronis		3WL9111-0BA33-0AA0		1	1 unit	1CA	0.400
	• Made by KIRK-Key[3]		3WL9111-0BA34-0AA0		1	1 unit	1CA	0.270
	• Made by Profalux		3WL9111-0BA35-0AA0		1	1 unit	1CA	0.250
	• Made by CES		3WL9111-0BA36-0AA0		1	1 unit	1CA	0.200
	• Made by IKON		3WL9111-0BA38-0AA0		1	1 unit	1CA	0.200
	• Assembly kit for padlocks[4]		3WL9111-0BA41-0AA0		1	1 unit	1CA	0.360
 3WL9111-0BA53-0AA0	**Locking devices against unauthorized closing, for withdrawable circuit breakers** • The disconnector unit fulfills the requirements for main circuit breakers acc. to EN 60204-1 • Consisting of lock in the cabinet door, active in connected position; function is retained when circuit breaker is replaced • Spare part for options **R60, R61, R68**, for "-Z" + order code, see page 1/98.							
	Versions							
	• Made by CES		3WL9111-0BA51-0AA0		1	1 unit	1CA	0.300
	• Made by IKON		3WL9111-0BA53-0AA0		1	1 unit	1CA	0.300
	• Made by KIRK-Key[3]		3WL9111-0BA57-0AA0		1	1 unit	1CA	0.300
	• Made by Ronis		3WL9111-0BA58-0AA0		1	1 unit	1CA	0.300
	• Made by Profalux		3WL9111-0BA50-0AA0		1	1 unit	1CA	0.227

1) Can only be used in conjunction with "automatic reset of reclosing lockout", e.g. "–Z" + "K01", 3WL9111-0AK21-0AA0.
2) Required if communication is retrofitted.
3) Locks, cylinders and keys must be ordered from the manufacturer.
4) Padlock not included in the scope of supply.

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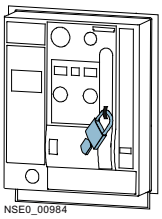
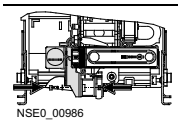
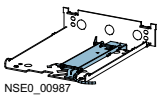
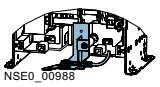
Accessories and spare parts

	Designation	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
 NSE0_00984 3WL9111-0BA71-0AA0	**Locking devices for operating mechanism handle with padlock[1)]** Spare part for option **S33,** for "-Z" + order code, see page 1/98.		3WL9111-0BA71-0AA0		1	1 unit	1CA	0.080
 NSE0_00986 3WL9111-0BA76-0AA0	**Locking devices to prevent movement of the withdrawable circuit breakers** • Safety lock for mounting on the circuit breaker • Spare part for options **S71, S75, S76,** for "-Z" + order code, see page 1/98.							
	Versions							
	• Made by CES		3WL9111-0BA73-0AA0		1	1 unit	1CA	0.300
	• Made by IKON		3WL9111-0BA75-0AA0		1	1 unit	1CA	0.200
	• Made by Profalux		3WL9111-0BA76-0AA0		1	1 unit	1CA	0.300
	• Made by Ronis		3WL9111-0BA77-0AA0		1	1 unit	1CA	0.300
	• Made by KIRK-Key[2)]		3WL9111-0BA80-0AA0		1	1 unit	1CA	0.400
	Interlocking systems • Made by CES • 2 of the same keys for 3 circuit breakers • Locking device in OFF position • Lock in the operator panel • A maximum of 2 circuit breakers can be switched on		3WL9111-0BA43-0AA0		1	1 unit	1CA	0.360
Locking mechanisms								
 NSE0_00987 3WL9111-0BA83-0AA0	**Locking devices to prevent movement of the withdrawable circuit breakers in disconnected position** • Consisting of Bowden wire and lock in the cabinet door on the circuit breaker • Spare part for options **R81**, **R85**, **R86,** for "-Z" + order code, see page 1/98.							
	Versions							
	• Made by CES		3WL9111-0BA81-0AA0		1	1 unit	1CA	0.800
	• Made by IKON		3WL9111-0BA83-0AA0		1	1 unit	1CA	0.800
	• Made by Profalux		3WL9111-0BA85-0AA0		1	1 unit	1CA	0.800
	• Made by Ronis		3WL9111-0BA86-0AA0		1	1 unit	1CA	0.800
	Note							
	Not possible in combination with "Locking device to prevent opening of the cabinet door" (order code "R30") or "Locking device to prevent movement with the cabinet door open" (order code "R50").							
 NSE0_00988 3WL9111-0BB12-0AA0	**Locking devices to prevent opening of the cabinet door in ON position** • Fixed-mounted • Can be defeated • Spare part for option **S30,** for "-Z" + order code, see page 1/98.		3WL9111-0BB12-0AA0		1	1 unit	1CA	0.600
	Locking devices to prevent opening of the cabinet door • Guide frames • Can be defeated • Spare part for option **R30,** for "-Z" + order code, see page 1/98.		3WL9111-0BB13-0AA0		1	1 unit	1CA	0.150
	Note							
	Not possible in combination with "Locking device to prevent movement of the withdrawable circuit breakers in disconnected position" (order codes "R81", "R85" or "R86").							
	Locking devices to prevent movement with the cabinet door open • Guide frames • Spare part for option **R50,** for "-Z" + order code, see page 1/98.		3WL9111-0BB15-0AA0		1	1 unit	1CA	0.150
	Note							
	Not possible in combination with "Locking device to prevent movement of the withdrawable circuit breakers in disconnected position" (order codes "R81", "R85" or "R86").							

1) Padlock not included in the scope of supply.
2) Locks, cylinders and keys must be ordered from the manufacturer.

* You can order this quantity or a multiple thereof.

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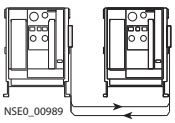
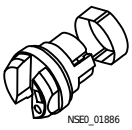
	Designation	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Interlocks								
 NSE0_00989 3WL9111-0BB21-0AA0	**Mutual mechanical interlocking** with 2000 mm Bowden wire (one required for each circuit breaker)							
	Type / When ordered separately / Spare part for							
	Fixed-mounted circuit breakers / -- / Option **S55,** for "-Z" + order code, see page 1/97		**3WL9111-0BB21-0AA0**		1	1 unit	1CA	2.700
	Module for withdrawable circuit breakers with guide frame / -- / Option **R55,** for "-Z" + order code, see page 1/97		**3WL9111-0BB24-0AA0**		1	1 unit	1CA	1.130
	Module for guide frame / ✓ / Option **R56,** for "-Z" + order code, see page 1/97		**3WL9111-0BB22-0AA0**		1	1 unit	1CA	1.100
	Module for withdrawable circuit breaker / ✓ / Option **R57,** for "-Z" + order code, see page 1/97		**3WL9111-0BB23-0AA0**		1	1 unit	1CA	0.150
	Adapter for size III withdrawable circuit breaker / ✓ / --		**3WL9111-0BB30-0AA0**		1	1 unit	1CA	0.100
 NSE0_01886 3WL9112-8HA47-0AA0	**Couplings on the circuit breaker (with ring) for mutual interlocking** Can be used in all circuit breakers		**3WL9112-8AH47-0AA0**		1	1 unit	1CA	0.160
	Bowden wires							
	Versions							
	2000 mm		**3WL9111-0BB45-0AA0**		1	1 unit	1CA	0.150
	3000 mm		**3WL9111-0BB46-0AA0**		1	1 unit	1CA	0.220
	4500 mm		**3WL9111-0BB47-0AA0**		1	1 unit	1CA	0.360
Transfer control devices								
3KC9000-8TL30 3KC9000-8EL10	**3KC ATC5300 and NEW ATC3100 transfer control devices** For combination with two air circuit breakers/molded case circuit breakers for changeover according to IEC 60947-6-1. For further information, see chapter "Monitoring Devices"							
Test devices								
	Manual test device for Electronic Trip Units ETU25B and ETU45B For testing the Electronic Trip Units functions of all 3WL ETUs		**3WL9111-0AT32-0AA0**		1	1 unit	1CA	1.100
	Function testers For testing the tripping characteristics of Electronic Trip Units ETU25B and ETU45B		**3WL9111-0AT44-0AA0**		1	1 unit	1CA	8.210
Capacitor storage devices								
	Capacitor storage devices • For shunt releases • Storage time 5 min		**3WL9111-0BA14-0AA0**		1	1 unit	1CA	0.520
	Rated control supply voltage/rated operational voltage							
	50/60 Hz V AC / V DC							
	220 ... 240 / 220 ... 250							
	Note							
	• Rated control supply voltage must match the rated control supply voltage of the shunt release • Suitable also for 3VL circuit breakers.							

* You can order this quantity or a multiple thereof.

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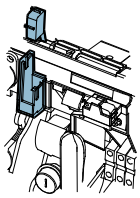
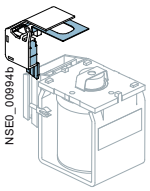
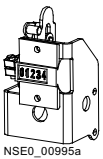
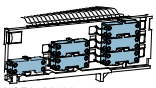
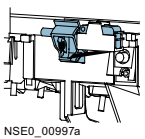
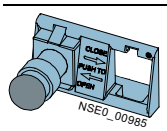
	Designation	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Indicators, control elements								
 NSE0_00993a 3WL9111-0AH01-0AA0	**Ready-to-close signaling switches (S20)** • 1 NO contact • Spare part for option **C22,** for "-Z" + order code, see page 1/96.		**3WL9111-0AH01-0AA0**		1	1 unit	1CA	0.020
 NSE0_00994b 3WL9111-0AH02-0AA0	**Signaling switches[1)2)] (S22 or S23)** • 1st or 2nd auxiliary release • Spare part for option **C26** and **C27,** for "-Z" + order code, see page 1/96.		**3WL9111-0AH02-0AA0**		1	1 unit	1CA	0.020
	1st tripped signaling switch[1)2)7)] (S24) • 1 CO contact • Spare part for option **K07,** for "-Z" + order code, see page 1/96.		**3WL9111-0AH14-0AA0**		1	1 unit	1CA	0.080
	2nd tripped signaling switch[1)2)3)7)] (S25) • 1 NO contact • Spare part for option **K06,** for "-Z" + order code, see page 1/96.		**3WL9111-0AH17-0AA0**		1	1 unit	1CA	0.080
 NSE0_00995a 3WL9111-0AH07-0AA0	**Operating cycles counter** • Mechanical[4)] • Spare part for option **C01,** for "-Z" + order code, see page 1/96.		**3WL9111-0AH07-0AA0**		1	1 unit	1CA	0.100
	Stored energy status signaling switches[1)2)] • 1 NO contact • Spare part for option **C20,** for "-Z" + order code, see page 1/96.		**3WL9111-0AH08-0AA0**		1	1 unit	1CA	0.030
 NSE0_00996a 3WL9111-0AH12-0AA0	**Position signaling switches for guide frames** Spare part for options **R15** and **R16,** for "-Z" + order code, see page 1/97.							
	Versions							
	• 1st block (3 CO contacts)		**3WL9111-0AH11-0AA0**		1	1 unit	1CA	0.200
	• 2nd block (6 CO contacts)		**3WL9111-0AH12-0AA0**		1	1 unit	1CA	0.400
 NSE0_00997a 3WL9111-0AJ0.-0AA0	**Electrical ON buttons[1)5)] (S10)** • Button + wiring[2)] • For operator panel • Spare part for options **C11** and **C12,** for "-Z" + order code, see page 1/96.							
	Versions							
	• With sealing cap **C11**		**3WL9111-0AJ02-0AA0**		1	1 unit	1CA	0.150
	• With CES **C12** assembly kit		**3WL9111-0AJ03-0AA0**		1	1 unit	1CA	0.140
	• With IKON assembly kit		**3WL9111-0AJ05-0AA0**		1	1 unit	1CA	0.140
	Note							
	Possible only for circuit breakers with closing coil.							
	Motor shutdown switches[6)] (S12) • Mounting on operator panel • Spare part for option **S25,** for "-Z" + order code, see page 1/96.		**3WL9111-0AJ06-0AA0**		1	1 unit	1CA	0.100
 NSE0_00985 3WL9111-0BA72-0AA0	**EMERGENCY-STOP pushbuttons** • Mushroom pushbutton instead of the mechanical OFF pushbutton • Spare part for option **S24,** for "-Z" + order code, see page 1/96.		**3WL9111-0BA72-0AA0**		1	1 unit	1CA	0.080

1) Not possible with communications interface option, order codes "F02" or "F12".

2) X7 auxiliary supply connector required for circuit breakers or guide frames. If this is not already available, please order additionally (see page 1/101 and page 1/109).

3) Can only be used in combination with 1st tripped signaling switch.

4) Only in conjunction with motorized operating mechanism.

5) Not possible with motor shutdown switch.

6) Not possible with electrical ON button.

7) Not available for non-automatic air circuit breakers.

* You can order this quantity or a multiple thereof.

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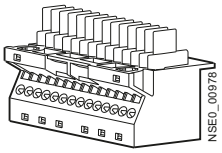
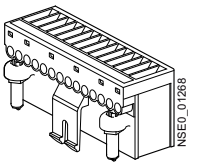
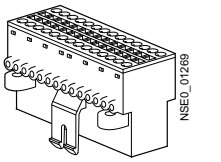
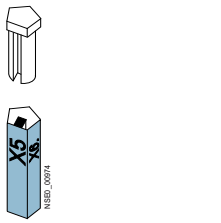
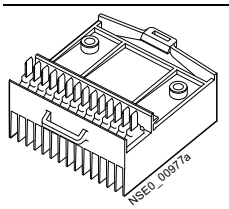
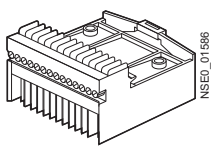
	Designation	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Auxiliary conductor connections								
 3WL9111-0AB01-0AA0	**Male connectors for circuit breakers** ①		**3WL9111-0AB01-0AA0**		1	1 unit	1CA	0.100
	Extension for the 1000 V male connector versions Male connector must be ordered separately.		**3WL9111-0AB02-0AA0**		1	1 unit	1EA	0.150
	Male connectors and extension for 1000 V		**3WL9111-0AB10-0AA0**		1	1 unit	1EA	1.000
 3WL9111-0AB03-0AA0	**Auxiliary supply connectors for circuit breakers or guide frames** ② Versions							
	• Screw connection (SIGUT)		**3WL9111-0AB03-0AA0**		1	1 unit	1CA	0.070
 3WL9111-0AB04-0AA0	• Screwless connection method (tension spring)		**3WL9111-0AB04-0AA0**		1	1 unit	1CA	0.070
 3WL9111-0AB07-0AA0	**Coding kits** For fixed-mounted versions (X5 to X8) ③		**3WL9111-0AB07-0AA0**		1	1 unit	1CA	0.020
 3WL9111-0AB08-0AA0	**Sliding contact modules for guide frames** ④		**3WL9111-0AB08-0AA0**		1	1 unit	1CA	0.100
 3WL9111-0AB18-0AA0	**One-part sliding contact modules for guide frames** Screw connection (SIGUT) ⑤		**3WL9111-0AB18-0AA0**		1	1 unit	1CA	0.120
	Blanking blocks for circuit breakers		**3WL9111-0AB12-0AA0**		1	1 unit	1CA	0.030

For a complete auxiliary current connection you must order:

Fixed-mounted version: ① + ② + ③

Withdrawable version: ① + ④ + ② or ① + ⑤

*** You can order this quantity or a multiple thereof.**

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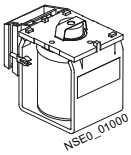
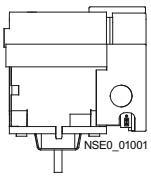
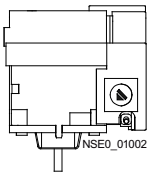
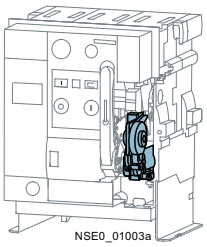
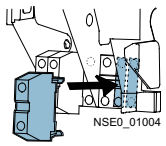
Accessories and spare parts

	Designation		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Auxiliary releases									
 3WL9111-0AD06-0AA0	**Closing coils/shunt releases**								
	Versions	Voltage							
	100 % OP	24 V DC		3WL9111-0AD01-0AA0		1	1 unit	1CA	0.700
		30 V DC		3WL9111-0AD02-0AA0		1	1 unit	1CA	0.700
		48 V DC		3WL9111-0AD03-0AA0		1	1 unit	1CA	0.700
		60 V DC		3WL9111-0AD04-0AA0		1	1 unit	1CA	0.700
		110 ... 125 V DC/110 ... 127 V AC		3WL9111-0AD05-0AA0		1	1 unit	1CA	0.700
		220 ... 250 V DC/208 ... 240 V AC		3WL9111-0AD06-0AA0		1	1 unit	1CA	0.700
	5 % OP[1]	24 V DC		3WL9111-0AD11-0AA0		1	1 unit	1CA	0.700
		48 V DC		3WL9111-0AD12-0AA0		1	1 unit	1CA	0.700
		110 ... 125 V DC/110 ... 127 V AC		3WL9111-0AD13-0AA0		1	1 unit	1CA	0.700
		220 ... 250 V DC/208 ... 240 V AC		3WL9111-0AD14-0AA0		1	1 unit	1CA	1.800
 3WL9111-0AE0.-0AA0	**Undervoltage releases**								
	Versions	Voltage							
	Instantaneous	24 V DC		3WL9111-0AE01-0AA0		1	1 unit	1CA	0.730
		30 V DC		3WL9111-0AE02-0AA0		1	1 unit	1CA	0.730
		48 V DC		3WL9111-0AE03-0AA0		1	1 unit	1CA	0.730
		60 V DC		3WL9111-0AE07-0AA0		1	1 unit	1CA	0.730
		110 ... 125 V DC/110 ... 127 V AC		3WL9111-0AE04-0AA0		1	1 unit	1CA	0.730
		220 ... 250 V DC/208 ... 240 V AC		3WL9111-0AE05-0AA0		1	1 unit	1CA	0.730
 3WL9111-0AE1.-0AA0	Delayed	48 V DC		3WL9111-0AE11-0AA0		1	1 unit	1CA	0.740
		110 ... 125 V DC/110 ... 127 V AC		3WL9111-0AE12-0AA0		1	1 unit	1CA	0.740
		220 ... 250 V DC/208 ... 240 V AC		3WL9111-0AE13-0AA0		1	1 unit	1CA	0.740
Operating mechanisms									
 3WL9111-0AF0.-0AA0	**Motorized operating mechanisms[2]**								
	Versions								
	• 24 ... 30 V DC			3WL9111-0AF01-0AA0		1	1 unit	1CA	1.510
	• 48 ... 60 V DC			3WL9111-0AF02-0AA0		1	1 unit	1CA	1.510
	• 110 ... 125 V DC/110 ... 127 V AC			3WL9111-0AF03-0AA0		1	1 unit	1CA	1.510
	• 220 ... 250 V DC/208 ... 240 V AC			3WL9111-0AF04-0AA0		1	1 unit	1CA	1.510
Auxiliary contacts									
 3WL9111-0AG03-0AA0	**Auxiliary switch blocks**								
	Versions								
	• 2 NO contacts + 2 NC contacts			3WL9111-0AG01-0AA0		1	1 unit	1CA	0.180
	• 2 NO contacts			3WL9111-0AG02-0AA0		1	1 unit	1CA	0.080
	• 1 NO contact + 1 NC contact			3WL9111-0AG03-0AA0		1	1 unit	1CA	0.070

[1] Overexcited, i.e. operating time 50 ms (standard > 80 ms).

[2] X5 auxiliary supply connector required for circuit breakers or guide frames. If this is not already available, please order additionally (see page 1/101 and page 1/109).

* You can order this quantity or a multiple thereof.

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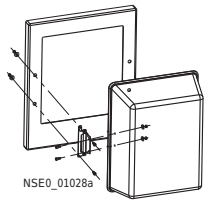
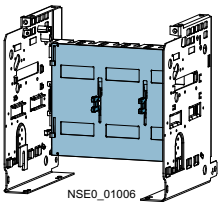
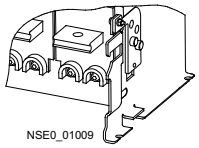
	Designation	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Door sealing frames, hoods, shutters								
	Door sealing frames Spare part for option **T40,** for "-Z" + order code, see page 1/96.		**3WL9111-0AP01-0AA0**		1	1 unit	1CA	0.360
 3WL9111-0AP02-0AA0	**Protective covers** IP55 Notes • Cannot be used in conjunction with door sealing frames • Hood removable and can be opened on both sides		**3WL9111-0AP03-0AA0**		1	1 unit	1CA	1.690
 3WL9111-0AP..-0AA0	**Shutters** Spare part for option **R21,** for "-Z" + order code, see page 1/97.							
	Number of poles: 3-pole; Size: I		**3WL9111-0AP04-0AA0**		1	1 unit	1CA	0.500
	Number of poles: 3-pole; Size: II		**3WL9111-0AP06-0AA0**		1	1 unit	1CA	0.630
	Number of poles: 3-pole; Size: III		**3WL9111-0AP07-0AA0**		1	1 unit	1CA	0.860
	Number of poles: 4-pole; Size: I		**3WL9111-0AP08-0AA0**		1	1 unit	1CA	0.600
	Number of poles: 4-pole; Size: II		**3WL9111-0AP11-0AA0**		1	1 unit	1CA	0.770
	Number of poles: 4-pole; Size: III		**3WL9111-0AP12-0AA0**		1	1 unit	1CA	1.070
Coding for withdrawable version								
 3WL9111-0AR12-0AA0 3WL9111-0AR13-0AA0	**Coding for withdrawable version** By customer, for 36 coding variants Versions							
	• Sizes I and II		**3WL9111-0AR12-0AA0**		1	1 unit	1CA	0.400
	• Size III		**3WL9111-0AR13-0AA0**		1	1 unit	1CA	0.310

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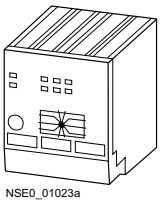
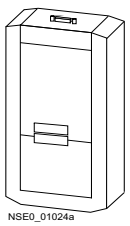
Accessories and spare parts

	Designation	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Support brackets								
3WL9111-0BB50-0AA0	**Support brackets** • For mounting fixed-mounted circuit breakers on vertical plane • Only for sizes I and II (1 set = 2 units)		**3WL9111-0BB50-0AA0**		1	1 unit	1CA	7.000
CubicleBUS modules[1)4)]								
 NSE0_01023a 3WL9111-0AT23-0AA0	**Digital output modules with rotary coding switch, relay outputs**		**3WL9111-1AT26-0AA0**		1	1 unit	1EA	0.350
	Digital output modules, configurable, relay outputs		**3WL9111-1AT20-0AA0**		1	1 unit	1EA	0.400
	Digital input modules		**3WL9111-1AT27-0AA0**		1	1 unit	1EA	0.300
	Analog output modules		**3WL9111-1AT23-0AA0**		1	1 unit	1EA	0.300
	Zone Selective Interlocking modules		**3WL9111-1AT21-0AA0**		1	1 unit	1EA	0.240
Parameterization systems[2)]								
 NSE0_01024a 3WL9111-0AT28-0AA0	**BDA *Plus***[2)3)] • Parameterization, operation, monitoring and diagnostics of 3WL air circuit breakers using the local interface • Breaker Data Adapter, connection cable to the 3WL air circuit breaker and to the programming device (e.g. notebook) • Can be run with Internet Explorer with JAVA2 VM 1.4.0-01 and higher • With Ethernet interface for connection to Ethernet/Intranet/ Internet		**3WL9111-2AT33-0AA0**		1	1 unit	1CA	1.000
	Connection cables for BDA *Plus* • Connection cable for connection of BDA *Plus* to terminal X8 of the 3WL air circuit breaker • Required if neither COM15 nor COM16 nor other external **Cubicle**BUS modules are available • Length 2 m		**3WL9111-0BC21-0AA0**		1	1 unit	1CA	0.350
	powerconfig parameterization software • Parameterization, operation, monitoring and diagnostics of 3WL air circuit breakers using the powerconfig software, see chapter "Measuring Devices and Power Monitoring". • powerconfig is available free of charge at http://support.automation.siemens.com/WW/view/en/22951684/133100							

1) Each **Cubicle**BUS module is supplied with a 0.2 m factory-fitted cable to connect the modules with each other. A longer factory-fitted cable is required for connection to the circuit breaker.

2) A 24 V DC power supply unit is required.

3) Operation under Windows Vista and Windows 7 possible with restrictions.

4) All communication components, **Cubicle**BUS modules and measurement functions are available for the releases ETU45B.

* You can order this quantity or a multiple thereof.

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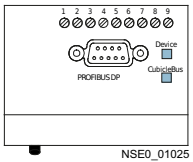
	Designation	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Accessories for communications[3]								
	Preassembled cables for CubicleBUS **modules**							
	Versions							
	• 0.2 m long, for connection to 3WL with COM15/COM16		**3WL9111-0BC04-0AA0**		1	1 unit	1CA	0.020
	• 1 m long, for connection to 3WL with COM15/COM16		**3WL9111-0BC02-0AA0**		1	1 unit	1CA	0.050
	• 2 m long, for connection to 3WL with COM15/COM16		**3WL9111-0BC03-0AA0**		1	1 unit	1CA	0.060
	• 2 m long, for connection to 3WL without COM15/COM16		**3WL9111-0BC05-0AA0**		1	1 unit	1CA	0.070
	SENTRON manual for communication solutions • Detailed description of the communication functions for circuit breakers. Installation, connection, commissioning, data transmission to the PLC. • Free download from: www.siemens.com/lowvoltage/manuals							
	Voltage transformers • 3-pole, for 3WL circuit breakers with measurement function *Plus*[1] • 380 ... 690 V/100 V, class 0.5		**3WL9111-0BB68-0AA0**		1	1 unit	1CA	2.600
Retrofitting and spare parts[3]								
 3WL9111-0AT15-0AA0	**COM15 PROFIBUS module** For ETU45B Electronic Trip Unit		**3WL9111-1AT65-0AA0**		1	1 unit	1EA	0.560
	COM16 MODBUS modules For ETU45B Electronic Trip Unit		**3WL9111-1AT15-0AA0**		1	1 unit	1CA	0.180
	Breaker status sensor (BSS) For ETU45B Electronic Trip Unit		**3WL9111-1AT16-0AA0**		1	1 unit	1EA	0.137
	Measurement function *Plus*[2] Voltage transformer required		**3WL9111-1AT03-0AA0**		1	1 unit	1EA	0.310

1) Is required for operation of the measurement function *Plus*.

2) A measuring accuracy of 3 % is reached if retrofitted.

3) All communication components, **Cubicle**BUS modules and measurement functions are available for the ETU45B Electronic Trip Unit.

*** You can order this quantity or a multiple thereof.**

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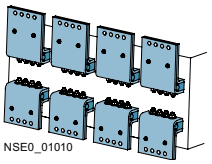
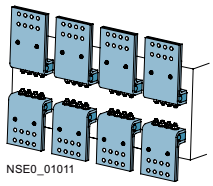
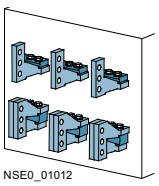
	Designation		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Main conductor connections, fixed-mounted versions (required accessory)									
	Specified for each connection								
 NSE0_01010 3WL9111-0AL06-0AA0 + 3WL9111-0AL56-0AA0	**Front-accessible main connections, single hole at top**								
	Size	Rated current I_n							
	I	Up to 1000 A		3WL9111-0AL01-0AA0		1	1 unit	1CA	1.100
		1250 A to 1600 A		3WL9111-0AL02-0AA0		1	1 unit	1CA	1.600
	II	Up to 2000 A		3WL9111-0AL03-0AA0		1	1 unit	1CA	2.000
		Up to 2500 A		3WL9111-0AL04-0AA0		1	1 unit	1CA	3.600
		Up to 3200 A		3WL9111-0AL05-0AA0		1	1 unit	1CA	3.500
	III	Up to 4000 A		3WL9111-0AL06-0AA0		1	1 unit	1CA	6.100
	Front-accessible main connections, single hole at bottom								
	Size	Rated current I_n							
	I	Up to 1000 A		3WL9111-0AL51-0AA0		1	1 unit	1CA	1.000
		1250 A to 1600 A		3WL9111-0AL52-0AA0		1	1 unit	1CA	1.300
	II	Up to 2000 A		3WL9111-0AL53-0AA0		1	1 unit	1CA	1.800
		Up to 2500 A		3WL9111-0AL54-0AA0		1	1 unit	1CA	3.100
		Up to 3200 A		3WL9111-0AL55-0AA0		1	1 unit	1CA	3.000
	III	Up to 4000 A		3WL9111-0AL56-0AA0		1	1 unit	1CA	5.200
 NSE0_01011 3WL9111-0AL14-0AA0 + 3WL9111-0AL64-0AA0	**Front-accessible main connections according to DIN 43673, double hole at top**								
	Size	Rated current I_n							
	I	Up to 1000 A		3WL9111-0AL07-0AA0		1	1 unit	1CA	1.400
		1250 A to 1600 A		3WL9111-0AL08-0AA0		1	1 unit	1CA	2.000
	II	Up to 2000 A		3WL9111-0AL11-0AA0		1	1 unit	1CA	2.400
		Up to 2500 A		3WL9111-0AL12-0AA0		1	1 unit	1CA	4.500
		Up to 3200 A		3WL9111-0AL13-0AA0		1	1 unit	1CA	4.400
	III	Up to 4000 A		3WL9111-0AL14-0AA0		1	1 unit	1CA	7.800
	Front-accessible main connections according to DIN 43673, double hole at bottom								
	Size	Rated current I_n							
	I	Up to 1000 A		3WL9111-0AL57-0AA0		1	1 unit	1CA	1.300
		1250 A to 1600 A		3WL9111-0AL58-0AA0		1	1 unit	1CA	1.700
	II	Up to 2000 A		3WL9111-0AL61-0AA0		1	1 unit	1CA	2.000
		Up to 2500 A		3WL9111-0AL62-0AA0		1	1 unit	1CA	3.700
		Up to 3200 A		3WL9111-0AL63-0AA0		1	1 unit	1CA	3.600
	III	Up to 4000 A		3WL9111-0AL64-0AA0		1	1 unit	1CA	6.400
 NSE0_01012 3WL9111-0AM03-0AA0	**Rear vertical main connections**								
	Size	Rated current I_n							
	I[1)]	Up to 1600 A		3WL9111-0AM01-0AA0		1	1 unit	1CA	0.500
	II[2)]	Up to 3200 A		3WL9111-0AM02-0AA0		1	1 unit	1CA	2.200
	III	Up to 6300 A		3WL9111-0AM03-0AA0		1	1 unit	1CA	5.000

1) In the case of vertical connection size I with breaking capacity N and S, up to 1000 A one 3WL9111–0AM01-0AA0 vertical connection is required, up to 1600 A two 3WL9111-0AM01-0AA0 vertical connections are required.

2) In the case of vertical connection size II, up to 2500 A one 3WL9111-0AM02-0AA0 vertical connection is required, up to 3200 A two 3WL9111-0AM02-0AA0 vertical connections are required.

* You can order this quantity or a multiple thereof.

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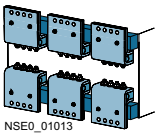
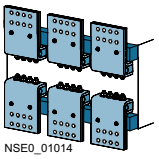
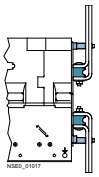
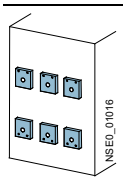
	Designation		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Main conductor connections, withdrawable versions (required accessory)									
	Specified for each connection								
 NSE0_01013 3WL9111-0AN06-0AA0	**Front-accessible main connections, single hole at top or at bottom[1)]**								
	Size	Rated current I_n							
	I	Up to 1000 A		3WL9111-0AN01-0AA0		1	1 unit	1CA	1.000
		1250 A to 1600 A		3WL9111-0AN02-0AA0		1	1 unit	1CA	1.300
	II	Up to 2000 A		3WL9111-0AN03-0AA0		1	1 unit	1CA	1.800
		Up to 2500 A		3WL9111-0AN04-0AA0		1	1 unit	1CA	3.100
		Up to 3200 A		3WL9111-0AN05-0AA0		1	1 unit	1CA	3.000
	III	Up to 4000 A		3WL9111-0AN06-0AA0		1	1 unit	1CA	5.200
 NSE0_01014 3WL9111-0AN14-0AA0	**Front-accessible main connections according to DIN 43673, double hole at top or at bottom[1)]**								
	Size	Rated current I_n							
	I	Up to 1000 A		3WL9111-0AN07-0AA0		1	1 unit	1CA	1.300
		1250 A to 1600 A		3WL9111-0AN08-0AA0		1	1 unit	1CA	1.700
	II	Up to 2000 A		3WL9111-0AN11-0AA0		1	1 unit	1CA	2.000
		Up to 2500 A		3WL9111-0AN12-0AA0		1	1 unit	1CA	3.700
		Up to 3200 A		3WL9111-0AN13-0AA0		1	1 unit	1CA	3.600
	III	Up to 4000 A		3WL9111-0AN14-0AA0		1	1 unit	1CA	6.400
 NSE0_01017 3WL9111-0AN41-0AA0	**Supports for front and DIN connecting bars**								
	Number of poles	Size							
	3-pole for 3 bars	I		3WL9111-0AN41-0AA0		1	1 unit	1CA	0.700
		II		3WL9111-0AN42-0AA0		1	1 unit	1CA	1.350
		III		3WL9111-0AN43-0AA0		1	1 unit	1CA	2.420
	4-pole for 4 bars	I		3WL9111-0AN44-0AA0		1	1 unit	1CA	1.200
		II		3WL9111-0AN45-0AA0		1	1 unit	1CA	2.200
		III		3WL9111-0AN46-0AA0		1	1 unit	1CA	3.200
NSE0_01015 3WL9111-0AN23-0AA0	**Rear vertical main connections**								
	Size	Rated current I_n							
	I	Up to 1000 A		3WL9111-0AN15-0AA0		1	1 unit	1CA	0.660
		1250 A to 1600 A		3WL9111-0AN16-0AA0		1	1 unit	1CA	0.870
	II	Up to 2000 A		3WL9111-0AN17-0AA0		1	1 unit	1CA	1.150
		Up to 2500 A		3WL9111-0AN18-0AA0		1	1 unit	1CA	1.490
		Up to 3200 A		3WL9111-0AN21-0AA0		1	1 unit	1CA	2.580
	III	Up to 5000 A		3WL9111-0AN22-0AA0		1	1 unit	1CA	6.380
	Rear horizontal main connections								
	Size	Rated current I_n							
	I	Up to 1000 A		3WL9111-0AN32-0AA0		1	1 unit	1CA	0.630
		1250 A to 1600 A		3WL9111-0AN33-0AA0		1	1 unit	1CA	0.770
	II	Up to 2000 A		3WL9111-0AN34-0AA0		1	1 unit	1CA	1.020
		Up to 2500 A		3WL9111-0AN35-0AA0		1	1 unit	1CA	1.240
		Up to 3200 A		3WL9111-0AN36-0AA0		1	1 unit	1CA	2.170
	III	Up to 5000 A		3WL9111-0AN37-0AA0		1	1 unit	1CA	3.860
 NSE0_01016 3WL9111-0AN24-0AA0	**Connecting flange**								
	Size	Rated current I_n							
	I	Up to 1000 A		3WL9111-0AN24-0AA0		1	1 unit	1CA	0.610
		1250 A to 1600 A		3WL9111-0AN25-0AA0		1	1 unit	1CA	0.640
	II	Up to 2000 A		3WL9111-0AN26-0AA0		1	1 unit	1CA	0.980
		Up to 2500 A		3WL9111-0AN27-0AA0		1	1 unit	1CA	1.020
		Up to 3200 A		3WL9111-0AN28-0AA0		1	1 unit	1CA	1.310
	III	Up to 4000 A		3WL9111-0AN31-0AA0		1	1 unit	1CA	2.370
Conversion sets									
	Conversion set for converting fixed-mounted circuit breakers into withdrawable circuit breakers • Only for AC circuit breakers/non-automatic air circuit breakers • Guide frames and sliding contact modules must be ordered separately								
	Number of poles	Size							
	3-pole	I		3WL9111-0BC11-0AA0		1	1 unit	1CA	5.100
		II		3WL9111-0BC12-0AA0		1	1 unit	1CA	5.900
		III		3WL9111-0BC13-0AA0		1	1 unit	1CA	8.100
	4-pole	I		3WL9111-0BC14-0AA0		1	1 unit	1CA	6.400
		II		3WL9111-0BC15-0AA0		1	1 unit	1CA	6.450
		III		3WL9111-0BC16-0AA0		1	1 unit	1CA	10.700

[1)] When using front-accessible mains connections (withdrawable circuit breakers) supports are required.

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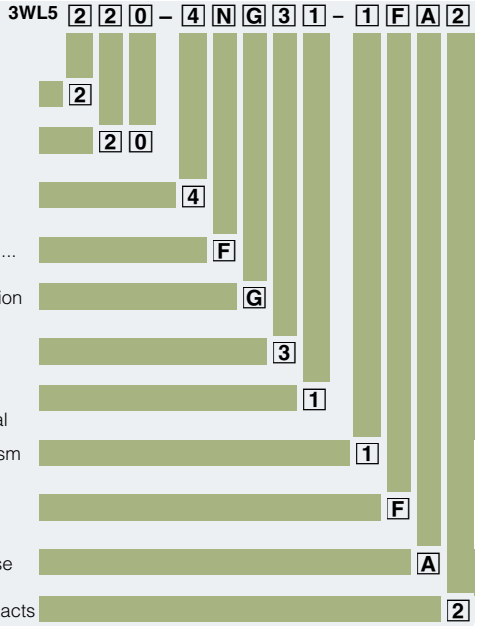
Options

Structure of the Article No.



Example

5th position:	Size	Size II
6th and 7th positions:	Max. rated circuit breaker current $I_{n\,max}$	$I_{n\,max}$ = 2000 A
8th position:	Breaking capacity class	High breaking capacity "H": 100 kA
9th position:	Electronic Trip Units	ETU45B with 4-line display ...
10th position:	Electronic Trip Unit supplement	... with ground-fault protection
11th position:	Number of poles	Three-pole
12th position:	Installation type	Fixed-mounted, main connections on rear, vertical
13th position:	Operating mechanisms	Manual operating mechanism with mechanical closing
14th position:	1st auxiliary release	Shunt release 50/60 Hz 110 V AC
15th position:	2nd auxiliary release	Without 2nd auxiliary release
16th position:	Auxiliary switches	2 NO contacts + 2 NC contacts

An important prerequisite for computer-based order processing is that article numbers must be structured according to standardized criteria.

They are used as an unambiguous means of communication for various purposes:

- Offer processing
  Selection and configuration
- Order processing
  Orders
  Order confirmation
  Processing of products for storage
  Order processing in supply locations
  Supply and dispatch
- Reporting and planning
- Service and warranty

The standardized structure ensures that only one Article No. has to be administered for one device.

This saves time and effort during planning, configuring, ordering and in stock keeping, and consequently above all it saves costs.

The example opposite explains the various positions within an Article No.

Accessories: With first order (components are already mounted)

Example

3WL5 2 1 6 – 4 J G 3 1 – 1 F A 3 – Z F 0 2

"-Z" with order code

Communications interface "Standard" + Breaker Status Sensor (BSS) + communication module COM15 for connection to PROFIBUS DP

Z F 0 2

Additional accessory components can be ordered ready-mounted.

These supplements are identified by **"–Z"**.

Even with additional components, one Article No. is sufficient.

Accessories: For retrofitting (components for subsequent fitting)

Example

3WL9 1 1 1 – 0 B A 2 1 – 0 A A 0

Interlocking set for mechanical ON/OFF without lock

Additional accessories which are not intended to be ready-mounted in the factory, such as spare parts for storage, can also be ordered separately from the circuit breaker.

Accessories for retrofitting are identified by the Article No. stem 3WL9.

Documentation

PROFIBUS manual	German	Article No.	**A5E0151347**
Communication	English	Article No.	**A5E0151353**
MODBUS manual	German	Article No.	**3ZX1012-0WL10-1AB1**
Communication	English	Article No.	**3ZX1012-0WL10-1AC1**

Free download of documentation from
www.siemens.com/lowvoltage/manuals

More information

Up-to-date information on the Internet at:
www.siemens.com/sentron

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3VA molded case circuit breakers NEW

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2/16 3VA1 molded case circuit breakers up to 250 A, IEC
2/42 3VA2 molded case circuit breakers up to 630 A, IEC
2/68 3VA molded case circuit breakers – accessories, IEC
2/68 - Internal accessories
2/75 - Manual operators
2/80 - Motor operators
2/81 - Connection technology
2/96 - Plug-in and draw-out technology
2/101 - Residual current devices
2/104 - Communication and testing/ commissioning devices
2/110 - Locking and interlocking
2/114 - Other

3VL molded case circuit breakers up to 1600 A, IEC

2/116 Introduction
2/122 General data
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2/150 4-pole
2/171 Options
2/175 Accessories and spare parts

3VL molded case circuit breakers up to 1600 A, according to UL 489

2/214 Introduction
2/220 3-pole
2/236 Options
2/238 Accessories and spare parts
General data
2/272 - Design
2/277 - Function
2/281 - Configuration
2/282 - Technical specifications

Ch. 10 **Busbar device adapters and device holders from 630 A to 1600 A**

Ch. 11 **4NC current transformers**

Ch. 12 **3KC ATC5300 and** NEW **ATC3100 transfer control devices**

Ch. 12 **Residual current devices (MRCD)**

For further technical product information:

Siemens Industry Online Support:
www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
Download
FAQ
Manual
Product note
Software archive
Technical data

For further information on 3VL according to UL,
see Catalog LV 16

NEW

Direct reference to the products in the Industry Mall from the selection and ordering data tables:

Article No.
www.siemens.com/product?Article No.
3VA2025-5HL36-0AA0

Paper catalog:
To get more product information enter the Web address plus Article No.

PDF catalog:
Get more product information with just a mouse click.

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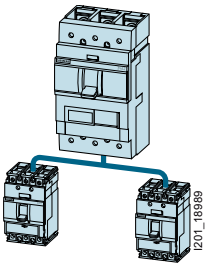
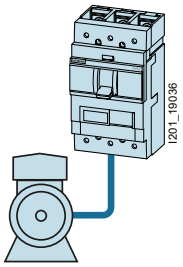
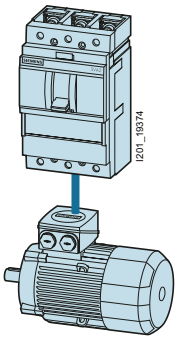
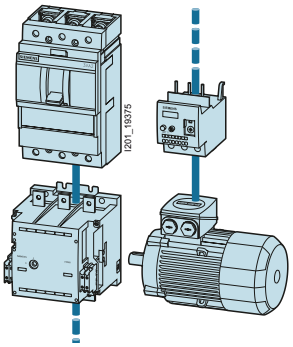
General data

Overview

Application	Page	3VA1	3VA2	Description	Standards
Line protection					
	2/16 ... 2/37 2/42 ... 2/65	✓	✓	The trip units for line protection are designed to provide overload and short-circuit protection for: • Cables • Lines • Non motorized loads	IEC/EN 60947-1, IEC/EN 60947-2
Generator protection					
	2/48 ... 2/53 2/60 ... 2/65	--	✓	The setting values of the trip units are matched to protecting generators.	IEC/EN 60947-1, IEC/EN 60947-2
Motor protection					
	2/66 ... 2/67	--	✓	The overload and short-circuit releases are designed for optimal protection and direct starting of three-phase AC squirrel-cage motors. The molded case circuit breakers for motor protection have phase-failure sensitivity and a thermal image that protects the motor against overheating. The adjustable time lag class enables users to adjust the overload release to the startup conditions of the motor to be protected. Are you IE3 ready?	IEC / EN 60947-1, IEC / EN 60947-2, IEC / EN 60947-4-1 IE3 ready
Protection for starter combinations (starter protection)					
	2/38 ... 2/39 2/66 ... 2/67	✓	✓	Starter combinations consist of: Molded case circuit breaker + contactor + overload relay. The molded case circuit breaker handles short-circuit protection and the isolating function. The task of the contactor is the operational switching of the feeder. The overload relay handles overload protection that can be specially matched to the motor. The molded case circuit breaker for the starter combination is therefore equipped with an adjustable and instantaneous short-circuit release. Are you IE3 ready?	IEC / EN 60947-1, IEC / EN 60947-2, IEC / EN 60947-4-1 IE3 ready

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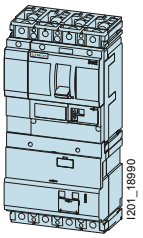
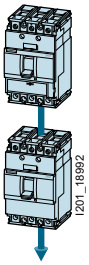
Application	Page	3VA1	3VA2	Description	Standards
Residual current protection					
	2/101 ... 2/103	✓	✓	Residual current protective devices afford fault protection (formerly referred to as: protection in case of indirect contact) and supplementary protection (formerly referred to as: Protection in case of direct contact) in low-voltage systems in the event of the basic insulation failing or live parts being touched. Their task is to prevent or reduce injury to personnel or livestock, or damage to property.	IEC / EN 60947-2 (Annexes B, M)
Switch disconnectors					
	2/40	✓	--	Switch disconnectors are deployed: • As main disconnecting means • For on/off switching • For disconnection of loads • As switch disconnectors without overload and short-circuit protection The switch disconnectors correspond to IEC / EN 60947-3.	IEC / EN 60947-1, IEC / EN 60947-3

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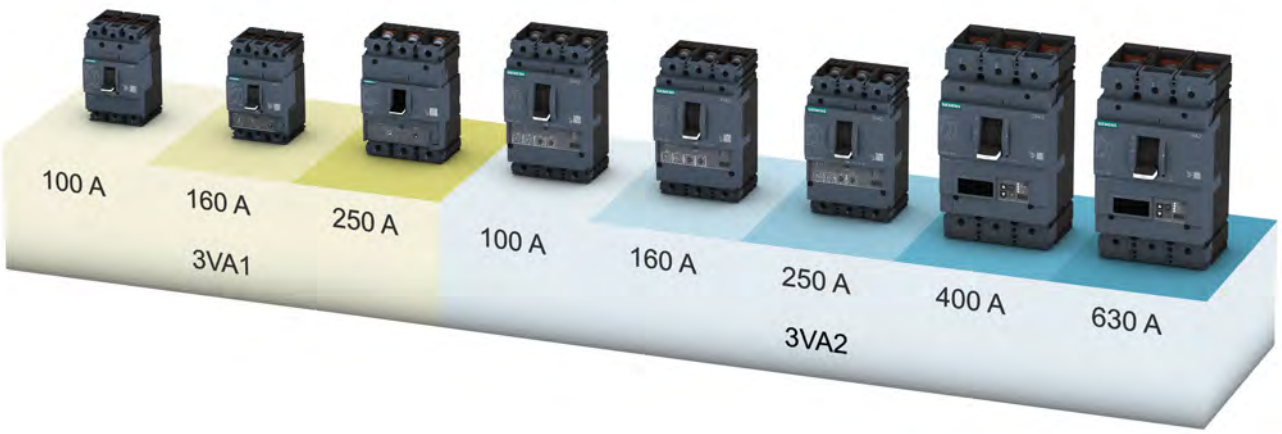
Sizes

The integrated 3VA portfolio consists of two different series of molded case circuit breakers in eight different rated operational current versions (sizes).

The new 3VA molded case circuit breakers set new standards in flexibility and the variety of modular accessories available. Standardized accessories suitable for use with several sizes of circuit breaker from all the 3VA ranges help to cut costs and save time.

The new 3VA1 molded case circuit breakers are available in 1 to 4-pole versions (3VA1 160 A) or in 3 and 4-pole versions (3VA1 100 A and 250 A). The new 3VA2 molded case circuit breakers are available in 3 and 4-pole versions.

The circuit breakers are available with rated operational currents ranging from 16 A to 630 A and rated voltages up to 690 V, depending on the series and size.



Integrated system

When it comes to operation, functionality and installation, the new 3VA series of molded case circuit breakers is a fully integrated system. This principle is embodied in the basic units and in all internal and external accessories.

The benefits offered by the internal and external accessories available for the 3VA molded case circuit breakers are:

- Standardized methods of operation
- Standardized scope of functions
- Standardized installation procedures
- Standardized accessories from 100 A ... 630 A (e.g. auxiliary switches, auxiliary releases, etc.)

3VA1 molded case circuit breakers

The new 3VA1 molded case circuit breakers reliably perform all the tasks required for line protection.

Features

The key features of the 3VA1 series are:

- Compact design
- Depending on size: 1-pole to 4-pole versions
- Depending on size: Breaking capacity of 16 kA ... 70 kA at 415 V, 3 or 4-pole breakers and 36 kA at 240 V, 1-pole breakers
- Fixed-mounted, plug-in version (depending on size)
- Thermal-magnetic trip units
- AC/DC applications
- No derating up to +50 °C
- Modular and easy-to-fit internal accessories with diverse functions
- Uniform accessories platform across all 3VA molded case circuit breakers

Compact dimensions

Thanks to a mounting depth of 70 mm and a cover size of 45 mm, the 3VA1 molded case circuit breakers of sizes 100 A, 160 A and 250 A are predestined for protecting cables and lines in the plant area, especially for the electrical installation area. For these applications, there is also a wide range of accessories available such as adapters for installation on standard mounting rails, as well as residual current devices (RCD310 (up to 160 A) and RCD510) that can be side-mounted.

Thermal-magnetic trip unit

A thermal-magnetic principle trip unit is the basic trip unit for providing overload and short-circuit protection. This has been developed for implementing economical, cost-efficient installations up to 250 A. It is suitable for use in three-phase networks, AC networks, 400 Hz applications, and with DC currents.

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3VA2 molded case circuit breakers

The new 3VA2 molded case circuit breakers reliably perform all the tasks required for line protection, generator protection, motor protection and protection of starter combinations.

This series is designed for applications with increased requirements:

- Increased breaking capacity
- Very good selective protection response
- Integrated metering function
- Connection to a communication system

Features

The most important features of the 3VA2 series are:

- Compact dimensions
- 3 and 4-pole versions
- Four breaking capacity classes from 55 kA … 150 kA
- Fixed-mounting, plug-in technology, draw-out technology
- Depending on size: Selective protection response in rated operational current interval 1 : 2.5
- Electronic Trip Units
- Retrofittable communication for ETU 5-series and 8-series
- Depending on the ETU: Integrated metering function
- AC applications
- No derating up to +50 °C
- Modular and easy-to-fit internal accessories with diverse functions
- Uniform accessories platform across all 3VA molded case circuit breakers

Compact dimensions with function expansions

In addition to its expanded functionality, the 3VA2 molded case circuit breaker also comes with compact dimensions for fixed mounting, as a plug-in version and a draw-out version.

A cover size of 70 mm for the door cutout and a complete selection of breaking capacity classes from 55 kA to 150 kA at 415 V AC provide the necessary flexibility for planning.

Despite its compact size, the circuit breaker offers the following benefits:

- Extremely high breaking capacity
- Extremely good selectivity
- Electronic trip units, versions with and without integrated metering function and optional communication interface

Selective contact system

With its contact system, the 3VA2 molded case circuit breaker is designed for fast selectivity tripping. The selective contact system ensures the following:

- Dynamic instantaneous short-circuit range
- High breaking capacity
- Selective protection response of the molded case circuit breakers in relation to each other
- Selective protection response of the molded case circuit breakers in relation to other protection devices such as downstream low-voltage fuses, etc.

Electronic Trip Units (ETUs)

The current sensor of the 3VA2 comprises an iron-cored transformer for the internal power supply and a Rogowski coil for precise current measurement. Each transformer can be optimized accordingly for its specific task. Thanks to the high accuracy of current measurement, the 3VA2 molded case circuit breaker is suitable for power/energy measurement. In addition, finer adjustment of ground fault current monitoring is possible.

The Electronic Trip Units (ETUs) provide the following protection functions:

- Overload protection L ("L" = Long-time delay)
- Short-time delayed short-circuit protection S ("S" = Short-time delay) for time-selective response in case of a short-circuit
- Instantaneous short-circuit protection I ("I" = Instantaneous)
- Protection of the neutral conductor N against overload and short-circuit ("N" = Neutral)
- Protection against residual currents to ground ("G" = Ground fault)
- ELISA:
  Improved selective grading of downstream LV HRC fuses and upstream molded case circuit breakers by means of a special form of current-time characteristic

Energy management and communication

The Electronic Trip Units (ETUs) provide the following energy management and communication functions:

- Metering functions
- Communication
- Flexible, local, digital inputs and outputs via the EFB300 external function box
- Software commissioning support with powerconfig
- Testing and archiving with the TD300 and TD500 test devices (with powerconfig)

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Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers NEW

General data

Type		3VA10	3VA11			3VA12
Number of poles		3, 4	1	2[1]	3, 4	3, 4
3VA1 molded case circuit breakers for line protection, standard applications						
Electrical characteristics according to IEC 60947-2						
Size		100 A	160 A	160 A	160 A	250 A
Rated operational current I_n at 50 °C ambient temperature	A	16 … 100	16 … 160	16 … 160	16 … 160	160 … 250
Rated operational voltage U_e AC 50/60 Hz	V	690	240	415	690	690
Rated insulation voltage U_i	V	800	500	500	800	800
Rated impulse withstand voltage U_{imp}	kV	8	8	8	8	8
Use in IT networks		✓	✓	✓	✓	✓
Frequency	Hz	0 ... 400	0 ... 400	0 ... 400	0 ... 400	0 ... 400

Breaking capacity		(B)	(N)	(S)	(N)	(S)	(N)	(S)	(N)	(S)	(M)	(H)	(S)	(M)	(H)
Rated ultimate short-circuit breaking capacity I_{cu} rms value, according to IEC 60947-2															
220 - 240 V AC / 50/60 Hz	kA	25	36	55	25	36	36	55	36	55	85	100	55	85	100
380 - 415 V AC / 50/60 Hz	kA	16	25	36	5	6	25	36	25	36	55	70	36	55	70
440 V AC / 50/60 Hz		8	16	25	--	--	--	--	16	25	36	55[2]	25	36	36
500 V AC / 50/60 Hz		On req.	On req.	On req.	--	--	--	--	On req.	On req.	On req.	On req.	10	15	15
690 V AC / 50/60 Hz	kA	5	5	7	--	--	--	--	7	7	10	10	7	10	10
125 V DC (1 switching pole)		--	--	--	16	25	16	25	--	--	--	--	--	--	--
250 V DC (2 switching poles)		25	36	55	--	--	36	55	36	55	85	100	55	85	100
500 V DC (3 switching poles)	kA	25	36	55	--	--	--	--	36	55	85	100	55	85	100
600 V DC (4 switching poles)	kA	8	16	25	--	--	--	--	16	25	36	55	25	36	55
Rated operational short-circuit breaking capacity I_{cs} rms value, according to IEC 60947-2															
220 - 240 V AC / 50/60 Hz	kA	25	36	55	25	36	36	55	36	55	85	100	55	85	100
380 - 415 V AC / 50/60 Hz	kA	16	25	36	5	6	25	36	25	36	55	70	36	55	70
440 V AC / 50/60 Hz		8	16	25	--	--	--	--	16	25	36	40[2]	25	36	36
500 V AC / 50/60 Hz		On req.	On req.	On req.	--	--	--	--	On req.	On req.	On req.	On req.	10	10	10
690 V AC / 50/60 Hz	kA	5	5	5	--	--	--	--	5	5	5	5	5	5	5
125 V DC (1 switching pole)		--	--	--	16	25	16	25	--	--	--	--	--	--	--
250 V DC (2 switching poles)		25	36	55	--	--	36	55	36	55	85	100	55	85	100
500 V DC (3 switching poles)	kA	25	36	55	--	--	--	--	36	55	85	100	55	85	100
600 V DC (4 switching poles)	kA	8	16	25	--	--	--	--	16	25	36	55	25	36	55

✓ Available -- Not available

1) A side plate must be used if no finger safety can be warranted on the right due to the installation situation (see page 2/92).

2) I_n 125 A, 160 A: I_{cu} / I_{cs} = 36 kA / 36 kA

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	3VA20	3VA21	3VA22	3VA23	3VA24
	3, 4	3, 4	3, 4	3, 4	3, 4
3VA2 molded case circuit breakers for line protection, selectivity applications					
	100 A	160 A	250 A	400 A	630 A
	25 ... 100	25 ... 160	160 ... 250	250 ... 400	400 ... 630
	690	690	690	690	690
	800	800	800	800	800
	8	8	8	8	8
	✓	✓	✓	✓	✓
	50 … 60	50 … 60	50 … 60	50 … 60	50 … 60

Ⓜ	Ⓗ	Ⓒ	Ⓛ	Ⓜ	Ⓗ	Ⓒ	Ⓛ	Ⓜ	Ⓗ	Ⓒ	Ⓛ	Ⓜ	Ⓗ	Ⓒ	Ⓛ	Ⓜ	Ⓗ	Ⓒ	Ⓛ
85	110	150	200	85	110	150	200	85	110	150	200	85	110	150	On req.	85	110	150	On req.
55	85	110	150	55	85	110	150	55	85	110	150	55	85	110	On req.	55	85	110	On req.
55	85	110	150	55	85	110	150	55	85	110	150	55	85	110	On req.	55	85	110	On req.
36	55	85	100	36	55	85	100	36	55	85	100	36	55	85	On req.	36	55	85	On req.
2	2	2	24	2.5	2.5	2.5	24	3	3	3	24	5	5	5	On req.	6	6	6	On req.
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
85	110	150	200	85	110	150	200	85	110	150	200	85	110	150	On req.	85	110	150	On req.
55	85	110	150	55	85	110	150	55	85	110	150	55	85	110	On req.	55	85	110	On req.
55	85	110	150	55	85	110	150	55	85	110	150	55	85	110	On req.	55	85	110	On req.
36	55	85	100	36	55	85	100	36	55	85	100	36	55	85	On req.	36	55	85	On req.
2	2	2	18	2.5	2.5	2.5	18	3	3	3	18	5	5	5	On req.	6	6	6	On req.
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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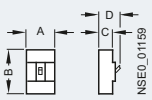
Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers NEW

General data

Type				3VA10	3VA11	3VA11	3VA11	3VA12
3VA1 molded case circuit breakers for line protection, standard applications								
Service life (make-break operations)								
Mechanical				15000	15000	15000	15000	15000
Electrical			380 ... 415 V	8000	8000	8000	8000	8000
Trip units	FTFM	TM210		✓	✓	✓	✓	--
	ATFM	TM220		--	--	--	✓	--
	ATAM	TM240		--	--	--	✓	✓
	LI	ETU320		--	--	--	--	--
	LIG	ETU330		--	--	--	--	--
	ELISA LI	ETU340		--	--	--	--	--
	LSI	ETU350		--	--	--	--	--
	LSI	ETU550/ETU850		--	--	--	--	--
	LSIG	ETU560/ETU860		--	--	--	--	--
3VA1 molded case circuit breakers for protecting starter combinations (standards and specifications IEC 60947-4-1 acc. to AC-1)								
Rated operational current I_n at 50 °C ambient temperature			A	--	--	--	32 … 125	160, 200
Service life (make-break operations)								
Mechanical				15000	15000	15000	15000	15000
Electrical			380 ... 415 V	8000	8000	8000	8000	8000
Trip units	AM	TM120M		--	--	--	✓	✓
	I	ETU310M		--	--	--	--	--
	LSI	ETU350M		--	--	--	--	--
	LSIG	ETU860M		--	--	--	--	--
Switch disconnectors								
Electrical characteristics according to IEC 60947-3								
Number of poles				--	--	--	3, 4	3, 4
Rated uninterrupted current I_u at 50 °C ambient temperature			A	--	--	--	63 … 160	250
Rated operational voltage U_e AC 50/60 Hz			V	--	--	--	690	690
Rated operational voltage U_e DC			V	--	--	--	500 (3p)/600 (4p)	500 (3p)/600 (4p)
Rated short-circuit making capacity I_{cn} with upstream circuit breaker			kA	--	--	--	70 kA at 415 V	70 kA at 415 V
Permissible rated short-time current I_{cw}			±1s kA	--	--	--	2	On request
Dimensions								
	A B C D		mm mm mm mm	76.2 (3p)/101.6 (4p) 130 70 88	25.4 130 70 88	50.8 130 70 88	76.2 (3p)/101.6 (4p) 130 70 88	105 (3p), 140 (4p) 158 70 88
Weight 1-pole Box terminal			kg	--	0.39	--	--	--
1-pole Lug terminal			kg	--	0.35	--	--	--
2-pole Box terminal			kg	--	--	0.68	--	--
2-pole Lug terminal			kg	--	--	0.60	--	--
3-pole Box terminal			kg	1.02	--	--	1.02	--
3-pole Lug terminal			kg	0.90	--	--	0.90	1.8
4-pole Box terminal			kg	1.31	--	--	1.31	--
4-pole Lug terminal			kg	1.15	--	--	1.15	2.3
General information								
Standards and specifications				IEC 60947-2, -3, -4	IEC 60947-2, -3, -4	IEC 60947-2, -3, -4	IEC 60947-2, -3, -4	IEC 60947-2, -3, -4
Utilization category according to IEC 60947-2				A	A	A	A	A
Power and infeed direction				Top and bottom	Top and bottom	Top and bottom	Top and bottom	Top and bottom
Standard connection system				Lug terminal Box terminal	Lug terminal Box terminal	Lug terminal Box terminal	Lug terminal Box terminal	Lug terminal --
Isolating features according to IEC 60947				✓	✓	✓	✓	✓

✓ Available -- Not available

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3VA20	3VA21	3VA22	3VA23	3VA24
3VA2 molded case circuit breakers for line protection, selectivity applications				
20000	20000	20000	15000	15000
12000	12000	10000	6000	4000
--	--	--	--	--
--	--	--	--	--
--	--	--	--	--
✓	✓	✓	✓	✓
✓	✓	✓	✓	✓
✓	✓	✓	✓	✓
✓	✓	✓	✓	✓
✓	✓	✓	✓	✓
✓	✓	✓	✓	✓
3VA2 molded case circuit breakers for protecting motors/starter combinations (standards and specifications 60947-4-1 acc. to AC-1)				
--	25 ... 100	160 ... 200	250	400 ... 500
20000	20000	20000	15000	15000
12000	12000	10000	6000	4000
--	--	--	--	--
✓	✓	✓	✓	✓
✓	✓	✓	✓	✓
✓	✓	✓	✓	✓
--	--	--	--	--
--	--	--	--	--
--	--	--	--	--
--	--	--	--	--
--	--	--	--	--
--	--	--	--	--
105 (3p)/140 (4p) 181 86 107	105 (3p)/140 (4p) 181 86 107	105 (3p)/140 (4p) 181 86 107	138 (3p)/184 (4p) 248 110 137	138 (3p)/184 (4p) 248 110 137
--	--	--	--	--
--	--	--	--	--
--	--	--	--	--
--	--	--	--	--
2.44	2.44	--	--	--
2.29	2.29	2.41	4.3	4.3
3.14	3.14	--	--	--
2.94	2.94	3.09	4.8	4.8
IEC 60947-2, -3, -4	IEC 60947-2, -3, -4	IEC 60947-2, -3, -4	IEC 60947-2, -3, -4	IEC 60947-2, -3, -4
A	A	A	A	A/B[1)]
Top and bottom	Top and bottom	Top and bottom	Top and bottom	Top and bottom
Lug terminal Box terminal	Lug terminal Box terminal	Lug terminal	Lug terminal	Lug terminal
✓	✓	✓	✓	✓

[1)] Utilization category B only for 400 A and 500 A and the trip units of the ETU5 and ETU8 series

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Molded case circuit breakers and accessories in the system

The new 3VA molded case circuit breakers come with a large portfolio of internal and external accessories which can be installed flexibly in any size of circuit breaker (depending on the type of accessory).

The table below shows the molded case circuit breakers in or on which the accessories can be installed, and the sizes covered by the same accessory component:

Accessories	Molded case circuit breakers							
	3VA1			3VA2				
	100	160	250	100	160	250	400	630
Auxiliary switches and alarm switches	■	■	■	■	■	■	■	■
Auxiliary releases	■	■	■	■	■	■	■	■
Connection technology	■	■	■	■	■	■	■	■
Plug-in technology		■	■	■	■	■	■	■
Draw-out technology			■	■	■	■	■	■
Front mounted rotary operator	■	■	■	■	■	■	■	■
Door mounted rotary operator	■	■	■	■	■	■	■	■
Side wall mounted rotary operators	■	■	■	■	■	■	■	■
Motor operator MO310 (mounted on the side)		■						
Motor operator MO320 (mounted on the front)		■	■	■	■	■	■	■
Locking and interlocking	■	■	■	■	■	■	■	■
Residual current device (mounted on the side)		■	■					
Residual current device (mounted underneath)		■	■	■	■	■	■	■
Communications interface				■	■	■	■	■
EFB300				■	■	■	■	■
TD300 and TD500				■	■	■	■	■
Masking frame	■	■	■	■	■	■	■	■
DIN rail adapter	■	■						

Front terminals

The portfolio of connection components for the molded case circuit breakers includes a large selection of front cable and busbar terminals.

Connection technology available from/installed at the factory

All 3VA molded case circuit breakers are available as standard with a lug terminal (clip-in nut and clamping screw) at the infeed and load ends.

For units up to size 160 A, a box terminal for direct cable connection can be optionally selected instead of the lug terminal. The box terminal is preassembled and installed at the factory.

The connection technology available from/installed at the factory can be selected in the 12th position of the article number of the molded case circuit breaker.

Connection technology	Illustration	3VA1			3VA2				
		100	160	250	100	160	250	400	630
Lug terminal		✓	✓	✓	✓	✓	✓	✓	✓
Box terminal		✓	✓	--	✓	✓	--	--	--

✓ Available

Insulated busbars and cables with cable lugs can be connected directly to the lug terminal. Furthermore, all connection bar extensions are assembled at the molded case circuit breaker using the lug terminal:

- Front connection bars extended (phase barriers included in scope of supply)
- Front connection bars broadened (phase barriers included in scope of supply)
- Front connection bars edgewise (phase barriers included in scope of supply)
- Lug terminal, right-angled (phase barriers included in scope of supply)

The implementation of insulation measures (phase barriers or terminal covers) is recommended. With some accessory components, insulation measures are essential (and these are included in the scope of supply of the relevant component).

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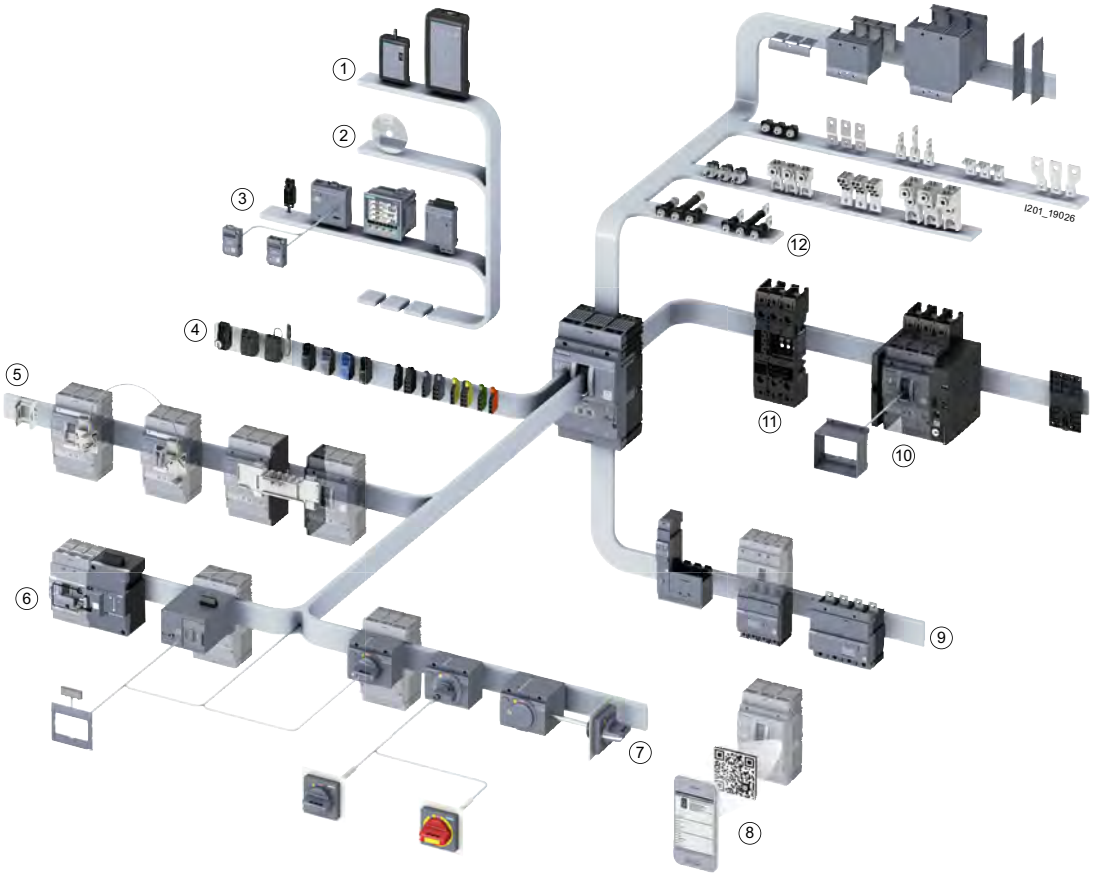


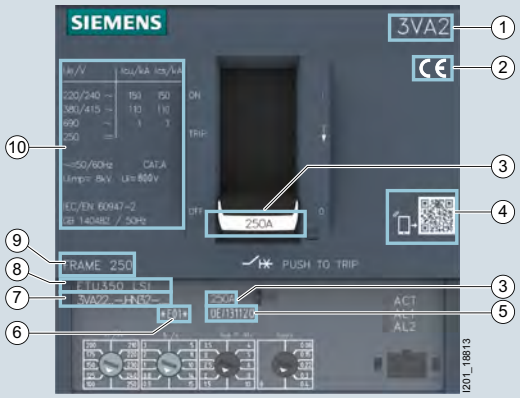
① Test devices (pages 2/109)
② powerconfig software (pages 2/109, Chapter "Measuring Devices and Power Monitoring" and Chapter "Software")
③ Communication (pages 2/105 to 2/109)
④ Internal accessories (pages 2/68 to 2/74)
⑤ Locking and interlocking (pages 2/110 to 2/113)
⑥ Motor operators (page 2/80)
⑦ Manual operators (pages 2/75 to 2/79)
⑧ Knowledge Manager (2/11)
⑨ Residual current devices (pages 2/101 to 2/103)
⑩ Withdrawable unit design (pages 2/96 to 2/100)
⑪ Plug-in design (pages 2/96 to 2/100)
⑫ Connection technology (pages 2/81 to 2/95)

Knowledge Manager

By reading out the QR code using a smartphone and the "Siemens Industry Online Support" app, it is possible to view key product information via the Internet at any time.

Siemens provides the app free of charge.

Technical information about installation, parameterization or maintenance can be called up directly from the system by QR code on a smartphone.



① Circuit breaker designation
② Approvals
③ Rated current
④ Knowledge Manager
⑤ Production date
⑥ Product version
⑦ Article number
⑧ ETU type
⑨ Size and breaking capacity class
⑩ Rating plate

Front: Inscription

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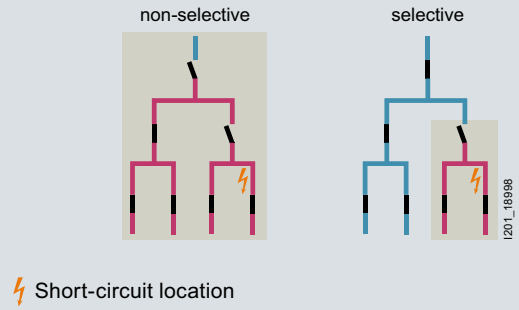
General data

Selectivity

Switching devices connected in series, e.g. molded case circuit breakers and fuses, work in a coordinated manner to ensure that switching devices are tripped successively. The closest, upstream switching device before the location of the short-circuit must trip. The other switching devices on the same current run do not trip. The purpose of selectivity is to minimize the effects of a fault in terms of its duration and the area affected by the fault.

Selectivity is achieved when the circuit breakers are matched to each other by means of selection, configuring and trip settings in such a way that, in the event of a fault, only the breaker closest to the location of the fault trips.



Selectivity with 3VA2 molded case circuit breakers

Series 3VA2 circuit breakers are designed to deliver excellent selective tripping combined with optimum current limiting and outstanding breaking capacity.

3VA2 molded case circuit breakers have been specifically designed to meet the following requirements:

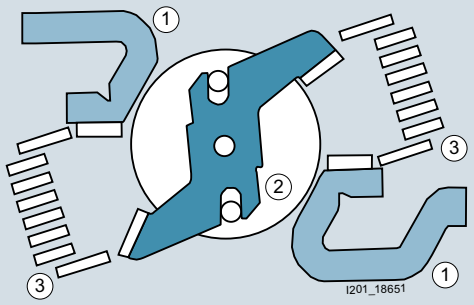
- System-wide, high selectivity with a rated operational current interval of 1 : 2.5 up to the miniature circuit breaker
- Selectivity in combination with high current limiting and high breaking capacity
- Cost-effective design / configuring of selective power distribution systems

You can find information on selectivity values for the 3VA2 molded case circuit breakers on the Internet under the link for the 3VA documentation (www.siemens.com/3VA-documentation).

Current limitation

To achieve excellent current limiting, the 3VA molded case circuit breakers are equipped with a double-rotatory contact system that opens dynamically on its own above the specified disengaging currents on the principle of magnetic repulsion before the expected peak value of the short-circuit current is reached. These limits have been coordinated and optimized to suit the overall device characteristics. This substantially reduces the thermal and mechanical loading on the molded case circuit breaker.

The switching pole cassettes of the 3VA molded case circuit breakers are optimized for high breaking capacity, and their double-rotary contact system design enables extremely good current limiting thanks to the very fast build-up of peak arc voltage generated at both contacts in the event of a short-circuit. This results in significant limitation of the let-through energy I^2t and the expected let-through current I_{sc}.



(1) Fixed contacts
(2) Rotating contact system
(3) Arc splitter chamber

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Standards and guidelines

The standards fulfilled by the 3VA molded case circuit breakers include:

- IEC/EN 60947-1
- IEC/EN 60947-2
- IEC / EN 60947-2, Annexes B, M
- IEC/EN 60947-3
- IEC / EN 60947-4-1

Certificates

You can find information on the available certification (CE, CCC, EHC) on the Internet (www.siemens.com/lowvoltage/certificates).

In the Entry List you can use the certificate type (general product approval, explosion protection, test certificates, shipbuilding, etc.) as a filter criterion.

Operating conditions

- Pollution degree:
  Operation of the 3VA1 and 3VA2 molded case circuit breakers is approved in accordance with IEC / EN 60947-1 and IEC / EN 60664-1 for pollution degree 3.
- Ambient temperature:
  - 3VA molded case circuit breakers are used at ambient temperatures from -25 °C to +70 °C. At temperatures above +50 °C there are reductions in the rated operational current (derating).
  - The permissible storage temperature in original Siemens packaging lies between -40 °C and +80 °C.

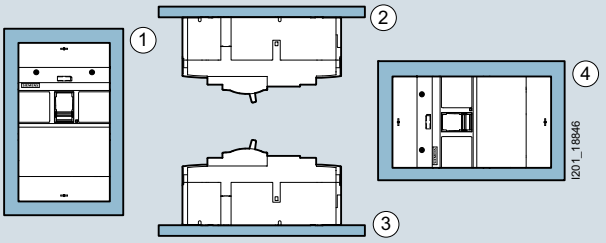
IE3 ready

As from January 2015, the energy-efficiency class IE3 will be mandatory, with a few exceptions only, for three-phase asynchronous motors. This will have an effect on motors, low-voltage power distribution and electrical installation technology, as well as industrial controls.

For use of 3VL molded case circuit breakers in conjunction with highly energy-efficient IE3 motors, please observe the information on dimensioning and configuring, see "Configuration Manual for SIRIUS Controls with IE3 Motors", at http://support.automation.siemens.com/WW/view/en/94770820.

Are you IE3 ready?

Permissible mounting positions



1 Vertical wall mounting
2 Ceiling mounting
3 Floor mounting
4 Laterally rotated wall mounting

Positions in which the 3VA molded case circuit breakers are allowed to be installed

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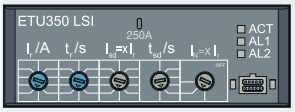
General data

Protection system

Description of functions

	Thermal-magnetic TM 2-series	Electronic ETU 3-series	Electronic with display ETU 5-series	Electronic with display and metering function – ETU 8-series
Protection				
Trip units	I201_19004	 I201_18828	I201_18480	I201_18482
	Line protection: TM210, TM220, TM240 Starter protection: TM120M	Line protection: ETU320, ETU330, ETU340, ETU350 Starter protection: ETU310M Motor protection: ETU350M	Line protection: ETU550, ETU560	Line protection: ETU850, ETU860 Motor protection: ETU860M
Integrated functions				
Parameterizing				
	Setting and reading the parameters in A	Setting and reading the parameters in A and s	• Setting and reading the parameters via display and communication • Fine setting of the parameters • Reading the measured values	• Setting and reading the parameters via display and communication • Fine setting of the parameters • Reading the measured values
Status display	--			
		Indicating the ETU status via LEDs	Indicating the ETU status via LEDs	Indicating the ETU status via LEDs
Interface	--			
		Interface for test devices	Interface for test devices	Interface for test devices
Metering function	--	--	--	Metering function integrated
Optional expansions				
	--	--		
			24 V module for continuous power supply (also without primary current through the molded case circuit breaker)	24 V module for continuous power supply (also without primary current through the molded case circuit breaker)
	--			
		EFB300 external function box for connecting to the ETU	EFB300 external function box for connecting to the ETU	EFB300 external function box for connecting to the ETU
	--	--		
			COM060 communication module	COM060 communication module
	--	--		
			COM800/COM100 breaker data server Interface to • PROFIBUS • PROFINET • Modbus RTU • Ethernet (Modbus TCP)	COM800/COM100 breaker data server Interface to • PROFIBUS • PROFINET • Modbus RTU • Ethernet (Modbus TCP)
	--	--		
			DSP800 external display for installing in the cubicle door	DSP800 external display for installing in the cubicle door
	--			
		TD300/TD500 test device	TD300/TD500 test device	TD300/TD500 test device

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Protection functions of the 3VA1 molded case circuit breakers with thermal-magnetic trip unit

	TM120M AM	TM210 FTFM	TM220 ATFM	TM240 ATAM
Protection				
Starter protection	✓	--	--	--
Line protection	--	✓	✓	✓
Version available with				
1-pole and 2-pole breakers	--	✓	--	--
3-pole breaker	✓	✓	✓	✓
4-pole breaker	--	✓	✓	✓
Available protection parameters				
I_r adjustable	--	--	✓	✓
I_i adjustable	✓	--	--	✓
I_r fixed	--	✓	--	--
I_i fixed	--	✓	✓	--
I_N [1]	--	✓	✓	✓

[1] 3VA10 only without N protection
3VA11 without, 50 % or 100 % N protection
50 % N protection from $I_n \geq 100$ A and only in size 160 A

Protection functions of the 3VA2 with electronic trip unit

	ETU310M I	ETU320 LI	ETU330 LIG	ETU340 ELISA®	ETU350 LSI	ETU350M LSI	ETU550 LSI	ETU560 LSIG	ETU850 LSI	ETU860 LSIG	ETU860M LSIG
Protection											
Starter protection	✓	--	--	--	--	--	--	--	--	--	--
Motor protection	--	--	--	--	--	✓	--	--	--	--	✓
Line protection	--	✓	✓	✓	✓	--	✓	✓	✓	✓	--
Generator protection	--	✓	✓	--	✓	--	✓	✓	✓	✓	--
Version available with											
3-pole without external neutral conductor transformer	✓	✓	✓	✓	✓	✓	--	--	--	--	✓
3-pole with external neutral conductor transformer	--	--	--	--	--	--	✓	✓	✓	✓	--
4-pole with protected neutral conductor	--	✓	✓	✓	✓	--	✓	✓	✓	✓	--
Available protection parameters											
Characteristic in L range	I^2t	I^2t	I^2t	I^4t	I^2t	I^2t	I^2t	I^2t	I^2t	I^2t	I^2t
I_r	--	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
t_r at 6 x I_r	--	✓	✓	--	✓	--	✓	✓	✓	✓	--
t_c	--	--	--	--	--	✓	--	--	--	--	✓
t_p	--	--	--	--	--	--	--	--	--	--	✓
Thermal image	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Thermal image can be switched on/off	--	--	--	--	--	--	✓	✓	✓	✓	--
I_{sd}	--	--	--	--	✓	✓	✓	✓	✓	✓	✓
t_{sd} at 8 x I_r	--	--	--	--	✓	✓	✓	✓	✓	✓	✓
Characteristic in S range: I^2t_{sd}	--	--	--	--	✓	--	✓	✓	✓	✓	--
Characteristic in S range: selectable I^2t_{sd} / t_{sd}	--	--	--	--	--	--	✓	✓	✓	✓	--
I_i	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
I_N [1]	--	✓	✓	✓	✓	--	✓	✓	✓	✓	--
I_g	--	--	✓	--	--	--	--	✓	--	✓	✓
t_g at 2 x I_g	--	--	✓	--	--	--	--	✓	--	✓	✓
Characteristic in G range: I^2t_g	--	--	✓	--	--	--	--	✓	--	✓	✓
Characteristic in G range: selectable I^2t_g / t_g	--	--	✓	--	--	--	--	✓	--	✓	✓
Ground-fault alarm function	--	--	--	--	--	--	--	✓	--	✓	✓
Blocking protection	--	--	--	--	--	--	--	--	--	--	✓
ZSI in combination with an EFB external function box	--	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Features and options											
Setting by rotary switch	✓	✓	✓	✓	✓	✓	--	--	--	--	--
Setting by ETU display	--	--	--	--	--	--	✓	✓	✓	✓	✓
Data shown on ETU display	--	--	--	--	--	--	✓	✓	✓	✓	✓
Metering function	--	--	--	--	--	--	--	--	✓	✓	✓
Communication option	--	--	--	--	--	--	✓	✓	✓	✓	✓
Front interface	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

[1] Available in a version with external current transformer for N conductor or 4-pole breaker

✓ Available -- Not available

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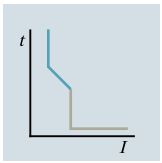
Selection and ordering data

PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

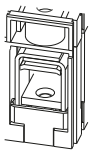
Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Operating current of the instanta-neous short-circuit protection "I" I_i	DT	I_{cu} up to 25 kA at 240 V, low breaking capacity N (N) See "Overview", p. 2/6 and 2/7	
		A	A	A		Article No. www.siemens.com/product?Article No.	Basic price per PU

1-pole, fixed-mounted, 3VA11, up to 160 A
Thermal-magnetic trip unit

I201_19027

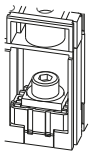


Line protection, 1-pole, TM210 FTFM
With fixed overload protection I_r and fixed short-circuit protection I_i



Connection with box terminal

3VA11	16	16	320	3VA1196-3ED16-0AA0
	20	20	320	3VA1120-3ED16-0AA0
	25	25	320	3VA1125-3ED16-0AA0
	32	32	320	3VA1132-3ED16-0AA0
	40	40	400	3VA1140-3ED16-0AA0
	50	50	500	3VA1150-3ED16-0AA0
	63	63	630	3VA1163-3ED16-0AA0
	80	80	800	3VA1180-3ED16-0AA0
	100	100	1000	3VA1110-3ED16-0AA0
	125	125	1250	3VA1112-3ED16-0AA0
	160	160	1600	3VA1116-3ED16-0AA0



Connection with lug terminal

3VA11	16	16	320	3VA1196-3ED12-0AA0
	20	20	320	3VA1120-3ED12-0AA0
	25	25	320	3VA1125-3ED12-0AA0
	32	32	320	3VA1132-3ED12-0AA0
	40	40	400	3VA1140-3ED12-0AA0
	50	50	500	3VA1150-3ED12-0AA0
	63	63	630	3VA1163-3ED12-0AA0
	80	80	800	3VA1180-3ED12-0AA0
	100	100	1000	3VA1110-3ED12-0AA0
	125	125	1250	3VA1112-3ED12-0AA0
	160	160	1600	3VA1116-3ED12-0AA0

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	**I_{cu} to 36 kA at 240 V, standard breaking capacity S** (S) See "Overview", p. 2/6 and 2/7	
		Article No. www.siemens.com/product?Article No.	Basic price per PU
A			
		Connection with box terminal	
16		**3VA1196-4ED16-0AA0**	
20		**3VA1120-4ED16-0AA0**	
25		**3VA1125-4ED16-0AA0**	
32		**3VA1132-4ED16-0AA0**	
40		**3VA1140-4ED16-0AA0**	
50		**3VA1150-4ED16-0AA0**	
63		**3VA1163-4ED16-0AA0**	
80		**3VA1180-4ED16-0AA0**	
100[1)]		**3VA1110-4ED16-0AA0**	
125[1)]		**3VA1112-4ED16-0AA0**	
160[1)]		**3VA1116-4ED16-0AA0**	
		Connection with lug terminal	
16		**3VA1196-4ED12-0AA0**	
20		**3VA1120-4ED12-0AA0**	
25		**3VA1125-4ED12-0AA0**	
32		**3VA1132-4ED12-0AA0**	
40		**3VA1140-4ED12-0AA0**	
50		**3VA1150-4ED12-0AA0**	
63		**3VA1163-4ED12-0AA0**	
80		**3VA1180-4ED12-0AA0**	
100[1)]		**3VA1110-4ED12-0AA0**	
125[1)]		**3VA1112-4ED12-0AA0**	
160[1)]		**3VA1116-4ED12-0AA0**	

Line protection, 1-pole, TM210 FTFM
With fixed overload protection I_r and fixed short-circuit protection I_i

[1)] Start of delivery scheduled for 4th quarter 2015

*** You can order this quantity or a multiple thereof.**

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Molded Case Circuit Breakers

3VA1 Molded Case Circuit Breakers up to 250 A, IEC NEW

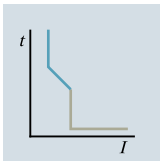
Line protection

PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

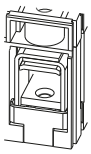
Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Operating current of the instanta-neous short-circuit protection "I" I_i	DT	I_{cu} up to 25 kA at 415 V, low breaking capacity N (N) See "Overview", p. 2/6 and 2/7
		A	A	A		Article No. www.siemens.com/product?Article No. / Basic price per PU

2-pole, fixed-mounted, 3VA11, up to 160 A
Thermal-magnetic trip unit

I201_19027

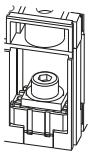


Line protection, 2-pole, TM210 FTFM
With fixed overload protection I_r and fixed short-circuit protection I_i



Connection with box terminal

3VA11	16	16	320	3VA1196-3ED26-0AA0
	20	20	320	3VA1120-3ED26-0AA0
	25	25	320	3VA1125-3ED26-0AA0
	32	32	320	3VA1132-3ED26-0AA0
	40	40	400	3VA1140-3ED26-0AA0
	50	50	500	3VA1150-3ED26-0AA0
	63	63	630	3VA1163-3ED26-0AA0
	80	80	800	3VA1180-3ED26-0AA0
	100	100	1000	3VA1110-3ED26-0AA0
	125	125	1250	3VA1112-3ED26-0AA0
	160	160	1600	3VA1116-3ED26-0AA0



Connection with lug terminal

3VA11	16	16	320	3VA1196-3ED22-0AA0
	20	20	320	3VA1120-3ED22-0AA0
	25	25	320	3VA1125-3ED22-0AA0
	32	32	320	3VA1132-3ED22-0AA0
	40	40	400	3VA1140-3ED22-0AA0
	50	50	500	3VA1150-3ED22-0AA0
	63	63	630	3VA1163-3ED22-0AA0
	80	80	800	3VA1180-3ED22-0AA0
	100	100	1000	3VA1110-3ED22-0AA0
	125	125	1250	3VA1112-3ED22-0AA0
	160	160	1600	3VA1116-3ED22-0AA0

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	**I_{cu} to 36 kA at 415 V, standard breaking capacity S** (S) See "Overview", p. 2/6 and 2/7	
		Article No. www.siemens.com/product?Article No.	Basic price per PU
A			
		Connection with box terminal	
16		**3VA1196-4ED26-0AA0**	
20		**3VA1120-4ED26-0AA0**	
25		**3VA1125-4ED26-0AA0**	
32		**3VA1132-4ED26-0AA0**	
40		**3VA1140-4ED26-0AA0**	
50		**3VA1150-4ED26-0AA0**	
63		**3VA1163-4ED26-0AA0**	
80		**3VA1180-4ED26-0AA0**	
100[1)]		**3VA1110-4ED26-0AA0**	
125[1)]		**3VA1112-4ED26-0AA0**	
160[1)]		**3VA1116-4ED26-0AA0**	
		Connection with lug terminal	
16		**3VA1196-4ED22-0AA0**	
20		**3VA1120-4ED22-0AA0**	
25		**3VA1125-4ED22-0AA0**	
32		**3VA1132-4ED22-0AA0**	
40		**3VA1140-4ED22-0AA0**	
50		**3VA1150-4ED22-0AA0**	
63		**3VA1163-4ED22-0AA0**	
80		**3VA1180-4ED22-0AA0**	
100[1)]		**3VA1110-4ED22-0AA0**	
125[1)]		**3VA1112-4ED22-0AA0**	
160[1)]		**3VA1116-4ED22-0AA0**	

Line protection, 2-pole, TM210 FTFM
With fixed overload protection I_r and fixed short-circuit protection I_i

[1)] Start of delivery scheduled for 4th quarter 2015

*** You can order this quantity or a multiple thereof.**

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Molded Case Circuit Breakers

3VA1 Molded Case Circuit Breakers up to 250 A, IEC NEW

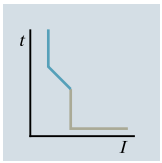
Line protection

PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Operating current of the instanta-neous short-circuit protection "I" I_i	DT	I_{cu} up to 16 kA at 415 V, very low breaking capacity B (B) See "Overview", p. 2/6 and 2/7	
		A	A	A		Article No. www.siemens.com/product?Article No.	Basic price per PU

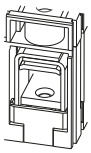
3-pole, fixed-mounted, 3VA10, up to 100 A Thermal-magnetic trip unit

I201_19027



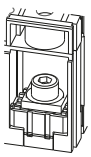
Line protection, TM210 FTFM

With fixed overload protection I_r and fixed short-circuit protection I_i



Connection with box terminal

3VA10	16	16	320	3VA1096-2ED36-0AA0
	20	20	320	3VA1020-2ED36-0AA0
	25	25	320	3VA1025-2ED36-0AA0
	32	32	320	3VA1032-2ED36-0AA0
	40	40	400	3VA1040-2ED36-0AA0
	50	50	500	3VA1050-2ED36-0AA0
	63	63	630	3VA1063-2ED36-0AA0
	80	80	800	3VA1080-2ED36-0AA0
	100	100	1000	3VA1010-2ED36-0AA0



Connection with lug terminal

3VA10	16	16	320	3VA1096-2ED32-0AA0
	20	20	320	3VA1020-2ED32-0AA0
	25	25	320	3VA1025-2ED32-0AA0
	32	32	320	3VA1032-2ED32-0AA0
	40	40	400	3VA1040-2ED32-0AA0
	50	50	500	3VA1050-2ED32-0AA0
	63	63	630	3VA1063-2ED32-0AA0
	80	80	800	3VA1080-2ED32-0AA0
	100	100	1000	3VA1010-2ED32-0AA0

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	I_{cu} up to 25 kA at 415 V, low breaking capacity N (N) See "Overview", p. 2/6 and 2/7		DT	I_{cu} to 36 kA at 415 V, standard breaking capacity S (S) See "Overview", p. 2/6 and 2/7	
		Article No. www.siemens.com/product?Article No.	Basic price per PU		Article No. www.siemens.com/product?Article No.	Basic price per PU
A						
Line protection, TM210 FTFM With fixed overload protection I_r and fixed short-circuit protection I_i						
		Connection with box terminal				
16		3VA1096-3ED36-0AA0			3VA1096-4ED36-0AA0	
20		3VA1020-3ED36-0AA0			3VA1020-4ED36-0AA0	
25		3VA1025-3ED36-0AA0			3VA1025-4ED36-0AA0	
32		3VA1032-3ED36-0AA0			3VA1032-4ED36-0AA0	
40		3VA1040-3ED36-0AA0			3VA1040-4ED36-0AA0	
50		3VA1050-3ED36-0AA0			3VA1050-4ED36-0AA0	
63		3VA1063-3ED36-0AA0			3VA1063-4ED36-0AA0	
80		3VA1080-3ED36-0AA0			3VA1080-4ED36-0AA0	
100		3VA1010-3ED36-0AA0			3VA1010-4ED36-0AA0	
		Connection with lug terminal				
16		3VA1096-3ED32-0AA0			3VA1096-4ED32-0AA0	
20		3VA1020-3ED32-0AA0			3VA1020-4ED32-0AA0	
25		3VA1025-3ED32-0AA0			3VA1025-4ED32-0AA0	
32		3VA1032-3ED32-0AA0			3VA1032-4ED32-0AA0	
40		3VA1040-3ED32-0AA0			3VA1040-4ED32-0AA0	
50		3VA1050-3ED32-0AA0			3VA1050-4ED32-0AA0	
63		3VA1063-3ED32-0AA0			3VA1063-4ED32-0AA0	
80		3VA1080-3ED32-0AA0			3VA1080-4ED32-0AA0	
100		3VA1010-3ED32-0AA0			3VA1010-4ED32-0AA0	

*** You can order this quantity or a multiple thereof.**

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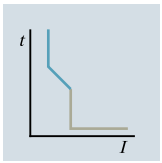
Line protection

PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Operating current of the instanta-neous short-circuit protection "I" I_i	DT	I_{cu} up to 25 kA at 415 V, low breaking capacity N (N) See "Overview", p. 2/6 and 2/7	
		A	A	A		Article No. www.siemens.com/product?Article No.	Basic price per PU

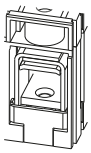
3-pole, fixed-mounted, 3VA11, up to 160 A Thermal-magnetic trip unit

I201_19027



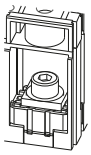
Line protection, TM210 FTFM
With fixed overload protection I_r and fixed short-circuit protection I_i

Connection with box terminal



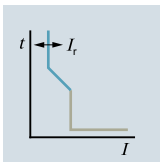
3VA11	16	16	320	3VA1196-3ED36-0AA0
	20	20	320	3VA1120-3ED36-0AA0
	25	25	320	3VA1125-3ED36-0AA0
	32	32	320	3VA1132-3ED36-0AA0
	40	40	400	3VA1140-3ED36-0AA0
	50	50	500	3VA1150-3ED36-0AA0
	63	63	630	3VA1163-3ED36-0AA0
	80	80	800	3VA1180-3ED36-0AA0
	100	100	1000	3VA1110-3ED36-0AA0
	125	125	1250	3VA1112-3ED36-0AA0
	160	160	1600	3VA1116-3ED36-0AA0

Connection with lug terminal



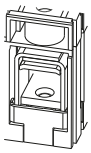
3VA11	16	16	320	3VA1196-3ED32-0AA0
	20	20	320	3VA1120-3ED32-0AA0
	25	25	320	3VA1125-3ED32-0AA0
	32	32	320	3VA1132-3ED32-0AA0
	40	40	400	3VA1140-3ED32-0AA0
	50	50	500	3VA1150-3ED32-0AA0
	63	63	630	3VA1163-3ED32-0AA0
	80	80	800	3VA1180-3ED32-0AA0
	100	100	1000	3VA1110-3ED32-0AA0
	125	125	1250	3VA1112-3ED32-0AA0
	160	160	1600	3VA1116-3ED32-0AA0

I201_19028



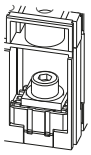
Line protection, TM220 ATFM
With adjustable overload protection I_r and fixed short-circuit protection I_i

Connection with box terminal



3VA11	16	11 ... 16	320	3VA1196-3EE36-0AA0
	20	14 ... 20	320	3VA1120-3EE36-0AA0
	25	18 ... 25	320	3VA1125-3EE36-0AA0
	32	22 ... 32	320	3VA1132-3EE36-0AA0
	40	28 ... 40	400	3VA1140-3EE36-0AA0
	50	35 ... 50	500	3VA1150-3EE36-0AA0
	63	44 ... 63	630	3VA1163-3EE36-0AA0
	80	56 ... 80	800	3VA1180-3EE36-0AA0
	100	70 ... 100	1000	3VA1110-3EE36-0AA0
	125	88 ... 125	1250	3VA1112-3EE36-0AA0
	160	112 ... 160	1600	3VA1116-3EE36-0AA0

Connection with lug terminal



3VA11	16	11 ... 16	320	3VA1196-3EE32-0AA0
	20	14 ... 20	320	3VA1120-3EE32-0AA0
	25	18 ... 25	320	3VA1125-3EE32-0AA0
	32	22 ... 32	320	3VA1132-3EE32-0AA0
	40	28 ... 40	400	3VA1140-3EE32-0AA0
	50	35 ... 50	500	3VA1150-3EE32-0AA0
	63	44 ... 63	630	3VA1163-3EE32-0AA0
	80	56 ... 80	800	3VA1180-3EE32-0AA0
	100	70 ... 100	1000	3VA1110-3EE32-0AA0
	125	88 ... 125	1250	3VA1112-3EE32-0AA0
	160	112 ... 160	1600	3VA1116-3EE32-0AA0

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	I_{cu} to 36 kA at 415 V, standard breaking capacity S (S) See "Overview", p. 2/6 and 2/7	DT	I_{cu} up to 55 kA at 415 V, medium breaking capacity M (M) See "Overview", p. 2/6 and 2/7	DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H) See "Overview", p. 2/6 and 2/7
		Article No. www.siemens.com/product?Article No. Basic price per PU		Article No. www.siemens.com/product?Article No. Basic price per PU		Article No. www.siemens.com/product?Article No. Basic price per PU
A						
Line protection, TM210 FTFM With fixed overload protection I_r and fixed short-circuit protection I_i						
		Connection with box terminal				
16		3VA1196-4ED36-0AA0		3VA1196-5ED36-0AA0		3VA1196-6ED36-0AA0
20		3VA1120-4ED36-0AA0		3VA1120-5ED36-0AA0		3VA1120-6ED36-0AA0
25		3VA1125-4ED36-0AA0		3VA1125-5ED36-0AA0		3VA1125-6ED36-0AA0
32		3VA1132-4ED36-0AA0		3VA1132-5ED36-0AA0		3VA1132-6ED36-0AA0
40		3VA1140-4ED36-0AA0		3VA1140-5ED36-0AA0		3VA1140-6ED36-0AA0
50		3VA1150-4ED36-0AA0		3VA1150-5ED36-0AA0		3VA1150-6ED36-0AA0
63		3VA1163-4ED36-0AA0		3VA1163-5ED36-0AA0		3VA1163-6ED36-0AA0
80		3VA1180-4ED36-0AA0		3VA1180-5ED36-0AA0		3VA1180-6ED36-0AA0
100		3VA1110-4ED36-0AA0		3VA1110-5ED36-0AA0		3VA1110-6ED36-0AA0
125		3VA1112-4ED36-0AA0		3VA1112-5ED36-0AA0		3VA1112-6ED36-0AA0
160		3VA1116-4ED36-0AA0		3VA1116-5ED36-0AA0		3VA1116-6ED36-0AA0
		Connection with lug terminal				
16		3VA1196-4ED32-0AA0		3VA1196-5ED32-0AA0		3VA1196-6ED32-0AA0
20		3VA1120-4ED32-0AA0		3VA1120-5ED32-0AA0		3VA1120-6ED32-0AA0
25		3VA1125-4ED32-0AA0		3VA1125-5ED32-0AA0		3VA1125-6ED32-0AA0
32		3VA1132-4ED32-0AA0		3VA1132-5ED32-0AA0		3VA1132-6ED32-0AA0
40		3VA1140-4ED32-0AA0		3VA1140-5ED32-0AA0		3VA1140-6ED32-0AA0
50		3VA1150-4ED32-0AA0		3VA1150-5ED32-0AA0		3VA1150-6ED32-0AA0
63		3VA1163-4ED32-0AA0		3VA1163-5ED32-0AA0		3VA1163-6ED32-0AA0
80		3VA1180-4ED32-0AA0		3VA1180-5ED32-0AA0		3VA1180-6ED32-0AA0
100		3VA1110-4ED32-0AA0		3VA1110-5ED32-0AA0		3VA1110-6ED32-0AA0
125		3VA1112-4ED32-0AA0		3VA1112-5ED32-0AA0		3VA1112-6ED32-0AA0
160		3VA1116-4ED32-0AA0		3VA1116-5ED32-0AA0		3VA1116-6ED32-0AA0
Line protection, TM220 ATFM With adjustable overload protection I_r and fixed short-circuit protection I_i						
		Connection with box terminal				
16		3VA1196-4EE36-0AA0		3VA1196-5EE36-0AA0		3VA1196-6EE36-0AA0
20		3VA1120-4EE36-0AA0		3VA1120-5EE36-0AA0		3VA1120-6EE36-0AA0
25		3VA1125-4EE36-0AA0		3VA1125-5EE36-0AA0		3VA1125-6EE36-0AA0
32		3VA1132-4EE36-0AA0		3VA1132-5EE36-0AA0		3VA1132-6EE36-0AA0
40		3VA1140-4EE36-0AA0		3VA1140-5EE36-0AA0		3VA1140-6EE36-0AA0
50		3VA1150-4EE36-0AA0		3VA1150-5EE36-0AA0		3VA1150-6EE36-0AA0
63		3VA1163-4EE36-0AA0		3VA1163-5EE36-0AA0		3VA1163-6EE36-0AA0
80		3VA1180-4EE36-0AA0		3VA1180-5EE36-0AA0		3VA1180-6EE36-0AA0
100		3VA1110-4EE36-0AA0		3VA1110-5EE36-0AA0		3VA1110-6EE36-0AA0
125		3VA1112-4EE36-0AA0		3VA1112-5EE36-0AA0		3VA1112-6EE36-0AA0
160		3VA1116-4EE36-0AA0		3VA1116-5EE36-0AA0		3VA1116-6EE36-0AA0
		Connection with lug terminal				
16		3VA1196-4EE32-0AA0		3VA1196-5EE32-0AA0		3VA1196-6EE32-0AA0
20		3VA1120-4EE32-0AA0		3VA1120-5EE32-0AA0		3VA1120-6EE32-0AA0
25		3VA1125-4EE32-0AA0		3VA1125-5EE32-0AA0		3VA1125-6EE32-0AA0
32		3VA1132-4EE32-0AA0		3VA1132-5EE32-0AA0		3VA1132-6EE32-0AA0
40		3VA1140-4EE32-0AA0		3VA1140-5EE32-0AA0		3VA1140-6EE32-0AA0
50		3VA1150-4EE32-0AA0		3VA1150-5EE32-0AA0		3VA1150-6EE32-0AA0
63		3VA1163-4EE32-0AA0		3VA1163-5EE32-0AA0		3VA1163-6EE32-0AA0
80		3VA1180-4EE32-0AA0		3VA1180-5EE32-0AA0		3VA1180-6EE32-0AA0
100		3VA1110-4EE32-0AA0		3VA1110-5EE32-0AA0		3VA1110-6EE32-0AA0
125		3VA1112-4EE32-0AA0		3VA1112-5EE32-0AA0		3VA1112-6EE32-0AA0
160		3VA1116-4EE32-0AA0		3VA1116-5EE32-0AA0		3VA1116-6EE32-0AA0

*** You can order this quantity or a multiple thereof.**

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Molded Case Circuit Breakers

3VA1 Molded Case Circuit Breakers up to 250 A, IEC NEW

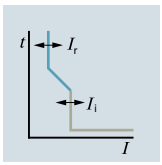
Line protection

PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

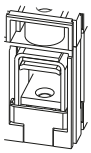
Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Operating current of the instanta-neous short-circuit protection "I" I_i	DT	I_{cu} up to 25 kA at 415 V, low breaking capacity N (N) See "Overview", p. 2/6 and 2/7
		A	A	A		Article No. www.siemens.com/product?Article No. / Basic price per PU

3-pole, fixed-mounted, 3VA11/3VA12, up to 250 A
Thermal-magnetic trip unit

I201_19035

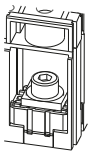


Line protection, TM240 ATAM
With adjustable overload protection I_r and adjustable short-circuit protection I_i



Connection with box terminal

3VA11	16	11 ... 16	160 ... 320	3VA1196-3EF36-0AA0
	20	14 ... 20	160 ... 320	3VA1120-3EF36-0AA0
	25	18 ... 25	160 ... 320	3VA1125-3EF36-0AA0
	32	16 ... 32	160 ... 320	3VA1132-3EF36-0AA0
	40	28 ... 40	200 ... 400	3VA1140-3EF36-0AA0
	50	35 ... 50	250 ... 500	3VA1150-3EF36-0AA0
	63	44 ... 63	315 ... 630	3VA1163-3EF36-0AA0
	80	56 ... 80	400 ... 800	3VA1180-3EF36-0AA0
	100	70 ... 100	500 ... 1000	3VA1110-3EF36-0AA0
	125	88 ... 125	625 ... 1250	3VA1112-3EF36-0AA0
	160	112 ... 160	800 ... 1600	3VA1116-3EF36-0AA0



Connection with lug terminal

3VA11	16	11 ... 16	160 ... 320	3VA1196-3EF32-0AA0
	20	14 ... 20	160 ... 320	3VA1120-3EF32-0AA0
	25	18 ... 25	160 ... 320	3VA1125-3EF32-0AA0
	32	16 ... 32	160 ... 320	3VA1132-3EF32-0AA0
	40	28 ... 40	200 ... 400	3VA1140-3EF32-0AA0
	50	35 ... 50	250 ... 500	3VA1150-3EF32-0AA0
	63	44 ... 63	315 ... 630	3VA1163-3EF32-0AA0
	80	56 ... 80	400 ... 800	3VA1180-3EF32-0AA0
	100	70 ... 100	500 ... 1000	3VA1110-3EF32-0AA0
	125	88 ... 125	625 ... 1250	3VA1112-3EF32-0AA0
	160	112 ... 160	800 ... 1600	3VA1116-3EF32-0AA0
3VA12	160	112 ... 160	800 ... 1600	--
	200	140 ... 200	1000 ... 2000	--
	250	175 ... 250	1250 ... 2500	--

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	I_{cu} to 36 kA at 415 V, standard breaking capacity S (S) See "Overview", p. 2/6 and 2/7	DT	I_{cu} up to 55 kA at 415 V, medium breaking capacity M (M) See "Overview", p. 2/6 and 2/7	DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H) See "Overview", p. 2/6 and 2/7
		Article No. www.siemens.com/product?Article No. Basic price per PU		Article No. www.siemens.com/product?Article No. Basic price per PU		Article No. www.siemens.com/product?Article No. Basic price per PU
A						
Line protection, TM240 ATAM With adjustable overload protection I_r and adjustable short-circuit protection I_i						
		Connection with box terminal				
16		3VA1196-4EF36-0AA0		3VA1196-5EF36-0AA0		3VA1196-6EF36-0AA0
20		3VA1120-4EF36-0AA0		3VA1120-5EF36-0AA0		3VA1120-6EF36-0AA0
25		3VA1125-4EF36-0AA0		3VA1125-5EF36-0AA0		3VA1125-6EF36-0AA0
32		3VA1132-4EF36-0AA0		3VA1132-5EF36-0AA0		3VA1132-6EF36-0AA0
40		3VA1140-4EF36-0AA0		3VA1140-5EF36-0AA0		3VA1140-6EF36-0AA0
50		3VA1150-4EF36-0AA0		3VA1150-5EF36-0AA0		3VA1150-6EF36-0AA0
63		3VA1163-4EF36-0AA0		3VA1163-5EF36-0AA0		3VA1163-6EF36-0AA0
80		3VA1180-4EF36-0AA0		3VA1180-5EF36-0AA0		3VA1180-6EF36-0AA0
100		3VA1110-4EF36-0AA0		3VA1110-5EF36-0AA0		3VA1110-6EF36-0AA0
125		3VA1112-4EF36-0AA0		3VA1112-5EF36-0AA0		3VA1112-6EF36-0AA0
160		3VA1116-4EF36-0AA0		3VA1116-5EF36-0AA0		3VA1116-6EF36-0AA0
		Connection with lug terminal				
16		3VA1196-4EF32-0AA0		3VA1196-5EF32-0AA0		3VA1196-6EF32-0AA0
20		3VA1120-4EF32-0AA0		3VA1120-5EF32-0AA0		3VA1120-6EF32-0AA0
25		3VA1125-4EF32-0AA0		3VA1125-5EF32-0AA0		3VA1125-6EF32-0AA0
32		3VA1132-4EF32-0AA0		3VA1132-5EF32-0AA0		3VA1132-6EF32-0AA0
40		3VA1140-4EF32-0AA0		3VA1140-5EF32-0AA0		3VA1140-6EF32-0AA0
50		3VA1150-4EF32-0AA0		3VA1150-5EF32-0AA0		3VA1150-6EF32-0AA0
63		3VA1163-4EF32-0AA0		3VA1163-5EF32-0AA0		3VA1163-6EF32-0AA0
80		3VA1180-4EF32-0AA0		3VA1180-5EF32-0AA0		3VA1180-6EF32-0AA0
100		3VA1110-4EF32-0AA0		3VA1110-5EF32-0AA0		3VA1110-6EF32-0AA0
125		3VA1112-4EF32-0AA0		3VA1112-5EF32-0AA0		3VA1112-6EF32-0AA0
160		3VA1116-4EF32-0AA0		3VA1116-5EF32-0AA0		3VA1116-6EF32-0AA0
160		3VA1216-4EF32-0AA0		3VA1216-5EF32-0AA0		3VA1216-6EF32-0AA0
200		3VA1220-4EF32-0AA0		3VA1220-5EF32-0AA0		3VA1220-6EF32-0AA0
250		3VA1225-4EF32-0AA0		3VA1225-5EF32-0AA0		3VA1225-6EF32-0AA0

*** You can order this quantity or a multiple thereof.**

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Molded Case Circuit Breakers

3VA1 Molded Case Circuit Breakers up to 250 A, IEC NEW

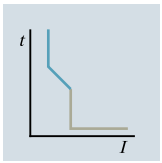
Line protection

PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

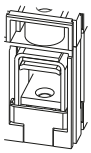
Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Operating current of the instanta-neous short-circuit protection "I" I_i	DT	I_{cu} up to 16 kA at 415 V, very low breaking capacity B (B) See "Overview", p. 2/6 and 2/7 Article No. www.siemens.com/product?Article No.	Basic price per PU
		A	A	A			

4-pole, fixed-mounted, 3VA10, up to 100 A
Thermal-magnetic trip unit

I201_19027

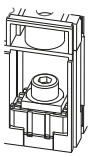


Line protection, TM210 FTFM, without neutral conductor protection
With fixed overload protection I_r and fixed short-circuit protection I_i



Connection with box terminal

3VA10	16	16	320	3VA1096-2ED46-0AA0
	20	20	320	3VA1020-2ED46-0AA0
	25	25	320	3VA1025-2ED46-0AA0
	32	32	320	3VA1032-2ED46-0AA0
	40	40	400	3VA1040-2ED46-0AA0
	50	50	500	3VA1050-2ED46-0AA0
	63	63	630	3VA1063-2ED46-0AA0
	80	80	800	3VA1080-2ED46-0AA0
	100	100	1000	3VA1010-2ED46-0AA0



Connection with lug terminal

3VA10	16	16	320	3VA1096-2ED42-0AA0
	20	20	320	3VA1020-2ED42-0AA0
	25	25	320	3VA1025-2ED42-0AA0
	32	32	320	3VA1032-2ED42-0AA0
	40	40	400	3VA1040-2ED42-0AA0
	50	50	500	3VA1050-2ED42-0AA0
	63	63	630	3VA1063-2ED42-0AA0
	80	80	800	3VA1080-2ED42-0AA0
	100	100	1000	3VA1010-2ED42-0AA0

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	I_{cu} up to 25 kA at 415 V, low breaking capacity N (N) See "Overview", p. 2/6 and 2/7		DT	I_{cu} to 36 kA at 415 V, standard breaking capacity S (S) See "Overview", p. 2/6 and 2/7	
		Article No. www.siemens.com/product?Article No.	Basic price per PU		Article No. www.siemens.com/product?Article No.	Basic price per PU
A						
Line protection, TM210 FTFM, without neutral conductor protection With fixed overload protection I_r and fixed short-circuit protection I_i						
		Connection with box terminal				
16		**3VA1096-3ED46-0AA0**			**3VA1096-4ED46-0AA0**	
20		**3VA1020-3ED46-0AA0**			**3VA1020-4ED46-0AA0**	
25		**3VA1025-3ED46-0AA0**			**3VA1025-4ED46-0AA0**	
32		**3VA1032-3ED46-0AA0**			**3VA1032-4ED46-0AA0**	
40		**3VA1040-3ED46-0AA0**			**3VA1040-4ED46-0AA0**	
50		**3VA1050-3ED46-0AA0**			**3VA1050-4ED46-0AA0**	
63		**3VA1063-3ED46-0AA0**			**3VA1063-4ED46-0AA0**	
80		**3VA1080-3ED46-0AA0**			**3VA1080-4ED46-0AA0**	
100		**3VA1010-3ED46-0AA0**			**3VA1010-4ED46-0AA0**	
		Connection with lug terminal				
16		**3VA1096-3ED42-0AA0**			**3VA1096-4ED42-0AA0**	
20		**3VA1020-3ED42-0AA0**			**3VA1020-4ED42-0AA0**	
25		**3VA1025-3ED42-0AA0**			**3VA1025-4ED42-0AA0**	
32		**3VA1032-3ED42-0AA0**			**3VA1032-4ED42-0AA0**	
40		**3VA1040-3ED42-0AA0**			**3VA1040-4ED42-0AA0**	
50		**3VA1050-3ED42-0AA0**			**3VA1050-4ED42-0AA0**	
63		**3VA1063-3ED42-0AA0**			**3VA1063-4ED42-0AA0**	
80		**3VA1080-3ED42-0AA0**			**3VA1080-4ED42-0AA0**	
100		**3VA1010-3ED42-0AA0**			**3VA1010-4ED42-0AA0**	

*** You can order this quantity or a multiple thereof.**

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Molded Case Circuit Breakers

3VA1 Molded Case Circuit Breakers up to 250 A, IEC NEW

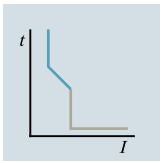
Line protection

PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

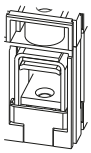
Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Operating current of the instanta-neous short-circuit protection "I" I_i	DT	I_{cu} up to 25 kA at 415 V, low breaking capacity N (N) See "Overview", p. 2/6 and 2/7	
		A	A	A		Article No. www.siemens.com/product?Article No.	Basic price per PU

4-pole, fixed-mounted, 3VA11, up to 160 A
Thermal-magnetic trip unit

I201_19027

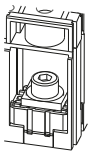


Line protection, TM210 FTFM, without neutral conductor protection
With fixed overload protection I_r and fixed short-circuit protection I_i



Connection with box terminal

3VA11	16	16	320	3VA1196-3ED46-0AA0
	20	20	320	3VA1120-3ED46-0AA0
	25	25	320	3VA1125-3ED46-0AA0
	32	32	320	3VA1132-3ED46-0AA0
	40	40	400	3VA1140-3ED46-0AA0
	50	50	500	3VA1150-3ED46-0AA0
	63	63	630	3VA1163-3ED46-0AA0
	80	80	800	3VA1180-3ED46-0AA0
	100	100	1000	3VA1110-3ED46-0AA0
	125	125	1250	3VA1112-3ED46-0AA0
	160	160	1600	3VA1116-3ED46-0AA0



Connection with lug terminal

3VA11	16	16	320	3VA1196-3ED42-0AA0
	20	20	320	3VA1120-3ED42-0AA0
	25	25	320	3VA1125-3ED42-0AA0
	32	32	320	3VA1132-3ED42-0AA0
	40	40	400	3VA1140-3ED42-0AA0
	50	50	500	3VA1150-3ED42-0AA0
	63	63	630	3VA1163-3ED42-0AA0
	80	80	800	3VA1180-3ED42-0AA0
	100	100	1000	3VA1110-3ED42-0AA0
	125	125	1250	3VA1112-3ED42-0AA0
	160	160	1600	3VA1116-3ED42-0AA0

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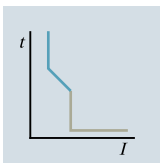
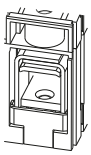
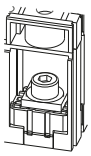


Line protection, TM210 FTFM, 50 % neutral conductor protection
With fixed overload protection I_r and fixed short-circuit protection I_i



Connection with box terminal

3VA11	100	100	1000	3VA1110-3FD46-0AA0
	125	125	1250	3VA1112-3FD46-0AA0
	160	160	1600	3VA1116-3FD46-0AA0



Connection with lug terminal

3VA11	100	100	1000	3VA1110-3FD42-0AA0
	125	125	1250	3VA1112-3FD42-0AA0
	160	160	1600	3VA1116-3FD42-0AA0

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	I_{cu} to 36 kA at 415 V, standard breaking capacity S (S) See "Overview", p. 2/6 and 2/7	DT	I_{cu} up to 55 kA at 415 V, medium breaking capacity M (M) See "Overview", p. 2/6 and 2/7	DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H) See "Overview", p. 2/6 and 2/7
		Article No. www.siemens.com/product?Article No. Basic price per PU		Article No. www.siemens.com/product?Article No. Basic price per PU		Article No. www.siemens.com/product?Article No. Basic price per PU
A						
Line protection, TM210 FTFM, without neutral conductor protection With fixed overload protection I_r and fixed short-circuit protection I_i						
		Connection with box terminal				
16		3VA1196-4ED46-0AA0		3VA1196-5ED46-0AA0		3VA1196-6ED46-0AA0
20		3VA1120-4ED46-0AA0		3VA1120-5ED46-0AA0		3VA1120-6ED46-0AA0
25		3VA1125-4ED46-0AA0		3VA1125-5ED46-0AA0		3VA1125-6ED46-0AA0
32		3VA1132-4ED46-0AA0		3VA1132-5ED46-0AA0		3VA1132-6ED46-0AA0
40		3VA1140-4ED46-0AA0		3VA1140-5ED46-0AA0		3VA1140-6ED46-0AA0
50		3VA1150-4ED46-0AA0		3VA1150-5ED46-0AA0		3VA1150-6ED46-0AA0
63		3VA1163-4ED46-0AA0		3VA1163-5ED46-0AA0		3VA1163-6ED46-0AA0
80		3VA1180-4ED46-0AA0		3VA1180-5ED46-0AA0		3VA1180-6ED46-0AA0
100		3VA1110-4ED46-0AA0		3VA1110-5ED46-0AA0		3VA1110-6ED46-0AA0
125		3VA1112-4ED46-0AA0		3VA1112-5ED46-0AA0		3VA1112-6ED46-0AA0
160		3VA1116-4ED46-0AA0		3VA1116-5ED46-0AA0		3VA1116-6ED46-0AA0
		Connection with lug terminal				
16		3VA1196-4ED42-0AA0		3VA1196-5ED42-0AA0		3VA1196-6ED42-0AA0
20		3VA1120-4ED42-0AA0		3VA1120-5ED42-0AA0		3VA1120-6ED42-0AA0
25		3VA1125-4ED42-0AA0		3VA1125-5ED42-0AA0		3VA1125-6ED42-0AA0
32		3VA1132-4ED42-0AA0		3VA1132-5ED42-0AA0		3VA1132-6ED42-0AA0
40		3VA1140-4ED42-0AA0		3VA1140-5ED42-0AA0		3VA1140-6ED42-0AA0
50		3VA1150-4ED42-0AA0		3VA1150-5ED42-0AA0		3VA1150-6ED42-0AA0
63		3VA1163-4ED42-0AA0		3VA1163-5ED42-0AA0		3VA1163-6ED42-0AA0
80		3VA1180-4ED42-0AA0		3VA1180-5ED42-0AA0		3VA1180-6ED42-0AA0
100		3VA1110-4ED42-0AA0		3VA1110-5ED42-0AA0		3VA1110-6ED42-0AA0
125		3VA1112-4ED42-0AA0		3VA1112-5ED42-0AA0		3VA1112-6ED42-0AA0
160		3VA1116-4ED42-0AA0		3VA1116-5ED42-0AA0		3VA1116-6ED42-0AA0
Line protection, TM210 FTFM, 50 % neutral conductor protection With adjustable overload protection I_r and fixed short-circuit protection I_i						
		Connection with box terminal				
100		3VA1110-4FD46-0AA0		3VA1110-5FD46-0AA0		3VA1110-6FD46-0AA0
125		3VA1112-4FD46-0AA0		3VA1112-5FD46-0AA0		3VA1112-6FD46-0AA0
160		3VA1116-4FD46-0AA0		3VA1116-5FD46-0AA0		3VA1116-6FD46-0AA0
		Connection with lug terminal				
100		3VA1110-4FD42-0AA0		3VA1110-5FD42-0AA0		3VA1110-6FD42-0AA0
125		3VA1112-4FD42-0AA0		3VA1112-5FD42-0AA0		3VA1112-6FD42-0AA0
160		3VA1116-4FD42-0AA0		3VA1116-5FD42-0AA0		3VA1116-6FD42-0AA0

*** You can order this quantity or a multiple thereof.**

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Molded Case Circuit Breakers

3VA1 Molded Case Circuit Breakers up to 250 A, IEC NEW

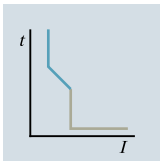
Line protection

PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Operating current of the instanta-neous short-circuit protection "I" I_i	DT	I_{cu} up to 25 kA at 415 V, low breaking capacity N (N) See "Overview", p. 2/6 and 2/7 Article No. www.siemens.com/product?Article No.	Basic price per PU
		A	A	A			

4-pole, fixed-mounted, 3VA11, up to 160 A Thermal-magnetic trip unit

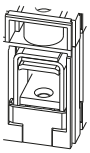
I201_19027



Line protection, TM210 FTFM, 100 % neutral conductor protection

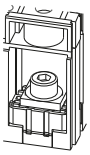
With fixed overload protection I_r and fixed short-circuit protection I_i

Connection with box terminal



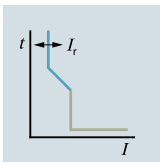
3VA11	16	16	320	3VA1196-3GD46-0AA0
	20	20	320	3VA1120-3GD46-0AA0
	25	25	320	3VA1125-3GD46-0AA0
	32	32	320	3VA1132-3GD46-0AA0
	40	40	400	3VA1140-3GD46-0AA0
	50	50	500	3VA1150-3GD46-0AA0
	63	63	630	3VA1163-3GD46-0AA0
	80	80	800	3VA1180-3GD46-0AA0
	100	100	1000	3VA1110-3GD46-0AA0
	125	125	1250	3VA1112-3GD46-0AA0
	160	160	1600	3VA1116-3GD46-0AA0

Connection with lug terminal



3VA11	16	16	320	3VA1196-3GD42-0AA0
	20	20	320	3VA1120-3GD42-0AA0
	25	25	320	3VA1125-3GD42-0AA0
	32	32	320	3VA1132-3GD42-0AA0
	40	40	400	3VA1140-3GD42-0AA0
	50	50	500	3VA1150-3GD42-0AA0
	63	63	630	3VA1163-3GD42-0AA0
	80	80	800	3VA1180-3GD42-0AA0
	100	100	1000	3VA1110-3GD42-0AA0
	125	125	1250	3VA1112-3GD42-0AA0
	160	160	1600	3VA1116-3GD42-0AA0

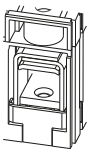
I201_19028



Line protection, TM220 ATFM, without neutral conductor protection

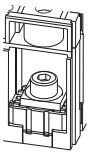
With adjustable overload protection I_r and fixed short-circuit protection I_i

Connection with box terminal



3VA11	16	11 ... 16	320	3VA1196-3EE46-0AA0
	20	14 ... 20	320	3VA1120-3EE46-0AA0
	25	18 ... 25	320	3VA1125-3EE46-0AA0
	32	22 ... 32	320	3VA1132-3EE46-0AA0
	40	28 ... 40	400	3VA1140-3EE46-0AA0
	50	35 ... 50	500	3VA1150-3EE46-0AA0
	63	44 ... 63	630	3VA1163-3EE46-0AA0
	80	56 ... 80	800	3VA1180-3EE46-0AA0
	100	70 ... 100	1000	3VA1110-3EE46-0AA0
	125	88 ... 125	1250	3VA1112-3EE46-0AA0
	160	112 ... 160	1600	3VA1116-3EE46-0AA0

Connection with lug terminal



3VA11	16	11 ... 16	320	3VA1196-3EE42-0AA0
	20	14 ... 20	320	3VA1120-3EE42-0AA0
	25	18 ... 25	320	3VA1125-3EE42-0AA0
	32	22 ... 32	320	3VA1132-3EE42-0AA0
	40	28 ... 40	400	3VA1140-3EE42-0AA0
	50	35 ... 50	500	3VA1150-3EE42-0AA0
	63	44 ... 63	630	3VA1163-3EE42-0AA0
	80	56 ... 80	800	3VA1180-3EE42-0AA0
	100	70 ... 100	1000	3VA1110-3EE42-0AA0
	125	88 ... 125	1250	3VA1112-3EE42-0AA0
	160	112 ... 160	1600	3VA1116-3EE42-0AA0

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	I_{cu} to 36 kA at 415 V, standard breaking capacity S (S) See "Overview", p. 2/6 and 2/7	DT	I_{cu} up to 55 kA at 415 V, medium breaking capacity M (M) See "Overview", p. 2/6 and 2/7	DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H) See "Overview", p. 2/6 and 2/7
		Article No. www.siemens.com/product?Article No. Basic price per PU		Article No. www.siemens.com/product?Article No. Basic price per PU		Article No. www.siemens.com/product?Article No. Basic price per PU
A						
Line protection, TM210 FTFM, 100 % neutral conductor protection With fixed overload protection I_r and fixed short-circuit protection I_i						
		Connection with box terminal				
16		3VA1196-4GD46-0AA0		3VA1196-5GD46-0AA0		3VA1196-6GD46-0AA0
20		3VA1120-4GD46-0AA0		3VA1120-5GD46-0AA0		3VA1120-6GD46-0AA0
25		3VA1125-4GD46-0AA0		3VA1125-5GD46-0AA0		3VA1125-6GD46-0AA0
32		3VA1132-4GD46-0AA0		3VA1132-5GD46-0AA0		3VA1132-6GD46-0AA0
40		3VA1140-4GD46-0AA0		3VA1140-5GD46-0AA0		3VA1140-6GD46-0AA0
50		3VA1150-4GD46-0AA0		3VA1150-5GD46-0AA0		3VA1150-6GD46-0AA0
63		3VA1163-4GD46-0AA0		3VA1163-5GD46-0AA0		3VA1163-6GD46-0AA0
80		3VA1180-4GD46-0AA0		3VA1180-5GD46-0AA0		3VA1180-6GD46-0AA0
100		3VA1110-4GD46-0AA0		3VA1110-5GD46-0AA0		3VA1110-6GD46-0AA0
125		3VA1112-4GD46-0AA0		3VA1112-5GD46-0AA0		3VA1112-6GD46-0AA0
160		3VA1116-4GD46-0AA0		3VA1116-5GD46-0AA0		3VA1116-6GD46-0AA0
		Connection with lug terminal				
16		3VA1196-4GD42-0AA0		3VA1196-5GD42-0AA0		3VA1196-6GD42-0AA0
20		3VA1120-4GD42-0AA0		3VA1120-5GD42-0AA0		3VA1120-6GD42-0AA0
25		3VA1125-4GD42-0AA0		3VA1125-5GD42-0AA0		3VA1125-6GD42-0AA0
32		3VA1132-4GD42-0AA0		3VA1132-5GD42-0AA0		3VA1132-6GD42-0AA0
40		3VA1140-4GD42-0AA0		3VA1140-5GD42-0AA0		3VA1140-6GD42-0AA0
50		3VA1150-4GD42-0AA0		3VA1150-5GD42-0AA0		3VA1150-6GD42-0AA0
63		3VA1163-4GD42-0AA0		3VA1163-5GD42-0AA0		3VA1163-6GD42-0AA0
80		3VA1180-4GD42-0AA0		3VA1180-5GD42-0AA0		3VA1180-6GD42-0AA0
100		3VA1110-4GD42-0AA0		3VA1110-5GD42-0AA0		3VA1110-6GD42-0AA0
125		3VA1112-4GD42-0AA0		3VA1112-5GD42-0AA0		3VA1112-6GD42-0AA0
160		3VA1116-4GD42-0AA0		3VA1116-5GD42-0AA0		3VA1116-6GD42-0AA0
Line protection, TM220 ATFM, without neutral conductor protection With adjustable overload protection I_r and fixed short-circuit protection I_i						
		Connection with box terminal				
16		3VA1196-4EE46-0AA0		3VA1196-5EE46-0AA0		3VA1196-6EE46-0AA0
20		3VA1120-4EE46-0AA0		3VA1120-5EE46-0AA0		3VA1120-6EE46-0AA0
25		3VA1125-4EE46-0AA0		3VA1125-5EE46-0AA0		3VA1125-6EE46-0AA0
32		3VA1132-4EE46-0AA0		3VA1132-5EE46-0AA0		3VA1132-6EE46-0AA0
40		3VA1140-4EE46-0AA0		3VA1140-5EE46-0AA0		3VA1140-6EE46-0AA0
50		3VA1150-4EE46-0AA0		3VA1150-5EE46-0AA0		3VA1150-6EE46-0AA0
63		3VA1163-4EE46-0AA0		3VA1163-5EE46-0AA0		3VA1163-6EE46-0AA0
80		3VA1180-4EE46-0AA0		3VA1180-5EE46-0AA0		3VA1180-6EE46-0AA0
100		3VA1110-4EE46-0AA0		3VA1110-5EE46-0AA0		3VA1110-6EE46-0AA0
125		3VA1112-4EE46-0AA0		3VA1112-5EE46-0AA0		3VA1112-6EE46-0AA0
160		3VA1116-4EE46-0AA0		3VA1116-5EE46-0AA0		3VA1116-6EE46-0AA0
		Connection with lug terminal				
16		3VA1196-4EE42-0AA0		3VA1196-5EE42-0AA0		3VA1196-6EE42-0AA0
20		3VA1120-4EE42-0AA0		3VA1120-5EE42-0AA0		3VA1120-6EE42-0AA0
25		3VA1125-4EE42-0AA0		3VA1125-5EE42-0AA0		3VA1125-6EE42-0AA0
32		3VA1132-4EE42-0AA0		3VA1132-5EE42-0AA0		3VA1132-6EE42-0AA0
40		3VA1140-4EE42-0AA0		3VA1140-5EE42-0AA0		3VA1140-6EE42-0AA0
50		3VA1150-4EE42-0AA0		3VA1150-5EE42-0AA0		3VA1150-6EE42-0AA0
63		3VA1163-4EE42-0AA0		3VA1163-5EE42-0AA0		3VA1163-6EE42-0AA0
80		3VA1180-4EE42-0AA0		3VA1180-5EE42-0AA0		3VA1180-6EE42-0AA0
100		3VA1110-4EE42-0AA0		3VA1110-5EE42-0AA0		3VA1110-6EE42-0AA0
125		3VA1112-4EE42-0AA0		3VA1112-5EE42-0AA0		3VA1112-6EE42-0AA0
160		3VA1116-4EE42-0AA0		3VA1116-5EE42-0AA0		3VA1116-6EE42-0AA0

*** You can order this quantity or a multiple thereof.**

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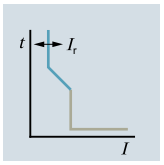
PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

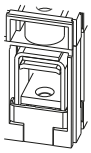
Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Operating current of the instanta-neous short-circuit protection "I" I_i	DT	**I_{cu} up to 25 kA at 415 V, low breaking capacity N** (N) See "Overview", p. 2/6 and 2/7	
						Article No. www.siemens.com/product?Article No.	Basic price per PU
		A	A	A			

4-pole, fixed-mounted, 3VA11, up to 160 A
Thermal-magnetic trip unit



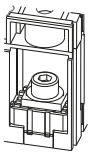
Line protection, TM220 ATFM, 50 % neutral conductor protection
With adjustable overload protection I_r and fixed short-circuit protection I_i

Connection with box terminal

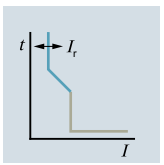


3VA11	100	70 ... 100	1000	**3VA1110-3FE46-0AA0**
	125	88 ... 125	1250	**3VA1112-3FE46-0AA0**
	160	112 ... 160	1600	**3VA1116-3FE46-0AA0**

Connection with lug terminal

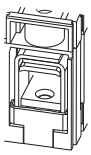


3VA11	100	70 ... 100	1000	**3VA1110-3FE42-0AA0**
	125	88 ... 125	1250	**3VA1112-3FE42-0AA0**
	160	112 ... 160	1600	**3VA1116-3FE42-0AA0**



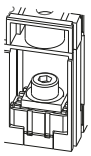
Line protection, TM220 ATFM, 100 % neutral conductor protection
With adjustable overload protection I_r and fixed short-circuit protection I_i

Connection with box terminal



3VA11	16	11 ... 16	320	**3VA1196-3GE46-0AA0**
	20	14 ... 20	320	**3VA1120-3GE46-0AA0**
	25	18 ... 25	320	**3VA1125-3GE46-0AA0**
	32	22 ... 32	320	**3VA1132-3GE46-0AA0**
	40	28 ... 40	400	**3VA1140-3GE46-0AA0**
	50	35 ... 50	500	**3VA1150-3GE46-0AA0**
	63	44 ... 63	630	**3VA1163-3GE46-0AA0**
	80	56 ... 80	800	**3VA1180-3GE46-0AA0**
	100	70 ... 100	1000	**3VA1110-3GE46-0AA0**
	125	88 ... 125	1250	**3VA1112-3GE46-0AA0**
	160	112 ... 160	1600	**3VA1116-3GE46-0AA0**

Connection with lug terminal



3VA11	16	11 ... 16	320	**3VA1196-3GE42-0AA0**
	20	14 ... 20	320	**3VA1120-3GE42-0AA0**
	25	18 ... 25	320	**3VA1125-3GE42-0AA0**
	32	22 ... 32	320	**3VA1132-3GE42-0AA0**
	40	28 ... 40	400	**3VA1140-3GE42-0AA0**
	50	35 ... 50	500	**3VA1150-3GE42-0AA0**
	63	44 ... 63	630	**3VA1163-3GE42-0AA0**
	80	56 ... 80	800	**3VA1180-3GE42-0AA0**
	100	70 ... 100	1000	**3VA1110-3GE42-0AA0**
	125	88 ... 125	1250	**3VA1112-3GE42-0AA0**
	160	112 ... 160	1600	**3VA1116-3GE42-0AA0**

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	I_{cu} to 36 kA at 415 V, standard breaking capacity S (S) See "Overview", p. 2/6 and 2/7	DT	I_{cu} up to 55 kA at 415 V, medium breaking capacity M (M) See "Overview", p. 2/6 and 2/7	DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H) See "Overview", p. 2/6 and 2/7
		Article No. www.siemens.com/product?Article No. Basic price per PU		Article No. www.siemens.com/product?Article No. Basic price per PU		Article No. www.siemens.com/product?Article No. Basic price per PU
A						
Line protection, TM220 ATFM, 50 % neutral conductor protection With adjustable overload protection I_r and fixed short-circuit protection I_i						
		Connection with box terminal				
100		3VA1110-4FE46-0AA0		3VA1110-5FE46-0AA0		3VA1110-6FE46-0AA0
125		3VA1112-4FE46-0AA0		3VA1112-5FE46-0AA0		3VA1112-6FE46-0AA0
160		3VA1116-4FE46-0AA0		3VA1116-5FE46-0AA0		3VA1116-6FE46-0AA0
		Connection with lug terminal				
100		3VA1110-4FE42-0AA0		3VA1110-5FE42-0AA0		3VA1110-6FE42-0AA0
125		3VA1112-4FE42-0AA0		3VA1112-5FE42-0AA0		3VA1112-6FE42-0AA0
160		3VA1116-4FE42-0AA0		3VA1116-5FE42-0AA0		3VA1116-6FE42-0AA0
Line protection, TM220 ATFM, 100 % neutral conductor protection With adjustable overload protection I_r and fixed short-circuit protection I_i						
		Connection with box terminal				
16		3VA1196-4GE46-0AA0		3VA1196-5GE46-0AA0		3VA1196-6GE46-0AA0
20		3VA1120-4GE46-0AA0		3VA1120-5GE46-0AA0		3VA1120-6GE46-0AA0
25		3VA1125-4GE46-0AA0		3VA1125-5GE46-0AA0		3VA1125-6GE46-0AA0
32		3VA1132-4GE46-0AA0		3VA1132-5GE46-0AA0		3VA1132-6GE46-0AA0
40		3VA1140-4GE46-0AA0		3VA1140-5GE46-0AA0		3VA1140-6GE46-0AA0
50		3VA1150-4GE46-0AA0		3VA1150-5GE46-0AA0		3VA1150-6GE46-0AA0
63		3VA1163-4GE46-0AA0		3VA1163-5GE46-0AA0		3VA1163-6GE46-0AA0
80		3VA1180-4GE46-0AA0		3VA1180-5GE46-0AA0		3VA1180-6GE46-0AA0
100		3VA1110-4GE46-0AA0		3VA1110-5GE46-0AA0		3VA1110-6GE46-0AA0
125		3VA1112-4GE46-0AA0		3VA1112-5GE46-0AA0		3VA1112-6GE46-0AA0
160		3VA1116-4GE46-0AA0		3VA1116-5GE46-0AA0		3VA1116-6GE46-0AA0
		Connection with lug terminal				
16		3VA1196-4GE42-0AA0		3VA1196-5GE42-0AA0		3VA1196-6GE42-0AA0
20		3VA1120-4GE42-0AA0		3VA1120-5GE42-0AA0		3VA1120-6GE42-0AA0
25		3VA1125-4GE42-0AA0		3VA1125-5GE42-0AA0		3VA1125-6GE42-0AA0
32		3VA1132-4GE42-0AA0		3VA1132-5GE42-0AA0		3VA1132-6GE42-0AA0
40		3VA1140-4GE42-0AA0		3VA1140-5GE42-0AA0		3VA1140-6GE42-0AA0
50		3VA1150-4GE42-0AA0		3VA1150-5GE42-0AA0		3VA1150-6GE42-0AA0
63		3VA1163-4GE42-0AA0		3VA1163-5GE42-0AA0		3VA1163-6GE42-0AA0
80		3VA1180-4GE42-0AA0		3VA1180-5GE42-0AA0		3VA1180-6GE42-0AA0
100		3VA1110-4GE42-0AA0		3VA1110-5GE42-0AA0		3VA1110-6GE42-0AA0
125		3VA1112-4GE42-0AA0		3VA1112-5GE42-0AA0		3VA1112-6GE42-0AA0
160		3VA1116-4GE42-0AA0		3VA1116-5GE42-0AA0		3VA1116-6GE42-0AA0

*** You can order this quantity or a multiple thereof.**

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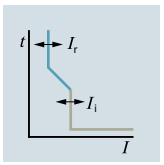
PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

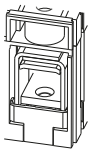
Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Operating current of the instanta-neous short-circuit protection "I" I_i	DT	**I_{cu} up to 25 kA at 415 V, low breaking capacity N** See "Overview", p. 2/6 and 2/7 (N)	
		A	A	A		Article No. www.siemens.com/product?Article No.	Basic price per PU

4-pole, fixed-mounted, 3VA11/3VA12, up to 250 A
Thermal-magnetic trip unit



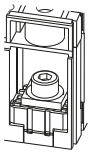
Line protection, TM240 ATAM, without neutral conductor protection
With adjustable overload protection I_r and adjustable short-circuit protection I_i

Connection with box terminal

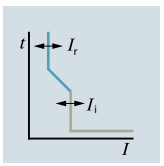


3VA11	16	11 ... 16	160 ... 320	3VA1196-3EF46-0AA0
	20	14 ... 20	160 ... 320	3VA1120-3EF46-0AA0
	25	18 ... 25	160 ... 320	3VA1125-3EF46-0AA0
	32	16 ... 32	160 ... 320	3VA1132-3EF46-0AA0
	40	28 ... 40	200 ... 400	3VA1140-3EF46-0AA0
	50	35 ... 50	250 ... 500	3VA1150-3EF46-0AA0
	63	44 ... 63	315 ... 630	3VA1163-3EF46-0AA0
	80	56 ... 80	400 ... 800	3VA1180-3EF46-0AA0
	100	70 ... 100	500 ... 1000	3VA1110-3EF46-0AA0
	125	88 ... 125	625 ... 1250	3VA1112-3EF46-0AA0
	160	112 ... 160	800 ... 1600	3VA1116-3EF46-0AA0

Connection with lug terminal

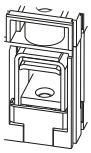


3VA11	16	11 ... 16	160 ... 320	3VA1196-3EF42-0AA0
	20	14 ... 20	160 ... 320	3VA1120-3EF42-0AA0
	25	18 ... 25	160 ... 320	3VA1125-3EF42-0AA0
	32	16 ... 32	160 ... 320	3VA1132-3EF42-0AA0
	40	28 ... 40	200 ... 400	3VA1140-3EF42-0AA0
	50	35 ... 50	250 ... 500	3VA1150-3EF42-0AA0
	63	44 ... 63	315 ... 630	3VA1163-3EF42-0AA0
	80	56 ... 80	400 ... 800	3VA1180-3EF42-0AA0
	100	70 ... 100	500 ... 1000	3VA1110-3EF42-0AA0
	125	88 ... 125	625 ... 1250	3VA1112-3EF42-0AA0
	160	112 ... 160	800 ... 1600	3VA1116-3EF42-0AA0
3VA12	160	112 ... 160	800 ... 1600	--
	200	140 ... 200	1000 ... 2000	--
	250	175 ... 250	1250 ... 2500	--



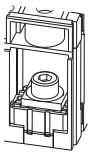
Line protection, TM240 ATAM, 50 % neutral conductor protection
With adjustable overload protection I_r and adjustable short-circuit protection I_i

Connection with box terminal



3VA11	100	70 ... 100	500 ... 1000	3VA1110-3FF46-0AA0
	125	88 ... 125	625 ... 1250	3VA1112-3FF46-0AA0
	160	112 ... 160	800 ... 1600	3VA1116-3FF46-0AA0

Connection with lug terminal



3VA11	100	70 ... 100	500 ... 1000	3VA1110-3FF42-0AA0
	125	88 ... 125	625 ... 1250	3VA1112-3FF42-0AA0
	160	112 ... 160	800 ... 1600	3VA1116-3FF42-0AA0
3VA12	160	112 ... 160	800 ... 1600	--
	200	140 ... 200	1000 ... 2000	--
	250	175 ... 250	1250 ... 2500	--

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	I_{cu} to 36 kA at 415 V, standard breaking capacity S (S) See "Overview", p. 2/6 and 2/7	DT	I_{cu} up to 55 kA at 415 V, medium breaking capacity M (M) See "Overview", p. 2/6 and 2/7	DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H) See "Overview", p. 2/6 and 2/7
		Article No. www.siemens.com/product?Article No. Basic price per PU		Article No. www.siemens.com/product?Article No. Basic price per PU		Article No. www.siemens.com/product?Article No. Basic price per PU
A						
Line protection, TM240 ATAM, without neutral conductor protection With adjustable overload protection I_r and adjustable short-circuit protection I_i						
		Connection with box terminal				
16		3VA1196-4EF46-0AA0		3VA1196-5EF46-0AA0		3VA1196-6EF46-0AA0
20		3VA1120-4EF46-0AA0		3VA1120-5EF46-0AA0		3VA1120-6EF46-0AA0
25		3VA1125-4EF46-0AA0		3VA1125-5EF46-0AA0		3VA1125-6EF46-0AA0
32		3VA1132-4EF46-0AA0		3VA1132-5EF46-0AA0		3VA1132-6EF46-0AA0
40		3VA1140-4EF46-0AA0		3VA1140-5EF46-0AA0		3VA1140-6EF46-0AA0
50		3VA1150-4EF46-0AA0		3VA1150-5EF46-0AA0		3VA1150-6EF46-0AA0
63		3VA1163-4EF46-0AA0		3VA1163-5EF46-0AA0		3VA1163-6EF46-0AA0
80		3VA1180-4EF46-0AA0		3VA1180-5EF46-0AA0		3VA1180-6EF46-0AA0
100		3VA1110-4EF46-0AA0		3VA1110-5EF46-0AA0		3VA1110-6EF46-0AA0
125		3VA1112-4EF46-0AA0		3VA1112-5EF46-0AA0		3VA1112-6EF46-0AA0
160		3VA1116-4EF46-0AA0		3VA1116-5EF46-0AA0		3VA1116-6EF46-0AA0
		Connection with lug terminal				
16		3VA1196-4EF42-0AA0		3VA1196-5EF42-0AA0		3VA1196-6EF42-0AA0
20		3VA1120-4EF42-0AA0		3VA1120-5EF42-0AA0		3VA1120-6EF42-0AA0
25		3VA1125-4EF42-0AA0		3VA1125-5EF42-0AA0		3VA1125-6EF42-0AA0
32		3VA1132-4EF42-0AA0		3VA1132-5EF42-0AA0		3VA1132-6EF42-0AA0
40		3VA1140-4EF42-0AA0		3VA1140-5EF42-0AA0		3VA1140-6EF42-0AA0
50		3VA1150-4EF42-0AA0		3VA1150-5EF42-0AA0		3VA1150-6EF42-0AA0
63		3VA1163-4EF42-0AA0		3VA1163-5EF42-0AA0		3VA1163-6EF42-0AA0
80		3VA1180-4EF42-0AA0		3VA1180-5EF42-0AA0		3VA1180-6EF42-0AA0
100		3VA1110-4EF42-0AA0		3VA1110-5EF42-0AA0		3VA1110-6EF42-0AA0
125		3VA1112-4EF42-0AA0		3VA1112-5EF42-0AA0		3VA1112-6EF42-0AA0
160		3VA1116-4EF42-0AA0		3VA1116-5EF42-0AA0		3VA1116-6EF42-0AA0
160		3VA1216-4EF42-0AA0		3VA1216-5EF42-0AA0		3VA1216-6EF42-0AA0
200		3VA1220-4EF42-0AA0		3VA1220-5EF42-0AA0		3VA1220-6EF42-0AA0
250		3VA1225-4EF42-0AA0		3VA1225-5EF42-0AA0		3VA1225-6EF42-0AA0
Line protection, TM240 ATAM, 50 % neutral conductor protection With adjustable overload protection I_r and adjustable short-circuit protection I_i						
		Connection with box terminal				
100		3VA1110-4FF46-0AA0		3VA1110-5FF46-0AA0		3VA1110-6FF46-0AA0
125		3VA1112-4FF46-0AA0		3VA1112-5FF46-0AA0		3VA1112-6FF46-0AA0
160		3VA1116-4FF46-0AA0		3VA1116-5FF46-0AA0		3VA1116-6FF46-0AA0
		Connection with lug terminal				
100		3VA1110-4FF42-0AA0		3VA1110-5FF42-0AA0		3VA1110-6FF42-0AA0
125		3VA1112-4FF42-0AA0		3VA1112-5FF42-0AA0		3VA1112-6FF42-0AA0
160		3VA1116-4FF42-0AA0		3VA1116-5FF42-0AA0		3VA1116-6FF42-0AA0
160		3VA1216-4FF42-0AA0		3VA1216-5FF42-0AA0		3VA1216-6FF42-0AA0
200		3VA1220-4FF42-0AA0		3VA1220-5FF42-0AA0		3VA1220-6FF42-0AA0
250		3VA1225-4FF42-0AA0		3VA1225-5FF42-0AA0		3VA1225-6FF42-0AA0

*** You can order this quantity or a multiple thereof.**

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Molded Case Circuit Breakers

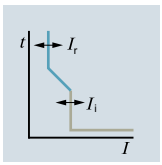
3VA1 Molded Case Circuit Breakers up to 250 A, IEC NEW

Line protection

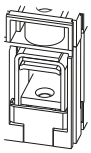
PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Operating current of the instantaneous short-circuit protection "I" I_i	DT	I_{cu} up to 25 kA at 415 V, low breaking capacity N (N) See "Overview", p. 2/6 and 2/7	
		A	A	A		Article No. www.siemens.com/product?Article No.	Basic price per PU

4-pole, fixed-mounted, 3VA11/3VA12, up to 250 A Thermal-magnetic trip unit

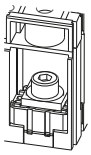


Line protection, TM240 ATAM, 100 % neutral conductor protection
With adjustable overload protection I_r and adjustable short-circuit protection I_i



Connection with box terminal

3VA11	16	11 ... 16	160 ... 320	3VA1196-3GF46-0AA0
	20	14 ... 20	160 ... 320	3VA1120-3GF46-0AA0
	25	18 ... 25	160 ... 320	3VA1125-3GF46-0AA0
	32	16 ... 32	160 ... 320	3VA1132-3GF46-0AA0
	40	28 ... 40	200 ... 400	3VA1140-3GF46-0AA0
	50	35 ... 50	250 ... 500	3VA1150-3GF46-0AA0
	63	44 ... 63	315 ... 630	3VA1163-3GF46-0AA0
	80	56 ... 80	400 ... 800	3VA1180-3GF46-0AA0
	100	70 ... 100	500 ... 1000	3VA1110-3GF46-0AA0
	125	88 ... 125	625 ... 1250	3VA1112-3GF46-0AA0
	160	112 ... 160	800 ... 1600	3VA1116-3GF46-0AA0



Connection with lug terminal

3VA11	16	11 ... 16	160 ... 320	3VA1196-3GF42-0AA0
	20	14 ... 20	160 ... 320	3VA1120-3GF42-0AA0
	25	18 ... 25	160 ... 320	3VA1125-3GF42-0AA0
	32	16 ... 32	160 ... 320	3VA1132-3GF42-0AA0
	40	28 ... 40	200 ... 400	3VA1140-3GF42-0AA0
	50	35 ... 50	250 ... 500	3VA1150-3GF42-0AA0
	63	44 ... 63	315 ... 630	3VA1163-3GF42-0AA0
	80	56 ... 80	400 ... 800	3VA1180-3GF42-0AA0
	100	70 ... 100	500 ... 1000	3VA1110-3GF42-0AA0
	125	88 ... 125	625 ... 1250	3VA1112-3GF42-0AA0
	160	112 ... 160	800 ... 1600	3VA1116-3GF42-0AA0
3VA12	160	112 ... 160	800 ... 1600	--
	200	140 ... 200	1000 ... 2000	--
	250	175 ... 250	1250 ... 2500	--

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	I_{cu} to 36 kA at 415 V, standard breaking capacity S (S) See "Overview", p. 2/6 and 2/7	DT	I_{cu} up to 55 kA at 415 V, medium breaking capacity M (M) See "Overview", p. 2/6 and 2/7	DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H) See "Overview", p. 2/6 and 2/7
		Article No. www.siemens.com/product?Article No. Basic price per PU		Article No. www.siemens.com/product?Article No. Basic price per PU		Article No. www.siemens.com/product?Article No. Basic price per PU
A						
Line protection, TM240 ATAM, 100 % neutral conductor protection With adjustable overload protection I_r and adjustable short-circuit protection I_i						
		Connection with box terminal				
16		3VA1196-4GF46-0AA0		3VA1196-5GF46-0AA0		3VA1196-6GF46-0AA0
20		3VA1120-4GF46-0AA0		3VA1120-5GF46-0AA0		3VA1120-6GF46-0AA0
25		3VA1125-4GF46-0AA0		3VA1125-5GF46-0AA0		3VA1125-6GF46-0AA0
32		3VA1132-4GF46-0AA0		3VA1132-5GF46-0AA0		3VA1132-6GF46-0AA0
40		3VA1140-4GF46-0AA0		3VA1140-5GF46-0AA0		3VA1140-6GF46-0AA0
50		3VA1150-4GF46-0AA0		3VA1150-5GF46-0AA0		3VA1150-6GF46-0AA0
63		3VA1163-4GF46-0AA0		3VA1163-5GF46-0AA0		3VA1163-6GF46-0AA0
80		3VA1180-4GF46-0AA0		3VA1180-5GF46-0AA0		3VA1180-6GF46-0AA0
100		3VA1110-4GF46-0AA0		3VA1110-5GF46-0AA0		3VA1110-6GF46-0AA0
125		3VA1112-4GF46-0AA0		3VA1112-5GF46-0AA0		3VA1112-6GF46-0AA0
160		3VA1116-4GF46-0AA0		3VA1116-5GF46-0AA0		3VA1116-6GF46-0AA0
		Connection with lug terminal				
16		3VA1196-4GF42-0AA0		3VA1196-5GF42-0AA0		3VA1196-6GF42-0AA0
20		3VA1120-4GF42-0AA0		3VA1120-5GF42-0AA0		3VA1120-6GF42-0AA0
25		3VA1125-4GF42-0AA0		3VA1125-5GF42-0AA0		3VA1125-6GF42-0AA0
32		3VA1132-4GF42-0AA0		3VA1132-5GF42-0AA0		3VA1132-6GF42-0AA0
40		3VA1140-4GF42-0AA0		3VA1140-5GF42-0AA0		3VA1140-6GF42-0AA0
50		3VA1150-4GF42-0AA0		3VA1150-5GF42-0AA0		3VA1150-6GF42-0AA0
63		3VA1163-4GF42-0AA0		3VA1163-5GF42-0AA0		3VA1163-6GF42-0AA0
80		3VA1180-4GF42-0AA0		3VA1180-5GF42-0AA0		3VA1180-6GF42-0AA0
100		3VA1110-4GF42-0AA0		3VA1110-5GF42-0AA0		3VA1110-6GF42-0AA0
125		3VA1112-4GF42-0AA0		3VA1112-5GF42-0AA0		3VA1112-6GF42-0AA0
160		3VA1116-4GF42-0AA0		3VA1116-5GF42-0AA0		3VA1116-6GF42-0AA0
160		3VA1216-4GF42-0AA0		3VA1216-5GF42-0AA0		3VA1216-6GF42-0AA0
200		3VA1220-4GF42-0AA0		3VA1220-5GF42-0AA0		3VA1220-6GF42-0AA0
250		3VA1225-4GF42-0AA0		3VA1225-5GF42-0AA0		3VA1225-6GF42-0AA0

*** You can order this quantity or a multiple thereof.**

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Molded Case Circuit Breakers

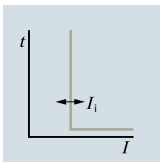
3VA1 Molded Case Circuit Breakers up to 250 A, IEC NEW

Starter protection

PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

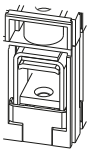
Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Operating current of the instanta-neous short-circuit protection "I" I_i	DT	**I_{cu} up to 55 kA at 415 V, medium breaking capacity M** See "Overview", p. 2/6 and 2/7 (M)	
		A	A	A		Article No. www.siemens.com/product?Article No.	Basic price per PU

3-pole, fixed-mounted, 3VA11/3VA12, up to 200 A Magnetic trip unit



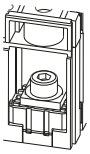
Starter protection, TM120M AM
With adjustable short-circuit protection I_i

Connection with box terminal



3VA11	32	--	220 ... 510	3VA1132-5MH36-0AA0
	40	--	280 ... 640	3VA1140-5MH36-0AA0
	50	--	350 ... 800	3VA1150-5MH36-0AA0
	63	--	440 ... 1010	3VA1163-5MH36-0AA0
	80	--	560 ... 1280	3VA1180-5MH36-0AA0
	100	--	700 ... 1600	3VA1110-5MH36-0AA0
	125	--	875 ... 2000	3VA1112-5MH36-0AA0

Connection with lug terminal



3VA11	32	--	220 ... 510	3VA1132-5MH32-0AA0
	40	--	280 ... 640	3VA1140-5MH32-0AA0
	50	--	350 ... 800	3VA1150-5MH32-0AA0
	63	--	440 ... 1010	3VA1163-5MH32-0AA0
	80	--	560 ... 1280	3VA1180-5MH32-0AA0
	100	--	700 ... 1600	3VA1110-5MH32-0AA0
	125	--	875 ... 2000	3VA1112-5MH32-0AA0
3VA12	160	--	1120 ... 2560	3VA1216-5MH32-0AA0
	200	--	1200 ... 2800	3VA1220-5MH32-0AA0

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	**I_{cu} up to 70 kA at 415 V, high breaking capacity H** (H) See "Overview", p. 2/6 and 2/7
		Article No. www.siemens.com/product?Article No. — Basic price per PU
A		

Starter protection, TM120M AM
With adjustable short-circuit protection I_i

	Connection with box terminal
32	**3VA1132-6MH36-0AA0**
40	**3VA1140-6MH36-0AA0**
50	**3VA1150-6MH36-0AA0**
63	**3VA1163-6MH36-0AA0**
80	**3VA1180-6MH36-0AA0**
100	**3VA1110-6MH36-0AA0**
125	**3VA1112-6MH36-0AA0**
	Connection with lug terminal
32	**3VA1132-6MH32-0AA0**
40	**3VA1140-6MH32-0AA0**
50	**3VA1150-6MH32-0AA0**
63	**3VA1163-6MH32-0AA0**
80	**3VA1180-6MH32-0AA0**
100	**3VA1110-6MH32-0AA0**
125	**3VA1112-6MH32-0AA0**
160	**3VA1216-6MH32-0AA0**
200	**3VA1220-6MH32-0AA0**

*** You can order this quantity or a multiple thereof.**

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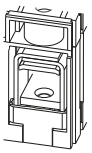
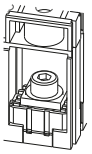
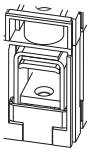
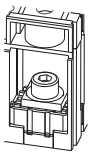
2

Selection and ordering data

PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Connection technology	Type	Rated uninterrupted current I_u	Current setting of the inverse-time delayed overload protection "L" I_r	Operating current of the instanta-neous short-circuit protection "I" I_i	DT	Article No. www.siemens.com/product?Article No.	Basic price per PU
		A	A	A			
3-pole, fixed-mounted, 3VA11/3VA12, up to 250 A Without trip unit							
Switch disconnector without SD100 trip unit							
 **Connection with box terminal**							
	3VA11	63	--	--		3VA1163-1AA36-0AA0	
		100	--	--		3VA1110-1AA36-0AA0	
		125	--	--		3VA1112-1AA36-0AA0	
		160	--	--		3VA1116-1AA36-0AA0	
 **Connection with lug terminal**							
	3VA11	63	--	--		3VA1163-1AA32-0AA0	
		100	--	--		3VA1110-1AA32-0AA0	
		125	--	--		3VA1112-1AA32-0AA0	
		160	--	--		3VA1116-1AA32-0AA0	
	3VA12	250	--	--		3VA1225-1AA32-0AA0	
4-pole, fixed-mounted, 3VA11/3VA12, up to 250 A Without trip unit							
Switch disconnector without SD100 trip unit							
 **Connection with box terminal**							
	3VA11	63	--	--		3VA1163-1AA46-0AA0	
		100	--	--		3VA1110-1AA46-0AA0	
		125	--	--		3VA1112-1AA46-0AA0	
		160	--	--		3VA1116-1AA46-0AA0	
 **Connection with lug terminal**							
	3VA11	63	--	--		3VA1163-1AA42-0AA0	
		100	--	--		3VA1110-1AA42-0AA0	
		125	--	--		3VA1112-1AA42-0AA0	
		160	--	--		3VA1116-1AA42-0AA0	
	3VA12	250	--	--		3VA1225-1AA42-0AA0	

* You can order this quantity or a multiple thereof.

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Note

You will find the 3VA2 molded case circuit breakers up to 630 A, IEC from page 2/42 onwards.

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2

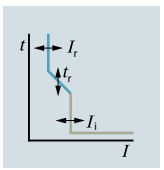
Selection and ordering data

PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

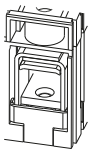
Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	S function (short-time delayed short-circuit protection "S") I_{sd}	Operating current of the instanta-neous short-circuit protection "I" I_i	DT	I_{cu} up to 55 kA at 415 V, medium breaking capacity M (M) See "Overview", p. 2/6 and 2/7	
		A	A	A	A		Article No. www.siemens.com/product?Article No.	Basic price per PU

3-pole, fixed-mounted, 3VA20 to 3VA24, up to 630 A Electronic trip unit

I201_18857

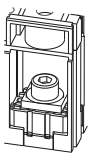


Line protection, ETU320 LI
With adjustable overload protection I_r and adjustable instantaneous short-circuit protection I_i



Connection with box terminal

3VA20	25	10 ... 25	--	38 ... 300	3VA2025-5HL36-0AA0
	40	16 ... 40	--	60 ... 480	3VA2040-5HL36-0AA0
	63	25 ... 63	--	95 ... 756	3VA2063-5HL36-0AA0
	100	40 ... 100	--	150 ... 1200	3VA2010-5HL36-0AA0
3VA21	25	10 ... 25	--	38 ... 300	3VA2125-5HL36-0AA0
	40	16 ... 40	--	60 ... 480	3VA2140-5HL36-0AA0
	63	25 ... 63	--	95 ... 756	3VA2163-5HL36-0AA0
	100	40 ... 100	--	150 ... 1200	3VA2110-5HL36-0AA0
	160	63 ... 160	--	240 ... 1600	3VA2116-5HL36-0AA0



Connection with lug terminal

3VA20	25	10 ... 25	--	38 ... 300	3VA2025-5HL32-0AA0
	40	16 ... 40	--	60 ... 480	3VA2040-5HL32-0AA0
	63	25 ... 63	--	95 ... 756	3VA2063-5HL32-0AA0
	100	40 ... 100	--	150 ... 1200	3VA2010-5HL32-0AA0
3VA21	25	10 ... 25	--	38 ... 300	3VA2125-5HL32-0AA0
	40	16 ... 40	--	60 ... 480	3VA2140-5HL32-0AA0
	63	25 ... 63	--	95 ... 756	3VA2163-5HL32-0AA0
	100	40 ... 100	--	150 ... 1200	3VA2110-5HL32-0AA0
	160	63 ... 160	--	240 ... 1600	3VA2116-5HL32-0AA0
3VA22	160	63 ... 160	--	240 ... 1920	3VA2216-5HL32-0AA0
	250	100 ... 250	--	375 ... 2500	3VA2225-5HL32-0AA0
3VA23	250	100 ... 250	--	375 ... 3000	3VA2325-5HL32-0AA0
	400	160 ... 400	--	600 ... 4000	3VA2340-5HL32-0AA0
3VA24	400	160 ... 400	--	600 ... 4800[1)]	3VA2440-5HL32-0AA0
	630	250 ... 630	--	945 ... 5670	3VA2463-5HL32-0AA0

1) At breaking capacity L 4400 A

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	I_{cu} up to 85 kA at 415 V, high breaking capacity H (H) See "Overview", p. 2/6 and 2/7		DT	I_{cu} up to 110 kA at 415 V, very high breaking capacity C (C) See "Overview", p. 2/6 and 2/7		DT	I_{cu} up to 150 kA at 415 V, extremely high breaking capacity L (L) See "Overview", p. 2/6 and 2/7	
		Article No. www.siemens.com/product?Article No.	Basic price per PU		Article No. www.siemens.com/product?Article No.	Basic price per PU		Article No. www.siemens.com/product?Article No.	Basic price per PU
A									
Line protection, ETU320 LI With adjustable overload protection I_r and adjustable instantaneous short-circuit protection I_i									
		Connection with box terminal							
25		3VA2025-6HL36-0AA0			3VA2025-7HL36-0AA0			3VA2025-8HL36-0AA0	
40		3VA2040-6HL36-0AA0			3VA2040-7HL36-0AA0			3VA2040-8HL36-0AA0	
63		3VA2063-6HL36-0AA0			3VA2063-7HL36-0AA0			3VA2063-8HL36-0AA0	
100		3VA2010-6HL36-0AA0			3VA2010-7HL36-0AA0			3VA2010-8HL36-0AA0	
25		3VA2125-6HL36-0AA0			3VA2125-7HL36-0AA0			3VA2125-8HL36-0AA0	
40		3VA2140-6HL36-0AA0			3VA2140-7HL36-0AA0			3VA2140-8HL36-0AA0	
63		3VA2163-6HL36-0AA0			3VA2163-7HL36-0AA0			3VA2163-8HL36-0AA0	
100		3VA2110-6HL36-0AA0			3VA2110-7HL36-0AA0			3VA2110-8HL36-0AA0	
160		3VA2116-6HL36-0AA0			3VA2116-7HL36-0AA0			3VA2116-8HL36-0AA0	
		Connection with lug terminal							
25		3VA2025-6HL32-0AA0			3VA2025-7HL32-0AA0			3VA2025-8HL32-0AA0	
40		3VA2040-6HL32-0AA0			3VA2040-7HL32-0AA0			3VA2040-8HL32-0AA0	
63		3VA2063-6HL32-0AA0			3VA2063-7HL32-0AA0			3VA2063-8HL32-0AA0	
100		3VA2010-6HL32-0AA0			3VA2010-7HL32-0AA0			3VA2010-8HL32-0AA0	
25		3VA2125-6HL32-0AA0			3VA2125-7HL32-0AA0			3VA2125-8HL32-0AA0	
40		3VA2140-6HL32-0AA0			3VA2140-7HL32-0AA0			3VA2140-8HL32-0AA0	
63		3VA2163-6HL32-0AA0			3VA2163-7HL32-0AA0			3VA2163-8HL32-0AA0	
100		3VA2110-6HL32-0AA0			3VA2110-7HL32-0AA0			3VA2110-8HL32-0AA0	
160		3VA2116-6HL32-0AA0			3VA2116-7HL32-0AA0			3VA2116-8HL32-0AA0	
160		3VA2216-6HL32-0AA0			3VA2216-7HL32-0AA0			3VA2216-8HL32-0AA0	
250		3VA2225-6HL32-0AA0			3VA2225-7HL32-0AA0			3VA2225-8HL32-0AA0	
250		3VA2325-6HL32-0AA0			3VA2325-7HL32-0AA0			3VA2325-8HL32-0AA0	
400		3VA2340-6HL32-0AA0			3VA2340-7HL32-0AA0			3VA2340-8HL32-0AA0	
400		3VA2440-6HL32-0AA0			3VA2440-7HL32-0AA0			3VA2440-8HL32-0AA0	
630		3VA2463-6HL32-0AA0			3VA2463-7HL32-0AA0			3VA2463-8HL32-0AA0	

*** You can order this quantity or a multiple thereof.**

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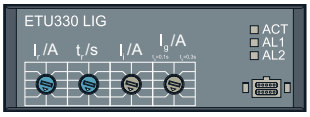
Line protection

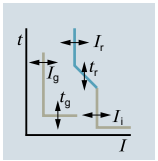
PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Operating current of the instantaneous short-circuit protection "I" I_i	Ground-fault protection G I_g	DT	I_{cu} up to 55 kA at 415 V, medium breaking capacity M (M) See "Overview", p. 2/6 and 2/7	
		A	A	A	A		Article No. www.siemens.com/product?Article No.	Basic price per PU

3-pole, fixed-mounted, 3VA20 to 3VA24, up to 630 A Electronic trip unit

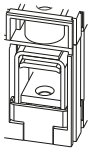


I201_18426



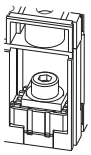
Line protection, ETU330 LIG

With adjustable overload protection I_r, adjustable instantaneous short-circuit protection I_i and adjustable ground-fault protection I_g



Connection with box terminal

3VA20	25	10 ... 25	38 ... 300	15 ... 25	3VA2025-5HM36-0AA0
	40	16 ... 40	60 ... 480	16 ... 40	3VA2040-5HM36-0AA0
	63	25 ... 63	95 ... 756	16 ... 63	3VA2063-5HM36-0AA0
	100	40 ... 100	150 ... 1200	20 ... 100	3VA2010-5HM36-0AA0
3VA21	25	10 ... 25	38 ... 300	15 ... 25	3VA2125-5HM36-0AA0
	40	16 ... 40	60 ... 480	16 ... 40	3VA2140-5HM36-0AA0
	63	25 ... 63	95 ... 756	16 ... 63	3VA2163-5HM36-0AA0
	100	40 ... 100	150 ... 1200	20 ... 100	3VA2110-5HM36-0AA0
	160	63 ... 160	240 ... 1600	32 ... 160	3VA2116-5HM36-0AA0



Connection with lug terminal

3VA20	25	10 ... 25	38 ... 300	15 ... 25	3VA2025-5HM32-0AA0
	40	16 ... 40	60 ... 480	16 ... 40	3VA2040-5HM32-0AA0
	63	25 ... 63	95 ... 756	16 ... 63	3VA2063-5HM32-0AA0
	100	40 ... 100	150 ... 1200	20 ... 100	3VA2010-5HM32-0AA0
3VA21	25	10 ... 25	38 ... 300	15 ... 25	3VA2125-5HM32-0AA0
	40	16 ... 40	60 ... 480	16 ... 40	3VA2140-5HM32-0AA0
	63	25 ... 63	95 ... 756	16 ... 63	3VA2163-5HM32-0AA0
	100	40 ... 100	150 ... 1200	20 ... 100	3VA2110-5HM32-0AA0
	160	63 ... 160	240 ... 1600	32 ... 160	3VA2116-5HM32-0AA0
3VA22	160	63 ... 160	240 ... 1920	32 ... 160	3VA2216-5HM32-0AA0
	250	100 ... 250	375 ... 2500	50 ... 250	3VA2225-5HM32-0AA0
3VA23	250	100 ... 250	375 ... 3000	50 ... 250	3VA2325-5HM32-0AA0
	400	160 ... 400	600 ... 4000	80 ... 400	3VA2340-5HM32-0AA0
3VA24	400	160 ... 400	600 ... 4800[1)]	80 ... 400	3VA2440-5HM32-0AA0
	630	250 ... 630	945 ... 5670	126 ... 630	3VA2463-5HM32-0AA0

1) At breaking capacity L 4400 A

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	**I_{cu} up to 85 kA at 415 V, high breaking capacity H** (H) See "Overview", p. 2/6 and 2/7 Article No. www.siemens.com/product?Article No.	Basic price per PU	DT	**I_{cu} up to 110 kA at 415 V, very high breaking capacity C** (C) See "Overview", p. 2/6 and 2/7 Article No. www.siemens.com/product?Article No.	Basic price per PU	DT	**I_{cu} up to 150 kA at 415 V, extremely high breaking capacity L** (L) See "Overview", p. 2/6 and 2/7 Article No. www.siemens.com/product?Article No.	Basic price per PU
A									

Line protection, ETU330 LIG

With adjustable overload protection I_r, adjustable instantaneous short-circuit protection I_i and adjustable ground-fault protection I_g

		Connection with box terminal							
25		3VA2025-6HM36-0AA0			3VA2025-7HM36-0AA0			3VA2025-8HM36-0AA0	
40		3VA2040-6HM36-0AA0			3VA2040-7HM36-0AA0			3VA2040-8HM36-0AA0	
63		3VA2063-6HM36-0AA0			3VA2063-7HM36-0AA0			3VA2063-8HM36-0AA0	
100		3VA2010-6HM36-0AA0			3VA2010-7HM36-0AA0			3VA2010-8HM36-0AA0	
25		3VA2125-6HM36-0AA0			3VA2125-7HM36-0AA0			3VA2125-8HM36-0AA0	
40		3VA2140-6HM36-0AA0			3VA2140-7HM36-0AA0			3VA2140-8HM36-0AA0	
63		3VA2163-6HM36-0AA0			3VA2163-7HM36-0AA0			3VA2163-8HM36-0AA0	
100		3VA2110-6HM36-0AA0			3VA2110-7HM36-0AA0			3VA2110-8HM36-0AA0	
160		3VA2116-6HM36-0AA0			3VA2116-7HM36-0AA0			3VA2116-8HM36-0AA0	
		Connection with lug terminal							
25		3VA2025-6HM32-0AA0			3VA2025-7HM32-0AA0			3VA2025-8HM32-0AA0	
40		3VA2040-6HM32-0AA0			3VA2040-7HM32-0AA0			3VA2040-8HM32-0AA0	
63		3VA2063-6HM32-0AA0			3VA2063-7HM32-0AA0			3VA2063-8HM32-0AA0	
100		3VA2010-6HM32-0AA0			3VA2010-7HM32-0AA0			3VA2010-8HM32-0AA0	
25		3VA2125-6HM32-0AA0			3VA2125-7HM32-0AA0			3VA2125-8HM32-0AA0	
40		3VA2140-6HM32-0AA0			3VA2140-7HM32-0AA0			3VA2140-8HM32-0AA0	
63		3VA2163-6HM32-0AA0			3VA2163-7HM32-0AA0			3VA2163-8HM32-0AA0	
100		3VA2110-6HM32-0AA0			3VA2110-7HM32-0AA0			3VA2110-8HM32-0AA0	
160		3VA2116-6HM32-0AA0			3VA2116-7HM32-0AA0			3VA2116-8HM32-0AA0	
160		3VA2216-6HM32-0AA0			3VA2216-7HM32-0AA0			3VA2216-8HM32-0AA0	
250		3VA2225-6HM32-0AA0			3VA2225-7HM32-0AA0			3VA2225-8HM32-0AA0	
250		3VA2325-6HM32-0AA0			3VA2325-7HM32-0AA0			3VA2325-8HM32-0AA0	
400		3VA2340-6HM32-0AA0			3VA2340-7HM32-0AA0			3VA2340-8HM32-0AA0	
400		3VA2440-6HM32-0AA0			3VA2440-7HM32-0AA0			3VA2440-8HM32-0AA0	
630		3VA2463-6HM32-0AA0			3VA2463-7HM32-0AA0			3VA2463-8HM32-0AA0	

*** You can order this quantity or a multiple thereof.**

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Molded Case Circuit Breakers

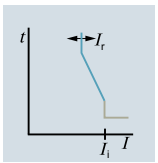
3VA2 Molded Case Circuit Breakers up to 630 A, IEC NEW

Line protection

PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Operating current of the instantaneous short-circuit protection "I" I_i	DT	I_{cu} up to 55 kA at 415 V, medium breaking capacity M (M) See "Overview", p. 2/6 and 2/7 Article No. www.siemens.com/product?Article No.	Basic price per PU
		A	A	A			

3-pole, fixed-mounted, 3VA21 to 3VA24, up to 630 A Electronic trip unit

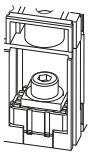


Line protection, ETU340 ELISA

With easily adjustable characteristic (characteristic form of a fuse)

Connection with box terminal

3VA21	25	10 ... 25	375	3VA2125-5HK36-0AA0
	40	16 ... 40	600	3VA2140-5HK36-0AA0
	63	25 ... 63	945	3VA2163-5HK36-0AA0
	100	40 ... 100	1500	3VA2110-5HK36-0AA0



Connection with lug terminal

3VA21	25	10 ... 25	375	3VA2125-5HK32-0AA0
	40	16 ... 40	600	3VA2140-5HK32-0AA0
	63	25 ... 63	945	3VA2163-5HK32-0AA0
	100	40 ... 100	1500	3VA2110-5HK32-0AA0
3VA22	160	63 ... 160	2400	3VA2216-5HK32-0AA0
3VA23	250	100 ... 250	3750	3VA2325-5HK32-0AA0
3VA24	400	160 ... 400	6000[1]	3VA2440-5HK32-0AA0
	500	200 ... 500	7000	3VA2450-5HK32-0AA0
	630	250 ... 630	5670	3VA2463-5HK32-0AA0

1) At breaking capacity L 4400 A

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	I_{cu} up to 85 kA at 415 V, high breaking capacity H (H) See "Overview", p. 2/6 and 2/7		DT	I_{cu} up to 110 kA at 415 V, very high breaking capacity C (C) See "Overview", p. 2/6 and 2/7		DT	I_{cu} up to 150 kA at 415 V, extremely high breaking capacity L (L) See "Overview", p. 2/6 and 2/7	
		Article No. www.siemens.com/product?Article No.	Basic price per PU		Article No. www.siemens.com/product?Article No.	Basic price per PU		Article No. www.siemens.com/product?Article No.	Basic price per PU
A									
Line protection, ETU340 ELISA With easily adjustable characteristic (characteristic form of a fuse)									
		Connection with box terminal							
25		3VA2125-6HK36-0AA0			3VA2125-7HK36-0AA0			3VA2125-8HK36-0AA0	
40		3VA2140-6HK36-0AA0			3VA2140-7HK36-0AA0			3VA2140-8HK36-0AA0	
63		3VA2163-6HK36-0AA0			3VA2163-7HK36-0AA0			3VA2163-8HK36-0AA0	
100		3VA2110-6HK36-0AA0			3VA2110-7HK36-0AA0			3VA2110-8HK36-0AA0	
		Connection with lug terminal							
25		3VA2125-6HK32-0AA0			3VA2125-7HK32-0AA0			3VA2125-8HK32-0AA0	
40		3VA2140-6HK32-0AA0			3VA2140-7HK32-0AA0			3VA2140-8HK32-0AA0	
63		3VA2163-6HK32-0AA0			3VA2163-7HK32-0AA0			3VA2163-8HK32-0AA0	
100		3VA2110-6HK32-0AA0			3VA2110-7HK32-0AA0			3VA2110-8HK32-0AA0	
160		3VA2216-6HK32-0AA0			3VA2216-7HK32-0AA0			3VA2216-8HK32-0AA0	
250		3VA2325-6HK32-0AA0			3VA2325-7HK32-0AA0			3VA2325-8HK32-0AA0	
400		3VA2440-6HK32-0AA0			3VA2440-7HK32-0AA0			3VA2440-8HK32-0AA0	
500		3VA2450-6HK32-0AA0			3VA2450-7HK32-0AA0			3VA2450-8HK32-0AA0	
630		3VA2463-6HK32-0AA0			3VA2463-7HK32-0AA0			3VA2463-8HK32-0AA0	

*** You can order this quantity or a multiple thereof.**

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Molded Case Circuit Breakers

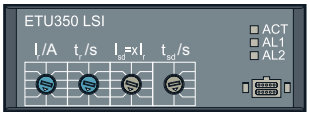
3VA2 Molded Case Circuit Breakers up to 630 A, IEC NEW

Line protection

PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	S function (short-time delayed short-circuit protection "S") I_{sd}	Operating current of the instantaneous short-circuit protection "I" I_i	DT	**I_{cu} up to 55 kA at 415 V, medium breaking capacity M** See "Overview", p. 2/6 and 2/7 (M)	
		A	A	A	A		Article No. www.siemens.com/product?Article No.	Basic price per PU

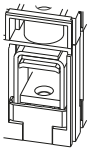
3-pole, fixed-mounted, 3VA20 to 3VA24, up to 630 A Electronic trip unit



I201_18430

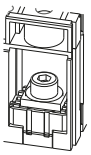
Line and generator protection, ETU350 LSI

With adjustable overload protection I_r, adjustable delayed short-circuit protection I_{sd} and fixed instantaneous short-circuit protection I_i



Connection with box terminal

		I_r x ...			
3VA20	25	10 ... 25	1.5 ... 10	300	3VA2025-5HN36-0AA0
	40	16 ... 40	1.5 ... 10	480	3VA2040-5HN36-0AA0
	63	25 ... 63	1.5 ... 10	756	3VA2063-5HN36-0AA0
	100	40 ... 100	1.5 ... 10	1200	3VA2010-5HN36-0AA0
3VA21	25	10 ... 25	1.5 ... 10	300	3VA2125-5HN36-0AA0
	40	16 ... 40	1.5 ... 10	480	3VA2140-5HN36-0AA0
	63	25 ... 63	1.5 ... 10	756	3VA2163-5HN36-0AA0
	100	40 ... 100	1.5 ... 10	1200	3VA2110-5HN36-0AA0
	160	63 ... 160	1.5 ... 10	1600	3VA2116-5HN36-0AA0



Connection with lug terminal

3VA20	25	10 ... 25	1.5 ... 10	300	3VA2025-5HN32-0AA0
	40	16 ... 40	1.5 ... 10	480	3VA2040-5HN32-0AA0
	63	25 ... 63	1.5 ... 10	756	3VA2063-5HN32-0AA0
	100	40 ... 100	1.5 ... 10	1200	3VA2010-5HN32-0AA0
3VA21	25	10 ... 25	1.5 ... 10	300	3VA2125-5HN32-0AA0
	40	16 ... 40	1.5 ... 10	480	3VA2140-5HN32-0AA0
	63	25 ... 63	1.5 ... 10	756	3VA2163-5HN32-0AA0
	100	40 ... 100	1.5 ... 10	1200	3VA2110-5HN32-0AA0
	160	63 ... 160	1.5 ... 10	1600	3VA2116-5HN32-0AA0
3VA22	160	63 ... 160	1.5 ... 10	1920	3VA2216-5HN32-0AA0
	250	100 ... 250	1.5 ... 10	2500	3VA2225-5HN32-0AA0
3VA23	250	100 ... 250	1.5 ... 10	3000	3VA2325-5HN32-0AA0
	400	160 ... 400	1.5 ... 10	4000	3VA2340-5HN32-0AA0
3VA24	400	160 ... 400	1.5 ... 10	4800[1)]	3VA2440-5HN32-0AA0
	630	250 ... 630	1.5 ... 9	5670	3VA2463-5HN32-0AA0

1) At breaking capacity L 4400 A

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	I_{cu} up to 85 kA at 415 V, high breaking capacity H (H) See "Overview", p. 2/6 and 2/7		DT	I_{cu} up to 110 kA at 415 V, very high breaking capacity C (C) See "Overview", p. 2/6 and 2/7		DT	I_{cu} up to 150 kA at 415 V, extremely high breaking capacity L (L) See "Overview", p. 2/6 and 2/7	
		Article No. www.siemens.com/product?Article No.	Basic price per PU		Article No. www.siemens.com/product?Article No.	Basic price per PU		Article No. www.siemens.com/product?Article No.	Basic price per PU
A									
Line and generator protection, ETU350 LSI With adjustable overload protection I_r, adjustable delayed short-circuit protection I_{sd} and fixed instantaneous short-circuit protection I_i									
		Connection with box terminal							
25		3VA2025-6HN36-0AA0			3VA2025-7HN36-0AA0			3VA2025-8HN36-0AA0	
40		3VA2040-6HN36-0AA0			3VA2040-7HN36-0AA0			3VA2040-8HN36-0AA0	
63		3VA2063-6HN36-0AA0			3VA2063-7HN36-0AA0			3VA2063-8HN36-0AA0	
100		3VA2010-6HN36-0AA0			3VA2010-7HN36-0AA0			3VA2010-8HN36-0AA0	
25		3VA2125-6HN36-0AA0			3VA2125-7HN36-0AA0			3VA2125-8HN36-0AA0	
40		3VA2140-6HN36-0AA0			3VA2140-7HN36-0AA0			3VA2140-8HN36-0AA0	
63		3VA2163-6HN36-0AA0			3VA2163-7HN36-0AA0			3VA2163-8HN36-0AA0	
100		3VA2110-6HN36-0AA0			3VA2110-7HN36-0AA0			3VA2110-8HN36-0AA0	
160		3VA2116-6HN36-0AA0			3VA2116-7HN36-0AA0			3VA2116-8HN36-0AA0	
		Connection with lug terminal							
25		3VA2025-6HN32-0AA0			3VA2025-7HN32-0AA0			3VA2025-8HN32-0AA0	
40		3VA2040-6HN32-0AA0			3VA2040-7HN32-0AA0			3VA2040-8HN32-0AA0	
63		3VA2063-6HN32-0AA0			3VA2063-7HN32-0AA0			3VA2063-8HN32-0AA0	
100		3VA2010-6HN32-0AA0			3VA2010-7HN32-0AA0			3VA2010-8HN32-0AA0	
25		3VA2125-6HN32-0AA0			3VA2125-7HN32-0AA0			3VA2125-8HN32-0AA0	
40		3VA2140-6HN32-0AA0			3VA2140-7HN32-0AA0			3VA2140-8HN32-0AA0	
63		3VA2163-6HN32-0AA0			3VA2163-7HN32-0AA0			3VA2163-8HN32-0AA0	
100		3VA2110-6HN32-0AA0			3VA2110-7HN32-0AA0			3VA2110-8HN32-0AA0	
160		3VA2116-6HN32-0AA0			3VA2116-7HN32-0AA0			3VA2116-8HN32-0AA0	
160		3VA2216-6HN32-0AA0			3VA2216-7HN32-0AA0			3VA2216-8HN32-0AA0	
250		3VA2225-6HN32-0AA0			3VA2225-7HN32-0AA0			3VA2225-8HN32-0AA0	
250		3VA2325-6HN32-0AA0			3VA2325-7HN32-0AA0			3VA2325-8HN32-0AA0	
400		3VA2340-6HN32-0AA0			3VA2340-7HN32-0AA0			3VA2340-8HN32-0AA0	
400		3VA2440-6HN32-0AA0			3VA2440-7HN32-0AA0			3VA2440-8HN32-0AA0	
630		3VA2463-6HN32-0AA0			3VA2463-7HN32-0AA0			3VA2463-8HN32-0AA0	

*** You can order this quantity or a multiple thereof.**

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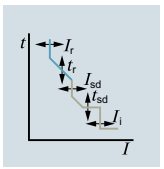
PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	S function (short-time delayed short-circuit protection "S") I_{sd}	Operating current of the instantaneous short-circuit protection "I" I_i	DT	**I_{cu} up to 55 kA at 415 V, medium breaking capacity M** See "Overview", p. 2/6 and 2/7 (M)	
		A	A	A	A		Article No. www.siemens.com/product?Article No.	Basic price per PU

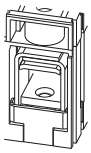
3-pole, fixed-mounted, 3VA20 to 3VA24, up to 630 A
Electronic trip unit

I201_18480



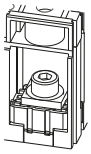
Line and generator protection, with display, ETU550 LSI

With adjustable overload protection I_r, adjustable delayed short-circuit protection I_{sd} and adjustable instantaneous short-circuit protection I_i



Connection with box terminal

3VA20	25	10 ... 25	15 ... 250	38 ... 300	3VA2025-5JP36-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2040-5JP36-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2063-5JP36-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2010-5JP36-0AA0
3VA21	25	10 ... 25	15 ... 250	38 ... 300	3VA2125-5JP36-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2140-5JP36-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2163-5JP36-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2110-5JP36-0AA0
	160	63 ... 160	96 ... 1600	240 ... 1600	3VA2116-5JP36-0AA0



Connection with lug terminal

3VA20	25	10 ... 25	15 ... 250	38 ... 300	3VA2025-5JP32-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2040-5JP32-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2063-5JP32-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2010-5JP32-0AA0
3VA21	25	10 ... 25	15 ... 250	38 ... 300	3VA2125-5JP32-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2140-5JP32-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2163-5JP32-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2110-5JP32-0AA0
	160	63 ... 160	96 ... 1600	240 ... 1600	3VA2116-5JP32-0AA0
3VA22	160	63 ... 160	96 ... 1600	240 ... 1920	3VA2216-5JP32-0AA0
	250	100 ... 250	150 ... 2500	375 ... 2500	3VA2225-5JP32-0AA0
3VA23	250	100 ... 250	150 ... 2500	375 ... 3000	3VA2325-5JP32-0AA0
	400	160 ... 400	240 ... 4000	600 ... 4000	3VA2340-5JP32-0AA0
3VA24	400	160 ... 400	240 ... 4000	600 ... 6000[1)]	3VA2440-5JP32-0AA0
	500	200 ... 500	300 ... 5000	750 ... 7000	3VA2450-5JP32-0AA0
	630	250 ... 630	378 ... 5670	945 ... 5670	3VA2463-5JP32-0AA0

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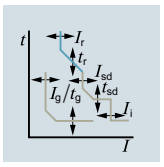
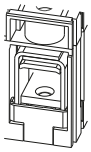


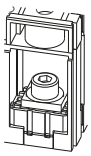
Line and generator protection, with display, ETU560 LSIG

With adjustable overload protection I_r, adjustable delayed short-circuit protection I_{sd}, adjustable instantaneous short-circuit protection I_i and adjustable ground-fault protection I_g



Connection with box terminal

3VA20	25	10 ... 25	15 ... 250	38 ... 300	3VA2025-5JQ36-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2040-5JQ36-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2063-5JQ36-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2010-5JQ36-0AA0
3VA21	25	10 ... 25	15 ... 250	38 ... 300	3VA2125-5JQ36-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2140-5JQ36-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2163-5JQ36-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2110-5JQ36-0AA0
	160	63 ... 160	96 ... 1600	240 ... 1600	3VA2116-5JQ36-0AA0



Connection with lug terminal

3VA20	25	10 ... 25	15 ... 250	38 ... 300	3VA2025-5JQ32-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2040-5JQ32-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2063-5JQ32-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2010-5JQ32-0AA0
3VA21	25	10 ... 25	15 ... 250	38 ... 300	3VA2125-5JQ32-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2140-5JQ32-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2163-5JQ32-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2110-5JQ32-0AA0
	160	63 ... 160	96 ... 1600	240 ... 1600	3VA2116-5JQ32-0AA0
3VA22	160	63 ... 160	96 ... 1600	240 ... 1920	3VA2216-5JQ32-0AA0
	250	100 ... 250	150 ... 2500	375 ... 2500	3VA2225-5JQ32-0AA0
3VA23	250	100 ... 250	150 ... 2500	375 ... 3000	3VA2325-5JQ32-0AA0
	400	160 ... 400	240 ... 4000	600 ... 4000	3VA2340-5JQ32-0AA0
3VA24	400	160 ... 400	240 ... 4000	600 ... 6000[1)]	3VA2440-5JQ32-0AA0
	500	200 ... 500	300 ... 5000	750 ... 7000	3VA2450-5JQ32-0AA0
	630	250 ... 630	378 ... 5670	945 ... 5670	3VA2463-5JQ32-0AA0

[1)] At breaking capacity L 4400 A

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	I_{cu} up to 85 kA at 415 V, high breaking capacity H (H) See "Overview", p. 2/6 and 2/7 Article No. www.siemens.com/product?Article No.	Basic price per PU	DT	I_{cu} up to 110 kA at 415 V, very high breaking capacity C (C) See "Overview", p. 2/6 and 2/7 Article No. www.siemens.com/product?Article No.	Basic price per PU	DT	I_{cu} up to 150 kA at 415 V, extremely high breaking capacity L (L) See "Overview", p. 2/6 and 2/7 Article No. www.siemens.com/product?Article No.	Basic price per PU
A									
Line and generator protection, with display, ETU550 LSI With adjustable overload protection I_r, adjustable delayed short-circuit protection I_{sd} and adjustable instantaneous short-circuit protection I_i									
		Connection with box terminal							
25		3VA2025-6JP36-0AA0			3VA2025-7JP36-0AA0			3VA2025-8JP36-0AA0	
40		3VA2040-6JP36-0AA0			3VA2040-7JP36-0AA0			3VA2040-8JP36-0AA0	
63		3VA2063-6JP36-0AA0			3VA2063-7JP36-0AA0			3VA2063-8JP36-0AA0	
100		3VA2010-6JP36-0AA0			3VA2010-7JP36-0AA0			3VA2010-8JP36-0AA0	
25		3VA2125-6JP36-0AA0			3VA2125-7JP36-0AA0			3VA2125-8JP36-0AA0	
40		3VA2140-6JP36-0AA0			3VA2140-7JP36-0AA0			3VA2140-8JP36-0AA0	
63		3VA2163-6JP36-0AA0			3VA2163-7JP36-0AA0			3VA2163-8JP36-0AA0	
100		3VA2110-6JP36-0AA0			3VA2110-7JP36-0AA0			3VA2110-8JP36-0AA0	
160		3VA2116-6JP36-0AA0			3VA2116-7JP36-0AA0			3VA2116-8JP36-0AA0	
		Connection with lug terminal							
25		3VA2025-6JP32-0AA0			3VA2025-7JP32-0AA0			3VA2025-8JP32-0AA0	
40		3VA2040-6JP32-0AA0			3VA2040-7JP32-0AA0			3VA2040-8JP32-0AA0	
63		3VA2063-6JP32-0AA0			3VA2063-7JP32-0AA0			3VA2063-8JP32-0AA0	
100		3VA2010-6JP32-0AA0			3VA2010-7JP32-0AA0			3VA2010-8JP32-0AA0	
25		3VA2125-6JP32-0AA0			3VA2125-7JP32-0AA0			3VA2125-8JP32-0AA0	
40		3VA2140-6JP32-0AA0			3VA2140-7JP32-0AA0			3VA2140-8JP32-0AA0	
63		3VA2163-6JP32-0AA0			3VA2163-7JP32-0AA0			3VA2163-8JP32-0AA0	
100		3VA2110-6JP32-0AA0			3VA2110-7JP32-0AA0			3VA2110-8JP32-0AA0	
160		3VA2116-6JP32-0AA0			3VA2116-7JP32-0AA0			3VA2116-8JP32-0AA0	
160		3VA2216-6JP32-0AA0			3VA2216-7JP32-0AA0			3VA2216-8JP32-0AA0	
250		3VA2225-6JP32-0AA0			3VA2225-7JP32-0AA0			3VA2225-8JP32-0AA0	
250		3VA2325-6JP32-0AA0			3VA2325-7JP32-0AA0			3VA2325-8JP32-0AA0	
400		3VA2340-6JP32-0AA0			3VA2340-7JP32-0AA0			3VA2340-8JP32-0AA0	
400		3VA2440-6JP32-0AA0			3VA2440-7JP32-0AA0			3VA2440-8JP32-0AA0	
500		3VA2450-6JP32-0AA0			3VA2450-7JP32-0AA0			--	
630		3VA2463-6JP32-0AA0			3VA2463-7JP32-0AA0			3VA2463-8JP32-0AA0	
Line and generator protection, with display, ETU560 LSIG With adjustable overload protection I_r, adjustable delayed short-circuit protection I_{sd}, adjustable instantaneous short-circuit protection I_i and adjustable ground-fault protection I_g									
		Connection with box terminal							
25		3VA2025-6JQ36-0AA0			3VA2025-7JQ36-0AA0			3VA2025-8JQ36-0AA0	
40		3VA2040-6JQ36-0AA0			3VA2040-7JQ36-0AA0			3VA2040-8JQ36-0AA0	
63		3VA2063-6JQ36-0AA0			3VA2063-7JQ36-0AA0			3VA2063-8JQ36-0AA0	
100		3VA2010-6JQ36-0AA0			3VA2010-7JQ36-0AA0			3VA2010-8JQ36-0AA0	
25		3VA2125-6JQ36-0AA0			3VA2125-7JQ36-0AA0			3VA2125-8JQ36-0AA0	
40		3VA2140-6JQ36-0AA0			3VA2140-7JQ36-0AA0			3VA2140-8JQ36-0AA0	
63		3VA2163-6JQ36-0AA0			3VA2163-7JQ36-0AA0			3VA2163-8JQ36-0AA0	
100		3VA2110-6JQ36-0AA0			3VA2110-7JQ36-0AA0			3VA2110-8JQ36-0AA0	
160		3VA2116-6JQ36-0AA0			3VA2116-7JQ36-0AA0			3VA2116-8JQ36-0AA0	
		Connection with lug terminal							
25		3VA2025-6JQ32-0AA0			3VA2025-7JQ32-0AA0			3VA2025-8JQ32-0AA0	
40		3VA2040-6JQ32-0AA0			3VA2040-7JQ32-0AA0			3VA2040-8JQ32-0AA0	
63		3VA2063-6JQ32-0AA0			3VA2063-7JQ32-0AA0			3VA2063-8JQ32-0AA0	
100		3VA2010-6JQ32-0AA0			3VA2010-7JQ32-0AA0			3VA2010-8JQ32-0AA0	
25		3VA2125-6JQ32-0AA0			3VA2125-7JQ32-0AA0			3VA2125-8JQ32-0AA0	
40		3VA2140-6JQ32-0AA0			3VA2140-7JQ32-0AA0			3VA2140-8JQ32-0AA0	
63		3VA2163-6JQ32-0AA0			3VA2163-7JQ32-0AA0			3VA2163-8JQ32-0AA0	
100		3VA2110-6JQ32-0AA0			3VA2110-7JQ32-0AA0			3VA2110-8JQ32-0AA0	
160		3VA2116-6JQ32-0AA0			3VA2116-7JQ32-0AA0			3VA2116-8JQ32-0AA0	
160		3VA2216-6JQ32-0AA0			3VA2216-7JQ32-0AA0			3VA2216-8JQ32-0AA0	
250		3VA2225-6JQ32-0AA0			3VA2225-7JQ32-0AA0			3VA2225-8JQ32-0AA0	
250		3VA2325-6JQ32-0AA0			3VA2325-7JQ32-0AA0			3VA2325-8JQ32-0AA0	
400		3VA2340-6JQ32-0AA0			3VA2340-7JQ32-0AA0			3VA2340-8JQ32-0AA0	
400		3VA2440-6JQ32-0AA0			3VA2440-7JQ32-0AA0			3VA2440-8JQ32-0AA0	
500		3VA2450-6JQ32-0AA0			3VA2450-7JQ32-0AA0			--	
630		3VA2463-6JQ32-0AA0			3VA2463-7JQ32-0AA0			3VA2463-8JQ32-0AA0	

* You can order this quantity or a multiple thereof.

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Molded Case Circuit Breakers

3VA2 Molded Case Circuit Breakers up to 630 A, IEC NEW

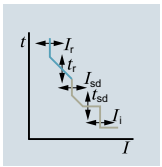
Line protection

PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	S function (short-time delayed short-circuit protection "S") I_{sd}	Operating current of the instanta-neous short-circuit protection "I" I_i	DT	**I_{cu} up to 55 kA at 415 V, medium breaking capacity M** (M) See "Overview", p. 2/6 and 2/7 Article No. www.siemens.com/product?Article No.	Basic price per PU
		A	A	A	A			

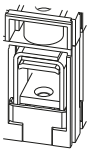
3-pole, fixed-mounted, 3VA20 to 3VA24, up to 630 A Electronic trip unit

I201_18482



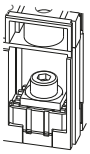
Line and generator protection, with display, with metering function, ETU850 LSI

With adjustable overload protection I_r, adjustable delayed short-circuit protection I_{sd} and adjustable instantaneous short-circuit protection I_i



Connection with box terminal

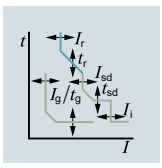
3VA20	25	10 ... 25	15 ... 250	38 ... 300	3VA2025-5KP36-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2040-5KP36-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2063-5KP36-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2010-5KP36-0AA0
3VA21	25	10 ... 25	15 ... 250	38 ... 300	3VA2125-5KP36-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2140-5KP36-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2163-5KP36-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2110-5KP36-0AA0
	160	63 ... 160	96 ... 1600	240 ... 1600	3VA2116-5KP36-0AA0



Connection with lug terminal

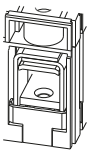
3VA20	25	10 ... 25	15 ... 250	38 ... 300	3VA2025-5KP32-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2040-5KP32-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2063-5KP32-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2010-5KP32-0AA0
3VA21	25	10 ... 25	15 ... 250	38 ... 300	3VA2125-5KP32-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2140-5KP32-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2163-5KP32-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2110-5KP32-0AA0
	160	63 ... 160	96 ... 1600	240 ... 1600	3VA2116-5KP32-0AA0
3VA22	160	63 ... 160	96 ... 1600	240 ... 1920	3VA2216-5KP32-0AA0
	250	100 ... 250	150 ... 2500	375 ... 2500	3VA2225-5KP32-0AA0
3VA23	250	100 ... 250	150 ... 2500	375 ... 3000	3VA2325-5KP32-0AA0
	400	160 ... 400	240 ... 4000	600 ... 4000	3VA2340-5KP32-0AA0
3VA24	400	160 ... 400	240 ... 4000	600 ... 6000[1)]	3VA2440-5KP32-0AA0
	500	200 ... 500	300 ... 5000	750 ... 7000	3VA2450-5KP32-0AA0
	630	250 ... 630	378 ... 5670	945 ... 5670	3VA2463-5KP32-0AA0

I201_18483



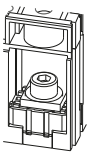
Line and generator protection, with display, with metering function, ETU860 LSIG

With adjustable overload protection I_r, adjustable delayed short-circuit protection I_{sd}, adjustable instantaneous short-circuit protection I_i and adjustable ground-fault protection I_g



Connection with box terminal

3VA20	25	10 ... 25	15 ... 250	38 ... 300	3VA2025-5KQ36-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2040-5KQ36-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2063-5KQ36-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2010-5KQ36-0AA0
3VA21	25	10 ... 25	15 ... 250	38 ... 300	3VA2125-5KQ36-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2140-5KQ36-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2163-5KQ36-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2110-5KQ36-0AA0
	160	63 ... 160	96 ... 1600	240 ... 1600	3VA2116-5KQ36-0AA0



Connection with lug terminal

3VA20	25	10 ... 25	15 ... 250	38 ... 300	3VA2025-5KQ32-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2040-5KQ32-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2063-5KQ32-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2010-5KQ32-0AA0
3VA21	25	10 ... 25	15 ... 250	38 ... 300	3VA2125-5KQ32-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2140-5KQ32-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2163-5KQ32-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2110-5KQ32-0AA0
	160	63 ... 160	96 ... 1600	240 ... 1600	3VA2116-5KQ32-0AA0
3VA22	160	63 ... 160	96 ... 1600	240 ... 1920	3VA2216-5KQ32-0AA0
	250	100 ... 250	150 ... 2500	375 ... 2500	3VA2225-5KQ32-0AA0
3VA23	250	100 ... 250	150 ... 2500	375 ... 3000	3VA2325-5KQ32-0AA0
	400	160 ... 400	240 ... 4000	600 ... 4000	3VA2340-5KQ32-0AA0
3VA24	400	160 ... 400	240 ... 4000	600 ... 6000[1)]	3VA2440-5KQ32-0AA0
	500	200 ... 500	300 ... 5000	750 ... 7000	3VA2450-5KQ32-0AA0
	630	250 ... 630	378 ... 5670	945 ... 5670	3VA2463-5KQ32-0AA0

[1)] At breaking capacity L 4400 A

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	I_{cu} up to 85 kA at 415 V, high breaking capacity H (H) See "Overview", p. 2/6 and 2/7 Article No. www.siemens.com/product?Article No.	Basic price per PU	DT	I_{cu} up to 110 kA at 415 V, very high breaking capacity C (C) See "Overview", p. 2/6 and 2/7 Article No. www.siemens.com/product?Article No.	Basic price per PU	DT	I_{cu} up to 150 kA at 415 V, extremely high breaking capacity L (L) See "Overview", p. 2/6 and 2/7 Article No. www.siemens.com/product?Article No.	Basic price per PU
A									
Line and generator protection, with display, with metering function, ETU850 LSI									
With adjustable overload protection I_r, adjustable delayed short-circuit protection I_{sd} and adjustable instantaneous short-circuit protection I_i									
		Connection with box terminal							
25		3VA2025-6KP36-0AA0			3VA2025-7KP36-0AA0			3VA2025-8KP36-0AA0	
40		3VA2040-6KP36-0AA0			3VA2040-7KP36-0AA0			3VA2040-8KP36-0AA0	
63		3VA2063-6KP36-0AA0			3VA2063-7KP36-0AA0			3VA2063-8KP36-0AA0	
100		3VA2010-6KP36-0AA0			3VA2010-7KP36-0AA0			3VA2010-8KP36-0AA0	
25		3VA2125-6KP36-0AA0			3VA2125-7KP36-0AA0			3VA2125-8KP36-0AA0	
40		3VA2140-6KP36-0AA0			3VA2140-7KP36-0AA0			3VA2140-8KP36-0AA0	
63		3VA2163-6KP36-0AA0			3VA2163-7KP36-0AA0			3VA2163-8KP36-0AA0	
100		3VA2110-6KP36-0AA0			3VA2110-7KP36-0AA0			3VA2110-8KP36-0AA0	
160		3VA2116-6KP36-0AA0			3VA2116-7KP36-0AA0			3VA2116-8KP36-0AA0	
		Connection with lug terminal							
25		3VA2025-6KP32-0AA0			3VA2025-7KP32-0AA0			3VA2025-8KP32-0AA0	
40		3VA2040-6KP32-0AA0			3VA2040-7KP32-0AA0			3VA2040-8KP32-0AA0	
63		3VA2063-6KP32-0AA0			3VA2063-7KP32-0AA0			3VA2063-8KP32-0AA0	
100		3VA2010-6KP32-0AA0			3VA2010-7KP32-0AA0			3VA2010-8KP32-0AA0	
25		3VA2125-6KP32-0AA0			3VA2125-7KP32-0AA0			3VA2125-8KP32-0AA0	
40		3VA2140-6KP32-0AA0			3VA2140-7KP32-0AA0			3VA2140-8KP32-0AA0	
63		3VA2163-6KP32-0AA0			3VA2163-7KP32-0AA0			3VA2163-8KP32-0AA0	
100		3VA2110-6KP32-0AA0			3VA2110-7KP32-0AA0			3VA2110-8KP32-0AA0	
160		3VA2116-6KP32-0AA0			3VA2116-7KP32-0AA0			3VA2116-8KP32-0AA0	
160		3VA2216-6KP32-0AA0			3VA2216-7KP32-0AA0			3VA2216-8KP32-0AA0	
250		3VA2225-6KP32-0AA0			3VA2225-7KP32-0AA0			3VA2225-8KP32-0AA0	
250		3VA2325-6KP32-0AA0			3VA2325-7KP32-0AA0			3VA2325-8KP32-0AA0	
400		3VA2340-6KP32-0AA0			3VA2340-7KP32-0AA0			3VA2340-8KP32-0AA0	
400		3VA2440-6KP32-0AA0			3VA2440-7KP32-0AA0			3VA2440-8KP32-0AA0	
500		3VA2450-6KP32-0AA0			3VA2450-7KP32-0AA0			--	
630		3VA2463-6KP32-0AA0			3VA2463-7KP32-0AA0			3VA2463-8KP32-0AA0	
Line and generator protection, with display, with metering function, ETU860 LSIG									
With adjustable overload protection I_r, adjustable delayed short-circuit protection I_{sd}, adjustable instantaneous short-circuit protection I_i and adjustable ground-fault protection I_g									
		Connection with box terminal							
25		3VA2025-6KQ36-0AA0			3VA2025-7KQ36-0AA0			3VA2025-8KQ36-0AA0	
40		3VA2040-6KQ36-0AA0			3VA2040-7KQ36-0AA0			3VA2040-8KQ36-0AA0	
63		3VA2063-6KQ36-0AA0			3VA2063-7KQ36-0AA0			3VA2063-8KQ36-0AA0	
100		3VA2010-6KQ36-0AA0			3VA2010-7KQ36-0AA0			3VA2010-8KQ36-0AA0	
25		3VA2125-6KQ36-0AA0			3VA2125-7KQ36-0AA0			3VA2125-8KQ36-0AA0	
40		3VA2140-6KQ36-0AA0			3VA2140-7KQ36-0AA0			3VA2140-8KQ36-0AA0	
63		3VA2163-6KQ36-0AA0			3VA2163-7KQ36-0AA0			3VA2163-8KQ36-0AA0	
100		3VA2110-6KQ36-0AA0			3VA2110-7KQ36-0AA0			3VA2110-8KQ36-0AA0	
160		3VA2116-6KQ36-0AA0			3VA2116-7KQ36-0AA0			3VA2116-8KQ36-0AA0	
		Connection with lug terminal							
25		3VA2025-6KQ32-0AA0			3VA2025-7KQ32-0AA0			3VA2025-8KQ32-0AA0	
40		3VA2040-6KQ32-0AA0			3VA2040-7KQ32-0AA0			3VA2040-8KQ32-0AA0	
63		3VA2063-6KQ32-0AA0			3VA2063-7KQ32-0AA0			3VA2063-8KQ32-0AA0	
100		3VA2010-6KQ32-0AA0			3VA2010-7KQ32-0AA0			3VA2010-8KQ32-0AA0	
25		3VA2125-6KQ32-0AA0			3VA2125-7KQ32-0AA0			3VA2125-8KQ32-0AA0	
40		3VA2140-6KQ32-0AA0			3VA2140-7KQ32-0AA0			3VA2140-8KQ32-0AA0	
63		3VA2163-6KQ32-0AA0			3VA2163-7KQ32-0AA0			3VA2163-8KQ32-0AA0	
100		3VA2110-6KQ32-0AA0			3VA2110-7KQ32-0AA0			3VA2110-8KQ32-0AA0	
160		3VA2116-6KQ32-0AA0			3VA2116-7KQ32-0AA0			3VA2116-8KQ32-0AA0	
160		3VA2216-6KQ32-0AA0			3VA2216-7KQ32-0AA0			3VA2216-8KQ32-0AA0	
250		3VA2225-6KQ32-0AA0			3VA2225-7KQ32-0AA0			3VA2225-8KQ32-0AA0	
250		3VA2325-6KQ32-0AA0			3VA2325-7KQ32-0AA0			3VA2325-8KQ32-0AA0	
400		3VA2340-6KQ32-0AA0			3VA2340-7KQ32-0AA0			3VA2340-8KQ32-0AA0	
400		3VA2440-6KQ32-0AA0			3VA2440-7KQ32-0AA0			3VA2440-8KQ32-0AA0	
500		3VA2450-6KQ32-0AA0			3VA2450-7KQ32-0AA0			--	
630		3VA2463-6KQ32-0AA0			3VA2463-7KQ32-0AA0			3VA2463-8KQ32-0AA0	

* You can order this quantity or a multiple thereof.

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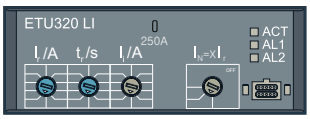
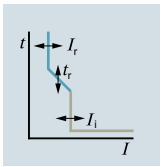
PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	S function (short-time delayed short-circuit protection "S") I_{sd}	Operating current of the instanta-neous short-circuit protection "I" I_i	DT	I_{cu} up to 55 kA at 415 V, medium breaking capacity M (M) See "Overview", p. 2/6 and 2/7	
		A	A	A	A		Article No. www.siemens.com/product?Article No.	Basic price per PU

4-pole, fixed-mounted, 3VA20 to 3VA24, up to 630 A
Electronic trip unit

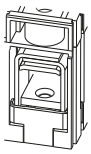


I201_18830



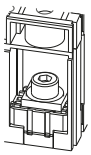
Line protection, ETU320 LI

With adjustable overload protection I_r and adjustable instantaneous short-circuit protection I_i, with neutral protection against overload and short circuit 0 % or 100 % (and 50 % with I_n 100 A and above)



Connection with box terminal

3VA20	25	10 ... 25	--	38 ... 300	3VA2025-5HL46-0AA0
	40	16 ... 40	--	60 ... 480	3VA2040-5HL46-0AA0
	63	25 ... 63	--	95 ... 756	3VA2063-5HL46-0AA0
	100	40 ... 100	--	150 ... 1200	3VA2010-5HL46-0AA0
3VA21	25	10 ... 25	--	38 ... 300	3VA2125-5HL46-0AA0
	40	16 ... 40	--	60 ... 480	3VA2140-5HL46-0AA0
	63	25 ... 63	--	95 ... 756	3VA2163-5HL46-0AA0
	100	40 ... 100	--	150 ... 1200	3VA2110-5HL46-0AA0
	160	63 ... 160	--	240 ... 1600	3VA2116-5HL46-0AA0



Connection with lug terminal

3VA20	25	10 ... 25	--	38 ... 300	3VA2025-5HL42-0AA0
	40	16 ... 40	--	60 ... 480	3VA2040-5HL42-0AA0
	63	25 ... 63	--	95 ... 756	3VA2063-5HL42-0AA0
	100	40 ... 100	--	150 ... 1200	3VA2010-5HL42-0AA0
3VA21	25	10 ... 25	--	38 ... 300	3VA2125-5HL42-0AA0
	40	16 ... 40	--	60 ... 480	3VA2140-5HL42-0AA0
	63	25 ... 63	--	95 ... 756	3VA2163-5HL42-0AA0
	100	40 ... 100	--	150 ... 1200	3VA2110-5HL42-0AA0
	160	63 ... 160	--	240 ... 1600	3VA2116-5HL42-0AA0
3VA22	160	63 ... 160	--	240 ... 1920	3VA2216-5HL42-0AA0
	250	100 ... 250	--	375 ... 2500	3VA2225-5HL42-0AA0
3VA23	250	100 ... 250	--	375 ... 3000	3VA2325-5HL42-0AA0
	400	160 ... 400	--	600 ... 4000	3VA2340-5HL42-0AA0
3VA24	400	160 ... 400	--	600 ... 4800[1)]	3VA2440-5HL42-0AA0
	630	250 ... 630	--	945 ... 5670	3VA2463-5HL42-0AA0

1) At breaking capacity L 4400 A

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	I_{cu} up to 85 kA at 415 V, high breaking capacity H (H) See "Overview", p. 2/6 and 2/7		DT	I_{cu} up to 110 kA at 415 V, very high breaking capacity C (C) See "Overview", p. 2/6 and 2/7		DT	I_{cu} up to 150 kA at 415 V, extremely high breaking capacity L (L) See "Overview", p. 2/6 and 2/7	
		Article No. www.siemens.com/product?Article No.	Basic price per PU		Article No. www.siemens.com/product?Article No.	Basic price per PU		Article No. www.siemens.com/product?Article No.	Basic price per PU
A									
Line protection, ETU320 LI With adjustable overload protection I_r and adjustable instantaneous short-circuit protection I_i, with neutral protection against overload and short circuit 0 % or 100 % (and 50 % with I_n 100 A and above)									
		Connection with box terminal							
25		3VA2025-6HL46-0AA0			3VA2025-7HL46-0AA0			3VA2025-8HL46-0AA0	
40		3VA2040-6HL46-0AA0			3VA2040-7HL46-0AA0			3VA2040-8HL46-0AA0	
63		3VA2063-6HL46-0AA0			3VA2063-7HL46-0AA0			3VA2063-8HL46-0AA0	
100		3VA2010-6HL46-0AA0			3VA2010-7HL46-0AA0			3VA2010-8HL46-0AA0	
25		3VA2125-6HL46-0AA0			3VA2125-7HL46-0AA0			3VA2125-8HL46-0AA0	
40		3VA2140-6HL46-0AA0			3VA2140-7HL46-0AA0			3VA2140-8HL46-0AA0	
63		3VA2163-6HL46-0AA0			3VA2163-7HL46-0AA0			3VA2163-8HL46-0AA0	
100		3VA2110-6HL46-0AA0			3VA2110-7HL46-0AA0			3VA2110-8HL46-0AA0	
160		3VA2116-6HL46-0AA0			3VA2116-7HL46-0AA0			3VA2116-8HL46-0AA0	
		Connection with lug terminal							
25		3VA2025-6HL42-0AA0			3VA2025-7HL42-0AA0			3VA2025-8HL42-0AA0	
40		3VA2040-6HL42-0AA0			3VA2040-7HL42-0AA0			3VA2040-8HL42-0AA0	
63		3VA2063-6HL42-0AA0			3VA2063-7HL42-0AA0			3VA2063-8HL42-0AA0	
100		3VA2010-6HL42-0AA0			3VA2010-7HL42-0AA0			3VA2010-8HL42-0AA0	
25		3VA2125-6HL42-0AA0			3VA2125-7HL42-0AA0			3VA2125-8HL42-0AA0	
40		3VA2140-6HL42-0AA0			3VA2140-7HL42-0AA0			3VA2140-8HL42-0AA0	
63		3VA2163-6HL42-0AA0			3VA2163-7HL42-0AA0			3VA2163-8HL42-0AA0	
100		3VA2110-6HL42-0AA0			3VA2110-7HL42-0AA0			3VA2110-8HL42-0AA0	
160		3VA2116-6HL42-0AA0			3VA2116-7HL42-0AA0			3VA2116-8HL42-0AA0	
160		3VA2216-6HL42-0AA0			3VA2216-7HL42-0AA0			3VA2216-8HL42-0AA0	
250		3VA2225-6HL42-0AA0			3VA2225-7HL42-0AA0			3VA2225-8HL42-0AA0	
250		3VA2325-6HL42-0AA0			3VA2325-7HL42-0AA0			3VA2325-8HL42-0AA0	
400		3VA2340-6HL42-0AA0			3VA2340-7HL42-0AA0			3VA2340-8HL42-0AA0	
400		3VA2440-6HL42-0AA0			3VA2440-7HL42-0AA0			3VA2440-8HL42-0AA0	
630		3VA2463-6HL42-0AA0			3VA2463-7HL42-0AA0			3VA2463-8HL42-0AA0	

*** You can order this quantity or a multiple thereof.**

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Molded Case Circuit Breakers

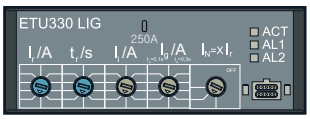
3VA2 Molded Case Circuit Breakers up to 630 A, IEC NEW

Line protection

PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Operating current of the instantaneous short-circuit protection "I" I_i	Ground-fault protection G I_g	DT	**I_{cu} up to 55 kA at 415 V, medium breaking capacity M** See "Overview", p. 2/6 and 2/7 (M)
		A	A	A	A		Article No. www.siemens.com/product?Article No. / Basic price per PU

4-pole, fixed-mounted, 3VA20 to 3VA24, up to 630 A
Electronic trip unit



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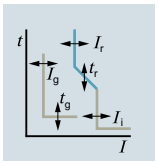
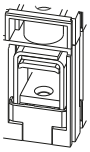


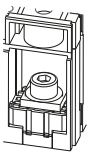
Line protection, ETU330 LIG

With adjustable overload protection I_r and adjustable instantaneous short-circuit protection I_i, with neutral protection against overload and short circuit 0 % or 100 % (and 50 % with I_n 100 A and above) and adjustable ground-fault protection I_g



Connection with box terminal

3VA20	25	10 ... 25	38 ... 300	15 ... 25	**3VA2025-5HM46-0AA0**
	40	16 ... 40	60 ... 480	16 ... 40	**3VA2040-5HM46-0AA0**
	63	25 ... 63	95 ... 756	16 ... 63	**3VA2063-5HM46-0AA0**
	100	40 ... 100	150 ... 1200	20 ... 100	**3VA2010-5HM46-0AA0**
3VA21	25	10 ... 25	38 ... 300	15 ... 25	**3VA2125-5HM46-0AA0**
	40	16 ... 40	60 ... 480	16 ... 40	**3VA2140-5HM46-0AA0**
	63	25 ... 63	95 ... 756	16 ... 63	**3VA2163-5HM46-0AA0**
	100	40 ... 100	150 ... 1200	20 ... 100	**3VA2110-5HM46-0AA0**
	160	63 ... 160	240 ... 1600	32 ... 160	**3VA2116-5HM46-0AA0**



Connection with lug terminal

3VA20	25	10 ... 25	38 ... 300	15 ... 25	**3VA2025-5HM42-0AA0**
	40	16 ... 40	60 ... 480	16 ... 40	**3VA2040-5HM42-0AA0**
	63	25 ... 63	95 ... 756	16 ... 63	**3VA2063-5HM42-0AA0**
	100	40 ... 100	150 ... 1200	20 ... 100	**3VA2010-5HM42-0AA0**
3VA21	25	10 ... 25	38 ... 300	15 ... 25	**3VA2125-5HM42-0AA0**
	40	16 ... 40	60 ... 480	16 ... 40	**3VA2140-5HM42-0AA0**
	63	25 ... 63	95 ... 756	16 ... 63	**3VA2163-5HM42-0AA0**
	100	40 ... 100	150 ... 1200	20 ... 100	**3VA2110-5HM42-0AA0**
	160	63 ... 160	240 ... 1600	32 ... 160	**3VA2116-5HM42-0AA0**
3VA22	160	63 ... 160	240 ... 1920	32 ... 160	**3VA2216-5HM42-0AA0**
	250	100 ... 250	375 ... 2500	50 ... 250	**3VA2225-5HM42-0AA0**
3VA23	250	100 ... 250	375 ... 3000	50 ... 250	**3VA2325-5HM42-0AA0**
	400	160 ... 400	600 ... 4000	80 ... 400	**3VA2340-5HM42-0AA0**
3VA24	400	160 ... 400	600 ... 4800[1)]	80 ... 400	**3VA2440-5HM42-0AA0**
	630	250 ... 630	945 ... 5670	126 ... 630	**3VA2463-5HM42-0AA0**

1) At breaking capacity L 4400 A

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	I_{cu} up to 85 kA at 415 V, high breaking capacity H (H) See "Overview", p. 2/6 and 2/7	DT	I_{cu} up to 110 kA at 415 V, very high breaking capacity C (C) See "Overview", p. 2/6 and 2/7	DT	I_{cu} up to 150 kA at 415 V, extremely high breaking capacity L (L) See "Overview", p. 2/6 and 2/7
		Article No. www.siemens.com/product?Article No. Basic price per PU		Article No. www.siemens.com/product?Article No. Basic price per PU		Article No. www.siemens.com/product?Article No. Basic price per PU
A						

Line protection, ETU330 LIG
With adjustable overload protection I_r and adjustable instantaneous short-circuit protection I_i, with neutral protection against overload and short circuit 0 % or 100 % (and 50 % with I_n 100 A and above) and adjustable ground-fault protection I_g

	Connection with box terminal		
25	3VA2025-6HM46-0AA0	3VA2025-7HM46-0AA0	3VA2025-8HM46-0AA0
40	3VA2040-6HM46-0AA0	3VA2040-7HM46-0AA0	3VA2040-8HM46-0AA0
63	3VA2063-6HM46-0AA0	3VA2063-7HM46-0AA0	3VA2063-8HM46-0AA0
100	3VA2010-6HM46-0AA0	3VA2010-7HM46-0AA0	3VA2010-8HM46-0AA0
25	3VA2125-6HM46-0AA0	3VA2125-7HM46-0AA0	3VA2125-8HM46-0AA0
40	3VA2140-6HM46-0AA0	3VA2140-7HM46-0AA0	3VA2140-8HM46-0AA0
63	3VA2163-6HM46-0AA0	3VA2163-7HM46-0AA0	3VA2163-8HM46-0AA0
100	3VA2110-6HM46-0AA0	3VA2110-7HM46-0AA0	3VA2110-8HM46-0AA0
160	3VA2116-6HM46-0AA0	3VA2116-7HM46-0AA0	3VA2116-8HM46-0AA0
	Connection with lug terminal		
25	3VA2025-6HM42-0AA0	3VA2025-7HM42-0AA0	3VA2025-8HM42-0AA0
40	3VA2040-6HM42-0AA0	3VA2040-7HM42-0AA0	3VA2040-8HM42-0AA0
63	3VA2063-6HM42-0AA0	3VA2063-7HM42-0AA0	3VA2063-8HM42-0AA0
100	3VA2010-6HM42-0AA0	3VA2010-7HM42-0AA0	3VA2010-8HM42-0AA0
25	3VA2125-6HM42-0AA0	3VA2125-7HM42-0AA0	3VA2125-8HM42-0AA0
40	3VA2140-6HM42-0AA0	3VA2140-7HM42-0AA0	3VA2140-8HM42-0AA0
63	3VA2163-6HM42-0AA0	3VA2163-7HM42-0AA0	3VA2163-8HM42-0AA0
100	3VA2110-6HM42-0AA0	3VA2110-7HM42-0AA0	3VA2110-8HM42-0AA0
160	3VA2116-6HM42-0AA0	3VA2116-7HM42-0AA0	3VA2116-8HM42-0AA0
160	3VA2216-6HM42-0AA0	3VA2216-7HM42-0AA0	3VA2216-8HM42-0AA0
250	3VA2225-6HM42-0AA0	3VA2225-7HM42-0AA0	3VA2225-8HM42-0AA0
250	3VA2325-6HM42-0AA0	3VA2325-7HM42-0AA0	3VA2325-8HM42-0AA0
400	3VA2340-6HM42-0AA0	3VA2340-7HM42-0AA0	3VA2340-8HM42-0AA0
400	3VA2440-6HM42-0AA0	3VA2440-7HM42-0AA0	3VA2440-8HM42-0AA0
630	3VA2463-6HM42-0AA0	3VA2463-7HM42-0AA0	3VA2463-8HM42-0AA0

*** You can order this quantity or a multiple thereof.**

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Molded Case Circuit Breakers

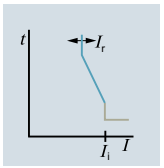
3VA2 Molded Case Circuit Breakers up to 630 A, IEC NEW

Line protection

PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

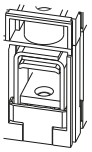
Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	S function (short-time delayed short-circuit protection "S") I_{sd}	Operating current of the instanta-neous short-circuit protection "I" I_i	DT	I_{cu} up to 55 kA at 415 V, medium breaking capacity M (M) See "Overview", p. 2/6 and 2/7 Article No. www.siemens.com/product?Article No.	Basic price per PU
		A	A	A	A			

4-pole, fixed-mounted, 3VA21 to 3VA24, up to 630 A Electronic trip unit



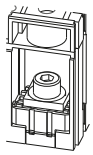
Line protection, ETU340 ELISA

With easily adjustable characteristic (characteristic form of a fuse) with "N" overload and short-circuit release 0 %, 50 % or 100 %



Connection with box terminal

3VA21	25	10 ... 25	--	375	3VA2125-5HK46-0AA0
	40	16 ... 40	--	600	3VA2140-5HK46-0AA0
	63	25 ... 63	--	945	3VA2163-5HK46-0AA0
	100	40 ... 100	--	1500	3VA2110-5HK46-0AA0



Connection with lug terminal

3VA21	25	10 ... 25	--	375	3VA2125-5HK42-0AA0
	40	16 ... 40	--	600	3VA2140-5HK42-0AA0
	63	25 ... 63	--	945	3VA2163-5HK42-0AA0
	100	40 ... 100	--	1500	3VA2110-5HK42-0AA0
3VA22	160	63 ... 160	--	2400	3VA2216-5HK42-0AA0
3VA23	250	100 ... 250	--	3750	3VA2325-5HK42-0AA0
3VA24	400	160 ... 400	--	6000[1]	3VA2440-5HK42-0AA0
	500	200 ... 500	--	7000	3VA2450-5HK42-0AA0
	630	250 ... 630	--	5670	3VA2463-5HK42-0AA0

1) At breaking capacity L 4400 A

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	I_{cu} up to 85 kA at 415 V, high breaking capacity H (H) See "Overview", p. 2/6 and 2/7	DT	I_{cu} up to 110 kA at 415 V, very high breaking capacity C (C) See "Overview", p. 2/6 and 2/7	DT	I_{cu} up to 150 kA at 415 V, extremely high breaking capacity L (L) See "Overview", p. 2/6 and 2/7
		Article No. www.siemens.com/product?Article No. / Basic price per PU		Article No. www.siemens.com/product?Article No. / Basic price per PU		Article No. www.siemens.com/product?Article No. / Basic price per PU
A						
Line protection, ETU340 ELISA With easily adjustable characteristic (characteristic form of a fuse) with "N" overload and short-circuit release 0 %, 50 % or 100 %						
		Connection with box terminal				
25		**3VA2125-6HK46-0AA0**		**3VA2125-7HK46-0AA0**		**3VA2125-8HK46-0AA0**
40		**3VA2140-6HK46-0AA0**		**3VA2140-7HK46-0AA0**		**3VA2140-8HK46-0AA0**
63		**3VA2163-6HK46-0AA0**		**3VA2163-7HK46-0AA0**		**3VA2163-8HK46-0AA0**
100		**3VA2110-6HK46-0AA0**		**3VA2110-7HK46-0AA0**		**3VA2110-8HK46-0AA0**
		Connection with lug terminal				
25		**3VA2125-6HK42-0AA0**		**3VA2125-7HK42-0AA0**		**3VA2125-8HK42-0AA0**
40		**3VA2140-6HK42-0AA0**		**3VA2140-7HK42-0AA0**		**3VA2140-8HK42-0AA0**
63		**3VA2163-6HK42-0AA0**		**3VA2163-7HK42-0AA0**		**3VA2163-8HK42-0AA0**
100		**3VA2110-6HK42-0AA0**		**3VA2110-7HK42-0AA0**		**3VA2110-8HK42-0AA0**
160		**3VA2216-6HK42-0AA0**		**3VA2216-7HK42-0AA0**		**3VA2216-8HK42-0AA0**
250		**3VA2325-6HK42-0AA0**		**3VA2325-7HK42-0AA0**		**3VA2325-8HK42-0AA0**
400		**3VA2440-6HK42-0AA0**		**3VA2440-7HK42-0AA0**		**3VA2440-8HK42-0AA0**
500		**3VA2450-6HK42-0AA0**		**3VA2450-7HK42-0AA0**		**3VA2450-8HK42-0AA0**
630		**3VA2463-6HK42-0AA0**		**3VA2463-7HK42-0AA0**		**3VA2463-8HK42-0AA0**

*** You can order this quantity or a multiple thereof.**

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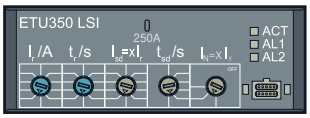
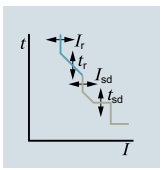
PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	S function (short-time delayed short-circuit protection "S") I_{sd}	Operating current of the instantaneous short-circuit protection "I" I_i	DT	**I_{cu} up to 55 kA at 415 V, medium breaking capacity M** (M) See "Overview", p. 2/6 and 2/7
		A	A	A	A		Article No. www.siemens.com/product?Article No. / Basic price per PU

4-pole, fixed-mounted, 3VA20 to 3VA24, up to 630 A
Electronic trip unit

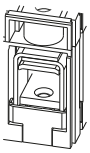


I201_18828



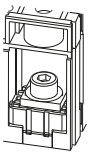
Line and generator protection, ETU350 LSI

With adjustable overload protection I_r, adjustable delayed short-circuit protection I_{sd} and fixed instantaneous short-circuit protection I_i, with neutral protection against overload and short circuit 0 % or 100 % (and 50 % with I_n 100 A and above)



Connection with box terminal

	I_n	I_r x ...	I_{sd} x I_r	I_i x I_n	
3VA20	25	10 ... 25	1.5 ... 10	300	3VA2025-5HN46-0AA0
	40	16 ... 40	1.5 ... 10	480	3VA2040-5HN46-0AA0
	63	25 ... 63	1.5 ... 10	756	3VA2063-5HN46-0AA0
	100	40 ... 100	1.5 ... 10	1200	3VA2010-5HN46-0AA0
3VA21	25	10 ... 25	1.5 ... 10	300	3VA2125-5HN46-0AA0
	40	16 ... 40	1.5 ... 10	480	3VA2140-5HN46-0AA0
	63	25 ... 63	1.5 ... 10	756	3VA2163-5HN46-0AA0
	100	40 ... 100	1.5 ... 10	1200	3VA2110-5HN46-0AA0
	160	63 ... 160	1.5 ... 10	1600	3VA2116-5HN46-0AA0



Connection with lug terminal

	I_n	I_r x ...	I_{sd} x I_r	I_i x I_n	
3VA20	25	10 ... 25	1.5 ... 10	300	3VA2025-5HN42-0AA0
	40	16 ... 40	1.5 ... 10	480	3VA2040-5HN42-0AA0
	63	25 ... 63	1.5 ... 10	756	3VA2063-5HN42-0AA0
	100	40 ... 100	1.5 ... 10	1200	3VA2010-5HN42-0AA0
3VA21	25	10 ... 25	1.5 ... 10	300	3VA2125-5HN42-0AA0
	40	16 ... 40	1.5 ... 10	480	3VA2140-5HN42-0AA0
	63	25 ... 63	1.5 ... 10	756	3VA2163-5HN42-0AA0
	100	40 ... 100	1.5 ... 10	1200	3VA2110-5HN42-0AA0
	160	63 ... 160	1.5 ... 10	1600	3VA2116-5HN42-0AA0
3VA22	160	63 ... 160	1.5 ... 10	1920	3VA2216-5HN42-0AA0
	250	100 ... 250	1.5 ... 10	2500	3VA2225-5HN42-0AA0
3VA23	250	100 ... 250	1.5 ... 10	3000	3VA2325-5HN42-0AA0
	400	160 ... 400	1.5 ... 10	4000	3VA2340-5HN42-0AA0
3VA24	400	160 ... 400	1.5 ... 10	4800[1)]	3VA2440-5HN42-0AA0
	630	250 ... 630	1.5 ... 9	5670	3VA2463-5HN42-0AA0

1) At breaking capacity L 4400 A

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	I_{cu} up to 85 kA at 415 V, high breaking capacity H (H) See "Overview", p. 2/6 and 2/7		DT	I_{cu} up to 110 kA at 415 V, very high breaking capacity C (C) See "Overview", p. 2/6 and 2/7		DT	I_{cu} up to 150 kA at 415 V, extremely high breaking capacity L (L) See "Overview", p. 2/6 and 2/7	
		Article No. www.siemens.com/product?Article No.	Basic price per PU		Article No. www.siemens.com/product?Article No.	Basic price per PU		Article No. www.siemens.com/product?Article No.	Basic price per PU
A									
Line and generator protection, ETU350 LSI With adjustable overload protection I_r, adjustable delayed short-circuit protection I_{sd} and fixed instantaneous short-circuit protection I_i, with neutral protection against overload and short circuit 0 % or 100 % (and 50 % with I_n 100 A and above)									
		Connection with box terminal							
25		3VA2025-6HN46-0AA0			3VA2025-7HN46-0AA0			3VA2025-8HN46-0AA0	
40		3VA2040-6HN46-0AA0			3VA2040-7HN46-0AA0			3VA2040-8HN46-0AA0	
63		3VA2063-6HN46-0AA0			3VA2063-7HN46-0AA0			3VA2063-8HN46-0AA0	
100		3VA2010-6HN46-0AA0			3VA2010-7HN46-0AA0			3VA2010-8HN46-0AA0	
25		3VA2125-6HN46-0AA0			3VA2125-7HN46-0AA0			3VA2125-8HN46-0AA0	
40		3VA2140-6HN46-0AA0			3VA2140-7HN46-0AA0			3VA2140-8HN46-0AA0	
63		3VA2163-6HN46-0AA0			3VA2163-7HN46-0AA0			3VA2163-8HN46-0AA0	
100		3VA2110-6HN46-0AA0			3VA2110-7HN46-0AA0			3VA2110-8HN46-0AA0	
160		3VA2116-6HN46-0AA0			3VA2116-7HN46-0AA0			3VA2116-8HN46-0AA0	
		Connection with lug terminal							
25		3VA2025-6HN42-0AA0			3VA2025-7HN42-0AA0			3VA2025-8HN42-0AA0	
40		3VA2040-6HN42-0AA0			3VA2040-7HN42-0AA0			3VA2040-8HN42-0AA0	
63		3VA2063-6HN42-0AA0			3VA2063-7HN42-0AA0			3VA2063-8HN42-0AA0	
100		3VA2010-6HN42-0AA0			3VA2010-7HN42-0AA0			3VA2010-8HN42-0AA0	
25		3VA2125-6HN42-0AA0			3VA2125-7HN42-0AA0			3VA2125-8HN42-0AA0	
40		3VA2140-6HN42-0AA0			3VA2140-7HN42-0AA0			3VA2140-8HN42-0AA0	
63		3VA2163-6HN42-0AA0			3VA2163-7HN42-0AA0			3VA2163-8HN42-0AA0	
100		3VA2110-6HN42-0AA0			3VA2110-7HN42-0AA0			3VA2110-8HN42-0AA0	
160		3VA2116-6HN42-0AA0			3VA2116-7HN42-0AA0			3VA2116-8HN42-0AA0	
160		3VA2216-6HN42-0AA0			3VA2216-7HN42-0AA0			3VA2216-8HN42-0AA0	
250		3VA2225-6HN42-0AA0			3VA2225-7HN42-0AA0			3VA2225-8HN42-0AA0	
250		3VA2325-6HN42-0AA0			3VA2325-7HN42-0AA0			3VA2325-8HN42-0AA0	
400		3VA2340-6HN42-0AA0			3VA2340-7HN42-0AA0			3VA2340-8HN42-0AA0	
400		3VA2440-6HN42-0AA0			3VA2440-7HN42-0AA0			3VA2440-8HN42-0AA0	
630		3VA2463-6HN42-0AA0			3VA2463-7HN42-0AA0			3VA2463-8HN42-0AA0	

*** You can order this quantity or a multiple thereof.**

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Molded Case Circuit Breakers

3VA2 Molded Case Circuit Breakers up to 630 A, IEC NEW

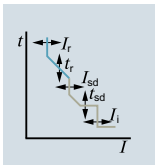
Line protection

PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	S function (short-time delayed short-circuit protection "S") I_{sd}	Operating current of the instantaneous short-circuit protection "I" I_i	DT	**I_{cu} up to 55 kA at 415 V, medium breaking capacity M** (M) See "Overview", p. 2/6 and 2/7	
		A	A	A	A		Article No. www.siemens.com/product?Article No.	Basic price per PU

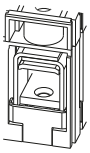
4-pole, fixed-mounted, 3VA20 to 3VA24, up to 630 A
Electronic trip unit

I201_18480



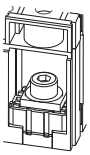
Line and generator protection, with display, ETU550 LSI

With adjustable overload protection I_r, adjustable delayed short-circuit protection I_{sd} and fixed instantaneous short-circuit protection I_i, with neutral protection against overload and short circuit from 20 %/40 % to 100 %/160 %



Connection with box terminal

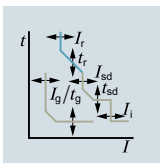
3VA20	25	10 ... 25	15 ... 250	38 ... 300	3VA2025-5JP46-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2040-5JP46-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2063-5JP46-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2010-5JP46-0AA0
3VA21	25	10 ... 25	15 ... 250	38 ... 300	3VA2125-5JP46-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2140-5JP46-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2163-5JP46-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2110-5JP46-0AA0
	160	63 ... 160	96 ... 1600	240 ... 1600	3VA2116-5JP46-0AA0



Connection with lug terminal

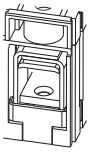
3VA20	25	10 ... 25	15 ... 250	38 ... 300	3VA2025-5JP42-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2040-5JP42-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2063-5JP42-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2010-5JP42-0AA0
3VA21	25	10 ... 25	15 ... 250	38 ... 300	3VA2125-5JP42-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2140-5JP42-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2163-5JP42-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2110-5JP42-0AA0
	160	63 ... 160	96 ... 1600	240 ... 1600	3VA2116-5JP42-0AA0
3VA22	160	63 ... 160	96 ... 1600	240 ... 1920	3VA2216-5JP42-0AA0
	250	100 ... 250	150 ... 2500	375 ... 2500	3VA2225-5JP42-0AA0
3VA23	250	100 ... 250	150 ... 2500	375 ... 3000	3VA2325-5JP42-0AA0
	400	160 ... 400	240 ... 4000	600 ... 4000	3VA2340-5JP42-0AA0
3VA24	400	160 ... 400	240 ... 4000	600 ... 6000[1]	3VA2440-5JP42-0AA0
	500	200 ... 500	300 ... 5000	750 ... 7000	3VA2450-5JP42-0AA0
	630	250 ... 630	378 ... 5670	945 ... 5670	3VA2463-5JP42-0AA0

I201_18481



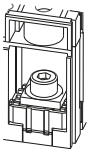
Line and generator protection, with display, ETU560 LSIG

With adjustable overload protection I_r, adjustable delayed short-circuit protection I_{sd} and fixed instantaneous short-circuit protection I_i, with neutral protection against overload and short circuit from 20 %/40 % to 100 %/160 % and adjustable ground-fault protection I_g



Connection with box terminal

3VA20	25	10 ... 25	15 ... 250	38 ... 300	3VA2025-5JQ46-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2040-5JQ46-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2063-5JQ46-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2010-5JQ46-0AA0
3VA21	25	10 ... 25	15 ... 250	38 ... 300	3VA2125-5JQ46-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2140-5JQ46-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2163-5JQ46-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2110-5JQ46-0AA0
	160	63 ... 160	96 ... 1600	240 ... 1600	3VA2116-5JQ46-0AA0



Connection with lug terminal

3VA20	25	10 ... 25	15 ... 250	38 ... 300	3VA2025-5JQ42-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2040-5JQ42-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2063-5JQ42-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2010-5JQ42-0AA0
3VA21	25	10 ... 25	15 ... 250	38 ... 300	3VA2125-5JQ42-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2140-5JQ42-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2163-5JQ42-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2110-5JQ42-0AA0
	160	63 ... 160	96 ... 1600	240 ... 1600	3VA2116-5JQ42-0AA0
3VA22	160	63 ... 160	96 ... 1600	240 ... 1920	3VA2216-5JQ42-0AA0
	250	100 ... 250	150 ... 2500	375 ... 2500	3VA2225-5JQ42-0AA0
3VA23	250	100 ... 250	150 ... 2500	375 ... 3000	3VA2325-5JQ42-0AA0
	400	160 ... 400	240 ... 4000	600 ... 4000	3VA2340-5JQ42-0AA0
3VA24	400	160 ... 400	240 ... 4000	600 ... 6000[1]	3VA2440-5JQ42-0AA0
	500	200 ... 500	300 ... 5000	750 ... 7000	3VA2450-5JQ42-0AA0
	630	250 ... 630	378 ... 5670	945 ... 5670	3VA2463-5JQ42-0AA0

[1] At breaking capacity L 4400 A

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	I_{cu} up to 85 kA at 415 V, high breaking capacity H (H) See "Overview", p. 2/6 and 2/7	DT	I_{cu} up to 110 kA at 415 V, very high breaking capacity C (C) See "Overview", p. 2/6 and 2/7	DT	I_{cu} up to 150 kA at 415 V, extremely high breaking capacity L (L) See "Overview", p. 2/6 and 2/7
		Article No. www.siemens.com/product?Article No. Basic price per PU		Article No. www.siemens.com/product?Article No. Basic price per PU		Article No. www.siemens.com/product?Article No. Basic price per PU
A						
Line and generator protection, with display, ETU550 LSI With adjustable overload protection I_r, adjustable delayed short-circuit protection I_{sd} and fixed instantaneous short-circuit protection I_i, with neutral protection against overload and short circuit from 20 %/40 % to 100 %/160 %						
		Connection with box terminal				
25		3VA2025-6JP46-0AA0		3VA2025-7JP46-0AA0		3VA2025-8JP46-0AA0
40		3VA2040-6JP46-0AA0		3VA2040-7JP46-0AA0		3VA2040-8JP46-0AA0
63		3VA2063-6JP46-0AA0		3VA2063-7JP46-0AA0		3VA2063-8JP46-0AA0
100		3VA2010-6JP46-0AA0		3VA2010-7JP46-0AA0		3VA2010-8JP46-0AA0
25		3VA2125-6JP46-0AA0		3VA2125-7JP46-0AA0		3VA2125-8JP46-0AA0
40		3VA2140-6JP46-0AA0		3VA2140-7JP46-0AA0		3VA2140-8JP46-0AA0
63		3VA2163-6JP46-0AA0		3VA2163-7JP46-0AA0		3VA2163-8JP46-0AA0
100		3VA2110-6JP46-0AA0		3VA2110-7JP46-0AA0		3VA2110-8JP46-0AA0
160		3VA2116-6JP46-0AA0		3VA2116-7JP46-0AA0		3VA2116-8JP46-0AA0
		Connection with lug terminal				
25		3VA2025-6JP42-0AA0		3VA2025-7JP42-0AA0		3VA2025-8JP42-0AA0
40		3VA2040-6JP42-0AA0		3VA2040-7JP42-0AA0		3VA2040-8JP42-0AA0
63		3VA2063-6JP42-0AA0		3VA2063-7JP42-0AA0		3VA2063-8JP42-0AA0
100		3VA2010-6JP42-0AA0		3VA2010-7JP42-0AA0		3VA2010-8JP42-0AA0
25		3VA2125-6JP42-0AA0		3VA2125-7JP42-0AA0		3VA2125-8JP42-0AA0
40		3VA2140-6JP42-0AA0		3VA2140-7JP42-0AA0		3VA2140-8JP42-0AA0
63		3VA2163-6JP42-0AA0		3VA2163-7JP42-0AA0		3VA2163-8JP42-0AA0
100		3VA2110-6JP42-0AA0		3VA2110-7JP42-0AA0		3VA2110-8JP42-0AA0
160		3VA2116-6JP42-0AA0		3VA2116-7JP42-0AA0		3VA2116-8JP42-0AA0
160		3VA2216-6JP42-0AA0		3VA2216-7JP42-0AA0		3VA2216-8JP42-0AA0
250		3VA2225-6JP42-0AA0		3VA2225-7JP42-0AA0		3VA2225-8JP42-0AA0
250		3VA2325-6JP42-0AA0		3VA2325-7JP42-0AA0		3VA2325-8JP42-0AA0
400		3VA2340-6JP42-0AA0		3VA2340-7JP42-0AA0		3VA2340-8JP42-0AA0
400		3VA2440-6JP42-0AA0		3VA2440-7JP42-0AA0		3VA2440-8JP42-0AA0
500		3VA2450-6JP42-0AA0		3VA2450-7JP42-0AA0		--
630		3VA2463-6JP42-0AA0		3VA2463-7JP42-0AA0		3VA2463-8JP42-0AA0
Line and generator protection, with display, ETU560 LSIG With adjustable overload protection I_r, adjustable delayed short-circuit protection I_{sd} and fixed instantaneous short-circuit protection I_i, with neutral protection against overload and short circuit from 20 %/40 % to 100 %/160 % and adjustable ground-fault protection I_g						
		Connection with box terminal				
25		3VA2025-6JQ46-0AA0		3VA2025-7JQ46-0AA0		3VA2025-8JQ46-0AA0
40		3VA2040-6JQ46-0AA0		3VA2040-7JQ46-0AA0		3VA2040-8JQ46-0AA0
63		3VA2063-6JQ46-0AA0		3VA2063-7JQ46-0AA0		3VA2063-8JQ46-0AA0
100		3VA2010-6JQ46-0AA0		3VA2010-7JQ46-0AA0		3VA2010-8JQ46-0AA0
25		3VA2125-6JQ46-0AA0		3VA2125-7JQ46-0AA0		3VA2125-8JQ46-0AA0
40		3VA2140-6JQ46-0AA0		3VA2140-7JQ46-0AA0		3VA2140-8JQ46-0AA0
63		3VA2163-6JQ46-0AA0		3VA2163-7JQ46-0AA0		3VA2163-8JQ46-0AA0
100		3VA2110-6JQ46-0AA0		3VA2110-7JQ46-0AA0		3VA2110-8JQ46-0AA0
160		3VA2116-6JQ46-0AA0		3VA2116-7JQ46-0AA0		3VA2116-8JQ46-0AA0
		Connection with lug terminal				
25		3VA2025-6JQ42-0AA0		3VA2025-7JQ42-0AA0		3VA2025-8JQ42-0AA0
40		3VA2040-6JQ42-0AA0		3VA2040-7JQ42-0AA0		3VA2040-8JQ42-0AA0
63		3VA2063-6JQ42-0AA0		3VA2063-7JQ42-0AA0		3VA2063-8JQ42-0AA0
100		3VA2010-6JQ42-0AA0		3VA2010-7JQ42-0AA0		3VA2010-8JQ42-0AA0
25		3VA2125-6JQ42-0AA0		3VA2125-7JQ42-0AA0		3VA2125-8JQ42-0AA0
40		3VA2140-6JQ42-0AA0		3VA2140-7JQ42-0AA0		3VA2140-8JQ42-0AA0
63		3VA2163-6JQ42-0AA0		3VA2163-7JQ42-0AA0		3VA2163-8JQ42-0AA0
100		3VA2110-6JQ42-0AA0		3VA2110-7JQ42-0AA0		3VA2110-8JQ42-0AA0
160		3VA2116-6JQ42-0AA0		3VA2116-7JQ42-0AA0		3VA2116-8JQ42-0AA0
160		3VA2216-6JQ42-0AA0		3VA2216-7JQ42-0AA0		3VA2216-8JQ42-0AA0
250		3VA2225-6JQ42-0AA0		3VA2225-7JQ42-0AA0		3VA2225-8JQ42-0AA0
250		3VA2325-6JQ42-0AA0		3VA2325-7JQ42-0AA0		3VA2325-8JQ42-0AA0
400		3VA2340-6JQ42-0AA0		3VA2340-7JQ42-0AA0		3VA2340-8JQ42-0AA0
400		3VA2440-6JQ42-0AA0		3VA2440-7JQ42-0AA0		3VA2440-8JQ42-0AA0
500		3VA2450-6JQ42-0AA0		3VA2450-7JQ42-0AA0		--
630		3VA2463-6JQ42-0AA0		3VA2463-7JQ42-0AA0		3VA2463-8JQ42-0AA0

*** You can order this quantity or a multiple thereof.**

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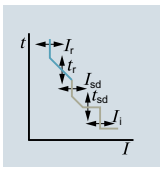
PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	S function (short-time delayed short-circuit protection "S") I_{sd}	Operating current of the instanta-neous short-circuit protection "I" I_i	DT	I_{cu} up to 55 kA at 415 V, medium breaking capacity M (M) See "Overview", p. 2/6 and 2/7 Article No. www.siemens.com/product?Article No.	Basic price per PU
		A	A	A	A			

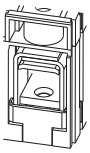
4-pole, fixed-mounted, 3VA20 to 3VA24, up to 630 A
Electronic trip unit

I201_18482



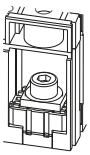
Line and generator protection, with display, with metering function, ETU850 LSI

With adjustable overload protection I_r, adjustable delayed short-circuit protection I_{sd} and fixed instantaneous short-circuit protection I_i, with neutral protection against overload and short circuit from 20 %/40 % to 100 %/160 %



Connection with box terminal

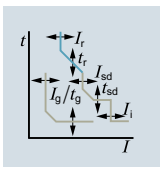
3VA20	25	10 ... 25	15 ... 250	38 ... 300	3VA2025-5KP46-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2040-5KP46-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2063-5KP46-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2010-5KP46-0AA0
3VA21	25	10 ... 25	15 ... 250	38 ... 300	3VA2125-5KP46-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2140-5KP46-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2163-5KP46-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2110-5KP46-0AA0
	160	63 ... 160	96 ... 1600	240 ... 1600	3VA2116-5KP46-0AA0



Connection with lug terminal

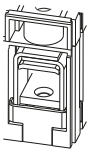
3VA20	25	10 ... 25	15 ... 250	38 ... 300	3VA2025-5KP42-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2040-5KP42-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2063-5KP42-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2010-5KP42-0AA0
3VA21	25	10 ... 25	15 ... 250	38 ... 300	3VA2125-5KP42-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2140-5KP42-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2163-5KP42-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2110-5KP42-0AA0
	160	63 ... 160	96 ... 1600	240 ... 1600	3VA2116-5KP42-0AA0
3VA22	160	63 ... 160	96 ... 1600	240 ... 1920	3VA2216-5KP42-0AA0
	250	100 ... 250	150 ... 2500	375 ... 2500	3VA2225-5KP42-0AA0
3VA23	250	100 ... 250	150 ... 2500	375 ... 3000	3VA2325-5KP42-0AA0
	400	160 ... 400	240 ... 4000	600 ... 4000	3VA2340-5KP42-0AA0
3VA24	400	160 ... 400	240 ... 4000	600 ... 6000[1)]	3VA2440-5KP42-0AA0
	500	200 ... 500	300 ... 5000	750 ... 7000	3VA2450-5KP42-0AA0
	630	250 ... 630	378 ... 5670	945 ... 5670	3VA2463-5KP42-0AA0

I201_18483



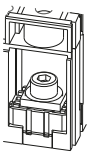
Line and generator protection, with display, with metering function, ETU860 LSIG

With adjustable overload protection I_r, adjustable delayed short-circuit protection I_{sd} and fixed instantaneous short-circuit protection I_i, with neutral protection against overload and short circuit from 20 %/40 % to 100 %/160 % and adjustable ground-fault protection I_g



Connection with box terminal

3VA20	25	10 ... 25	15 ... 250	38 ... 300	3VA2025-5KQ46-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2040-5KQ46-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2063-5KQ46-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2010-5KQ46-0AA0
3VA21	25	10 ... 25	15 ... 250	38 ... 300	3VA2125-5KQ46-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2140-5KQ46-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2163-5KQ46-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2110-5KQ46-0AA0
	160	63 ... 160	96 ... 1600	240 ... 1600	3VA2116-5KQ46-0AA0



Connection with lug terminal

3VA20	25	10 ... 25	15 ... 250	38 ... 300	3VA2025-5KQ42-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2040-5KQ42-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2063-5KQ42-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2010-5KQ42-0AA0
3VA21	25	10 ... 25	15 ... 250	38 ... 300	3VA2125-5KQ42-0AA0
	40	16 ... 40	24 ... 400	60 ... 480	3VA2140-5KQ42-0AA0
	63	25 ... 63	38 ... 630	95 ... 756	3VA2163-5KQ42-0AA0
	100	40 ... 100	60 ... 1000	150 ... 1200	3VA2110-5KQ42-0AA0
	160	63 ... 160	96 ... 1600	240 ... 1600	3VA2116-5KQ42-0AA0
3VA22	160	63 ... 160	96 ... 1600	240 ... 1920	3VA2216-5KQ42-0AA0
	250	100 ... 250	150 ... 2500	375 ... 2500	3VA2225-5KQ42-0AA0
3VA23	250	100 ... 250	150 ... 2500	375 ... 3000	3VA2325-5KQ42-0AA0
	400	160 ... 400	240 ... 4000	600 ... 4000	3VA2340-5KQ42-0AA0
3VA24	400	160 ... 400	240 ... 4000	600 ... 6000[1)]	3VA2440-5KQ42-0AA0
	500	200 ... 500	300 ... 5000	750 ... 7000	3VA2450-5KQ42-0AA0
	630	250 ... 630	378 ... 5670	945 ... 5670	3VA2463-5KQ42-0AA0

[1)] At breaking capacity L 4400 A

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	**I_{cu} up to 85 kA at 415 V, high breaking capacity H** (H) See "Overview", p. 2/6 and 2/7 Article No. www.siemens.com/product?Article No.	Basic price per PU	DT	**I_{cu} up to 110 kA at 415 V, very high breaking capacity C** (C) See "Overview", p. 2/6 and 2/7 Article No. www.siemens.com/product?Article No.	Basic price per PU	DT	**I_{cu} up to 150 kA at 415 V, extremely high breaking capacity L** (L) See "Overview", p. 2/6 and 2/7 Article No. www.siemens.com/product?Article No.	Basic price per PU
A									
Line and generator protection, with display, with metering function, ETU850 LSI									
With adjustable overload protection I_r, adjustable delayed short-circuit protection I_{sd} and fixed instantaneous short-circuit protection I_i, with neutral protection against overload and short circuit from 20 %/40 % to 100 %/160 %									
		Connection with box terminal							
25		3VA2025-6KP46-0AA0			3VA2025-7KP46-0AA0			3VA2025-8KP46-0AA0	
40		3VA2040-6KP46-0AA0			3VA2040-7KP46-0AA0			3VA2040-8KP46-0AA0	
63		3VA2063-6KP46-0AA0			3VA2063-7KP46-0AA0			3VA2063-8KP46-0AA0	
100		3VA2010-6KP46-0AA0			3VA2010-7KP46-0AA0			3VA2010-8KP46-0AA0	
25		3VA2125-6KP46-0AA0			3VA2125-7KP46-0AA0			3VA2125-8KP46-0AA0	
40		3VA2140-6KP46-0AA0			3VA2140-7KP46-0AA0			3VA2140-8KP46-0AA0	
63		3VA2163-6KP46-0AA0			3VA2163-7KP46-0AA0			3VA2163-8KP46-0AA0	
100		3VA2110-6KP46-0AA0			3VA2110-7KP46-0AA0			3VA2110-8KP46-0AA0	
160		3VA2116-6KP46-0AA0			3VA2116-7KP46-0AA0			3VA2116-8KP46-0AA0	
		Connection with lug terminal							
25		3VA2025-6KP42-0AA0			3VA2025-7KP42-0AA0			3VA2025-8KP42-0AA0	
40		3VA2040-6KP42-0AA0			3VA2040-7KP42-0AA0			3VA2040-8KP42-0AA0	
63		3VA2063-6KP42-0AA0			3VA2063-7KP42-0AA0			3VA2063-8KP42-0AA0	
100		3VA2010-6KP42-0AA0			3VA2010-7KP42-0AA0			3VA2010-8KP42-0AA0	
25		3VA2125-6KP42-0AA0			3VA2125-7KP42-0AA0			3VA2125-8KP42-0AA0	
40		3VA2140-6KP42-0AA0			3VA2140-7KP42-0AA0			3VA2140-8KP42-0AA0	
63		3VA2163-6KP42-0AA0			3VA2163-7KP42-0AA0			3VA2163-8KP42-0AA0	
100		3VA2110-6KP42-0AA0			3VA2110-7KP42-0AA0			3VA2110-8KP42-0AA0	
160		3VA2116-6KP42-0AA0			3VA2116-7KP42-0AA0			3VA2116-8KP42-0AA0	
160		3VA2216-6KP42-0AA0			3VA2216-7KP42-0AA0			3VA2216-8KP42-0AA0	
250		3VA2225-6KP42-0AA0			3VA2225-7KP42-0AA0			3VA2225-8KP42-0AA0	
250		3VA2325-6KP42-0AA0			3VA2325-7KP42-0AA0			3VA2325-8KP42-0AA0	
400		3VA2340-6KP42-0AA0			3VA2340-7KP42-0AA0			3VA2340-8KP42-0AA0	
400		3VA2440-6KP42-0AA0			3VA2440-7KP42-0AA0			3VA2440-8KP42-0AA0	
500		3VA2450-6KP42-0AA0			3VA2450-7KP42-0AA0			--	
630		3VA2463-6KP42-0AA0			3VA2463-7KP42-0AA0			3VA2463-8KP42-0AA0	
Line and generator protection, with display, with metering function, ETU860 LSIG									
With adjustable overload protection I_r, adjustable delayed short-circuit protection I_{sd} and fixed instantaneous short-circuit protection I_i, with neutral protection against overload and short circuit from 20 %/40 % to 100 %/160 % and adjustable ground-fault protection I_g									
		Connection with box terminal							
25		3VA2025-6KQ46-0AA0			3VA2025-7KQ46-0AA0			3VA2025-8KQ46-0AA0	
40		3VA2040-6KQ46-0AA0			3VA2040-7KQ46-0AA0			3VA2040-8KQ46-0AA0	
63		3VA2063-6KQ46-0AA0			3VA2063-7KQ46-0AA0			3VA2063-8KQ46-0AA0	
100		3VA2010-6KQ46-0AA0			3VA2010-7KQ46-0AA0			3VA2010-8KQ46-0AA0	
25		3VA2125-6KQ46-0AA0			3VA2125-7KQ46-0AA0			3VA2125-8KQ46-0AA0	
40		3VA2140-6KQ46-0AA0			3VA2140-7KQ46-0AA0			3VA2140-8KQ46-0AA0	
63		3VA2163-6KQ46-0AA0			3VA2163-7KQ46-0AA0			3VA2163-8KQ46-0AA0	
100		3VA2110-6KQ46-0AA0			3VA2110-7KQ46-0AA0			3VA2110-8KQ46-0AA0	
160		3VA2116-6KQ46-0AA0			3VA2116-7KQ46-0AA0			3VA2116-8KQ46-0AA0	
		Connection with lug terminal							
25		3VA2025-6KQ42-0AA0			3VA2025-7KQ42-0AA0			3VA2025-8KQ42-0AA0	
40		3VA2040-6KQ42-0AA0			3VA2040-7KQ42-0AA0			3VA2040-8KQ42-0AA0	
63		3VA2063-6KQ42-0AA0			3VA2063-7KQ42-0AA0			3VA2063-8KQ42-0AA0	
100		3VA2010-6KQ42-0AA0			3VA2010-7KQ42-0AA0			3VA2010-8KQ42-0AA0	
25		3VA2125-6KQ42-0AA0			3VA2125-7KQ42-0AA0			3VA2125-8KQ42-0AA0	
40		3VA2140-6KQ42-0AA0			3VA2140-7KQ42-0AA0			3VA2140-8KQ42-0AA0	
63		3VA2163-6KQ42-0AA0			3VA2163-7KQ42-0AA0			3VA2163-8KQ42-0AA0	
100		3VA2110-6KQ42-0AA0			3VA2110-7KQ42-0AA0			3VA2110-8KQ42-0AA0	
160		3VA2116-6KQ42-0AA0			3VA2116-7KQ42-0AA0			3VA2116-8KQ42-0AA0	
160		3VA2216-6KQ42-0AA0			3VA2216-7KQ42-0AA0			3VA2216-8KQ42-0AA0	
250		3VA2225-6KQ42-0AA0			3VA2225-7KQ42-0AA0			3VA2225-8KQ42-0AA0	
250		3VA2325-6KQ42-0AA0			3VA2325-7KQ42-0AA0			3VA2325-8KQ42-0AA0	
400		3VA2340-6KQ42-0AA0			3VA2340-7KQ42-0AA0			3VA2340-8KQ42-0AA0	
400		3VA2440-6KQ42-0AA0			3VA2440-7KQ42-0AA0			3VA2440-8KQ42-0AA0	
500		3VA2450-6KQ42-0AA0			3VA2450-7KQ42-0AA0			--	
630		3VA2463-6KQ42-0AA0			3VA2463-7KQ42-0AA0			3VA2463-8KQ42-0AA0	

*** You can order this quantity or a multiple thereof.**

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Molded Case Circuit Breakers

3VA2 Molded Case Circuit Breakers up to 630 A, IEC NEW

Motor and starter protection

PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Connection technology	Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	S function (short-time delayed short-circuit protection "S") I_{sd}	Operating current of the instanta-neous short-circuit protection "I" I_i	DT	I_{cu} up to 55 kA at 415 V, medium breaking capacity M (M) See "Overview", p. 2/6 and 2/7 Article No. www.siemens.com/product?Article No.	Basic price per PU
		A	A	A	A			

3-pole, fixed-mounted, 3VA20 to 3VA24, up to 630 A
Electronic trip unit

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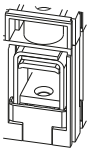
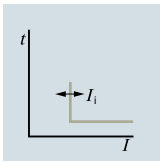


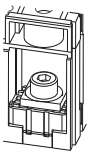
Starter protection, ETU310M I

With adjustable short-circuit protection I_i

Connection with box terminal

3VA21	25	--	--	75 ... 375	--
	40	--	--	120 ... 600	--
	63	--	--	189 ... 945	--
	100	--	--	300 ... 1500	--





Connection with lug terminal

3VA21	25	--	--	75 ... 375	--
	40	--	--	120 ... 600	--
	63	--	--	189 ... 945	--
	100	--	--	300 ... 1500	--
3VA22	160	--	--	480 ... 2400	--
	200	--	--	600 ... 3000	--
3VA23	250	--	--	750 ... 3750	--
3VA24	400	--	--	1200 ... 6000	--
	500	--	--	1500 ... 7500	--

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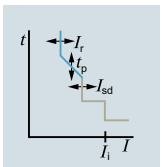
Motor protection, ETU350M LSI

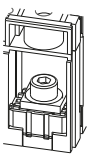
With adjustable overload protection I_r, (delay adjustable via trip class T_C (10A, 10/10E, 20/20E), adjustable delayed short-circuit protection I_{sd} and fixed instantaneous short-circuit protection I_i

I_r x ...

Connection with box terminal

3VA21	25	10 ... 25	3 ... 15	375	3VA2125-5MN36-0AA0
	40	16 ... 40	3 ... 15	600	3VA2140-5MN36-0AA0
	63	25 ... 63	3 ... 15	945	3VA2163-5MN36-0AA0
	100	40 ... 100	3 ... 15	1500	3VA2110-5MN36-0AA0





Connection with screw terminal

3VA21	25	10 ... 25	3 ... 15	375	3VA2125-5MN32-0AA0
	40	16 ... 40	3 ... 15	600	3VA2140-5MN32-0AA0
	63	25 ... 63	3 ... 15	945	3VA2163-5MN32-0AA0
	100	40 ... 100	3 ... 15	1500	3VA2110-5MN32-0AA0
3VA22	160	63 ... 160	3 ... 15	2400	3VA2216-5MN32-0AA0
	200	80 ... 200	3 ... 15	3000	3VA2220-5MN32-0AA0
3VA23	250	100 ... 250	3 ... 15	3750	3VA2325-5MN32-0AA0
3VA24	400	160 ... 400	3 ... 15	6000	3VA2440-5MN32-0AA0
	500	200 ... 500	3 ... 15	7500	3VA2450-5MN32-0AA0

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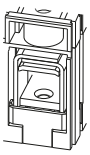
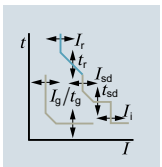


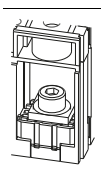
Motor protection, with display, with metering function, ETU860M LSIG

With adjustable overload protection I_r (delay adjustable either via trip class T_C (10A, 10/10E, 20/20E, 30/30E) or directly via T_P in the range of 3 ... 30 s at 7.2 x I (depending on size)), adjustable delayed short-circuit protection I_{sd}, and adjustable instantaneous short-circuit protection I_i, and fixed ground-fault protection I_g

Connection with box terminal

3VA21	25	10 ... 25	38 ... 375	75 ... 375	3VA2125-5MQ36-0AA0
	40	16 ... 40	60 ... 600	120 ... 600	3VA2140-5MQ36-0AA0
	63	25 ... 63	95 ... 945	189 ... 945	3VA2163-5MQ36-0AA0
	100	40 ... 100	150 ... 1500	300 ... 1500	3VA2110-5MQ36-0AA0





Connection with screw terminal

3VA21	25	10 ... 25	30 ... 375	75 ... 375	3VA2125-5MQ32-0AA0
	40	16 ... 40	48 ... 600	120 ... 600	3VA2140-5MQ32-0AA0
	63	25 ... 63	76 ... 945	189 ... 945	3VA2163-5MQ32-0AA0
	100	40 ... 100	120 ... 1500	300 ... 1500	3VA2110-5MQ32-0AA0
3VA22	160	63 ... 160	192 ... 2400	480 ... 2400	3VA2216-5MQ32-0AA0
	200	80 ... 200	240 ... 3000	600 ... 3000	3VA2220-5MQ32-0AA0
3VA23	250	100 ... 250	300 ... 3750	750 ... 3750	3VA2325-5MQ32-0AA0
3VA24	400	160 ... 400	480 ... 6000	1200 ... 6000	3VA2440-5MQ32-0AA0
	500	200 ... 500	600 ... 7500	1500 ... 7500	3VA2450-5MQ32-0AA0

* You can order this quantity or a multiple thereof.

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PU (UNIT, SET, M) = 1 PS*/P. unit = 1 unit PG = 1CB

Rated current I_n	DT	I_{cu} up to 85 kA at 415 V, high breaking capacity H (H) See "Overview", p. 2/6 and 2/7		DT	I_{cu} up to 110 kA at 415 V, very high breaking capacity C (C) See "Overview", p. 2/6 and 2/7	
		Article No. www.siemens.com/product?Article No.	Basic price per PU		Article No. www.siemens.com/product?Article No.	Basic price per PU
A						
Starter protection, ETU310M I With adjustable short-circuit protection I_i						
		Connection with box terminal			**Connection with box terminal**	
25		--			3VA2125-7MS36-0AA0	
40		--			3VA2140-7MS36-0AA0	
63		--			3VA2163-7MS36-0AA0	
100		--			3VA2110-7MS36-0AA0	
		Connection with lug terminal			**Connection with lug terminal**	
25		--			3VA2125-7MS32-0AA0	
40		--			3VA2140-7MS32-0AA0	
63		--			3VA2163-7MS32-0AA0	
100		--			3VA2110-7MS32-0AA0	
160		--			3VA2216-7MS32-0AA0	
200		--			3VA22 20-7MS32-0AA0	
250		--			3VA2325-7MS32-0AA0	
400		--			3VA2440-7MS32-0AA0	
500		--			3VA2450-7MS32-0AA0	
Motor protection, ETU350M LSI With adjustable overload protection I_r, (delay adjustable via trip class T_C (10A, 10/10E, 20/20E), adjustable delayed short-circuit protection I_{sd} and fixed instantaneous short-circuit protection I_i						
		Connection with box terminal			**Connection with box terminal**	
25		--			3VA2125-7MN36-0AA0	
40		--			3VA2140-7MN36-0AA0	
63		--			3VA2163-7MN36-0AA0	
100		--			3VA2110-7MN36-0AA0	
		Connection with lug terminal			**Connection with lug terminal**	
25		--			3VA2125-7MN32-0AA0	
40		--			3VA2140-7MN32-0AA0	
63		--			3VA2163-7MN32-0AA0	
100		--			3VA2110-7MN32-0AA0	
160		--			3VA2216-7MN32-0AA0	
200		--			3VA2220-7MN32-0AA0	
250		--			3VA2325-7MN32-0AA0	
400		--			3VA2440-7MN32-0AA0	
500		--			3VA2450-7MN32-0AA0	
Motor protection, with display, with metering function, ETU860M LSIG With adjustable overload protection I_r (delay adjustable either via trip class T_C (10A, 10/10E, 20/20E, 30/30E) or directly via T_P in the range of 3 ... 30 s at 7.2 x I (depending on size)), adjustable delayed short-circuit protection I_{sd}, and adjustable instantaneous short-circuit protection I_i, and fixed ground-fault protection I_g						
		Connection with box terminal			**Connection with box terminal**	
25		--			3VA2125-7MQ36-0AA0	
40		--			3VA2140-7MQ36-0AA0	
63		--			3VA2163-7MQ36-0AA0	
100		--			3VA2110-7MQ36-0AA0	
		Connection with lug terminal			**Connection with lug terminal**	
25		--			3VA2125-7MQ32-0AA0	
40		--			3VA2140-7MQ32-0AA0	
63		--			3VA2163-7MQ32-0AA0	
100		--			3VA2110-7MQ32-0AA0	
160		--			3VA2216-7MQ32-0AA0	
200		--			3VA2220-7MQ32-0AA0	
250		--			3VA2325-7MQ32-0AA0	
400		--			3VA2440-7MQ32-0AA0	
500		--			3VA2450-7MQ32-0AA0	

*** You can order this quantity or a multiple thereof.**

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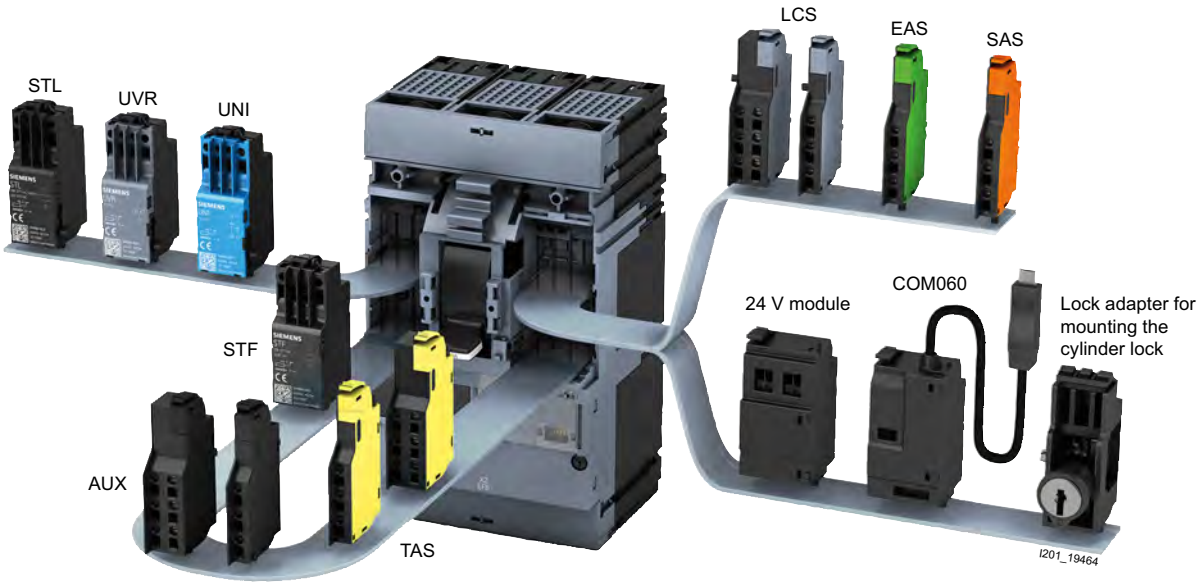
2

Overview

Color coding of accessories



A color coding system has been used to clearly identify the specific functions of individual accessories:

Color	Auxiliary switches and alarm switches	Auxiliary release
Black	Auxiliary switch AUX	• Shunt trip left STL • Shunt trip flexible STF
Gray	Leading changeover switch LCS	• Undervoltage release UVR
Yellow	Trip alarm switches TAS	--
Orange	Short circuit alarm switch SAS	--
Green	Electrical alarm switch EAS	--
Blue	--	Universal release UNI

Auxiliary switches

All auxiliary and alarm switches for the 3VA molded case circuit breakers and switch disconnectors belong to an integrated range of accessories. The auxiliary switches can be simply snapped into place and connected up in the accessories compartment provided on the front face of the unit to the left and right of the handle.

The purpose of the auxiliary switches AUX is to signal the position of the main contacts of the molded case circuit breaker. The contacts of the auxiliary switches open and close simultaneously with the main contacts of the molded case circuit breaker.

Leading changeover switches LCS signal the opening of the main contacts with a lead time of 20 ms in advance of the circuit breaker trips and are used for load shedding, for example.

Trip alarm switches TAS signal every circuit breaker tripping operation, regardless of the cause of the trip. The trip alarm switches are actuated whenever the molded case circuit breaker switches to the TRIP position.

Electrical alarm switches EAS are actuated as soon as the main contacts of the molded case circuit breaker open in the event that the breaker is tripped by the ETU.

Special electronic-compatible variants are available for applications which require the auxiliary switch signals to be linked to automation systems.

Auxiliary release

Auxiliary releases allow remote electrical tripping of the circuit breaker. They can be used to monitor control or main circuits in order to implement a protective system against accidental restart following a power failure, for example.

Undervoltage releases trip the 3VA molded case circuit breaker in the event that the rated voltage of a monitored circuit drops below a minimum permissible limit or fails altogether.

Shunt trips can be used to trip the 3VA molded case circuit breaker remotely. The STF variant can be mounted in either the left-hand or the right-hand accessories compartment. The STL and STL (EI) types are specifically designed for mounting in the left-hand compartment and are very low-consumption devices. The STL (EI) variant can be used to implement electrical interlocks between molded case circuit breakers.

A universal release is a single, 21 mm wide component in which a shunt trip and an undervoltage release are combined. These are subject to the same tripping conditions as the individual devices.

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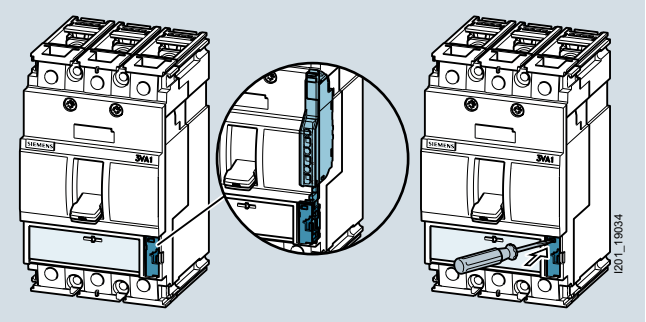
Short circuit alarm switch SAS

Short circuit alarm switches signal tripping operations only if they have been initiated by a short circuit. Tripping due to a short circuit is also indicated on the molded case circuit breaker.



The tripping operation must be reset by deliberate acknowledgement of the fault before the molded case circuit breaker can be switched to ON again.

Note

Short circuit alarm switches are only compatible with 3VA1 molded case circuit breakers. On breakers equipped with electronic trip units, the short circuit alarm function is performed by the electronic trip unit (ETU) and the EFB external function box.

Benefits

- The internal accessories are extremely easy to install. No tools are required because they are simply snapped into place in the accessories compartments to the left and right of the handle.
- The accessories are connected by screw terminals for auxiliary conductors with a cross-section of up to 2.5 mm^2. The terminals are mounted on the front of the unit for easy access.
- All auxiliary and alarm switches are designed as changeover contacts and therefore provide a high degree of flexibility for planning and installation purposes.
- Slimline auxiliary and alarm switches HQ and double-width auxiliary and alarm switches HP are suitable for use in applications involving diverse types of signaling contact and with high continuous currents.
- With two conductors per contact point for the auxiliary and alarm switches HP, looping through is extremely easy.
- Symbols engraved in the lid of the accessories compartment indicate the possible mounting positions of the internal accessories.

3VA with internal accessories pre-assembled at the factory

The basic circuit breakers with -0AA0 at the end of the article number are supplied without installed internal accessories.

Due to the high number of different internal accessory components available and the associated flexibility of use, it is not possible to represent all options with an article number for circuit breakers and installed internal accessories.

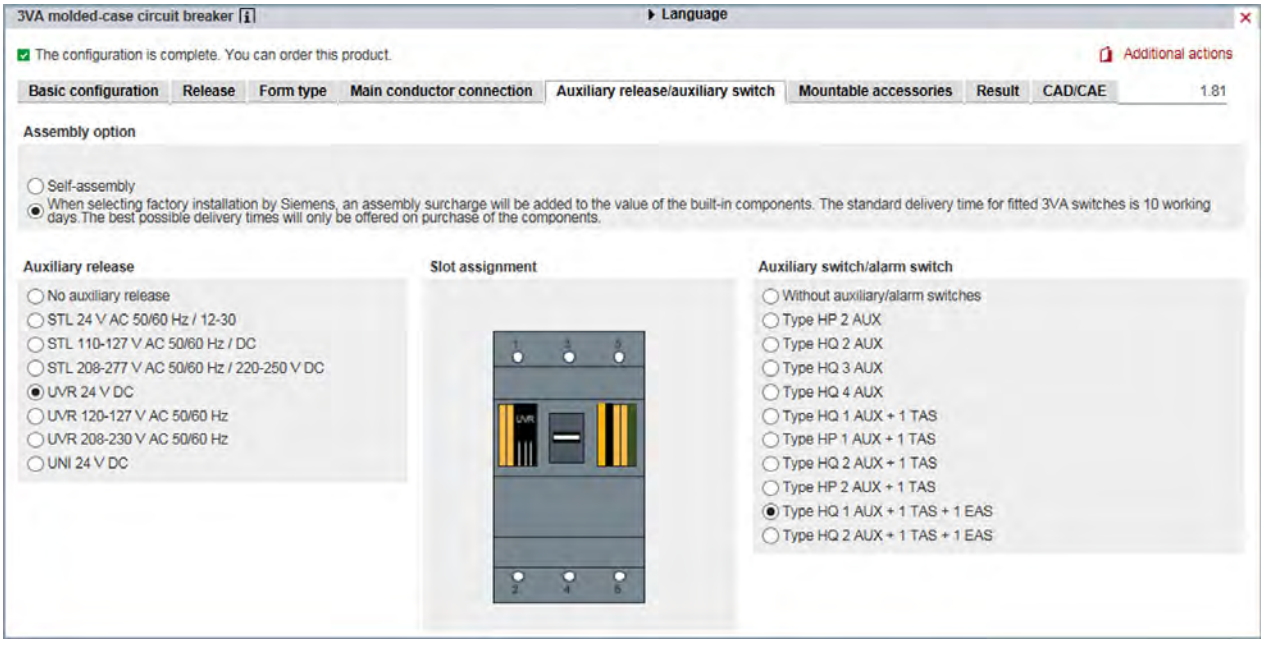
However, it is possible to order a basic circuit breaker with pre-defined combinations of internal accessories that are installed at the factory. This concerns a selection of different auxiliary releases and auxiliary/alarm switch combinations especially for each basic circuit breaker type.

In the case of factory installation, an installation surcharge is levied for the installed internal accessories.

The normal delivery time for equipped 3VA breakers is 10 working days. The best possible delivery times are only achieved when the individual components are ordered.

Basic circuit breakers with pre-installed internal accessories can only be ordered by registered customers using the 3VA Configurator:

www.siemens.com/lowvoltage/configurator-3VA



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Design

Internal accessories Optional equipment		3VA1 160 A 2-pole	3VA1 100 A 3- and 4-pole	3VA1 160 A 3- and 4-pole	3VA1 250 A 3- and 4-pole
Slot No.:		160 A 23 22 21	100 A 23 22 21 11 12 13	160 A 23 22 21 11 12 13	250 A 24 23 22 21 11 12 13 14
Auxiliary switch	**Type**				
Auxiliary switch	AUX_HQ	x x x	x x x x x x	x x x x x x	x x x x x x x x
	AUX_HQ_el	x x x	x x x x x x	x x x x x x	x x x x x x x x
	AUX_HP	x x		x x	x x x x x
Leading changeover switch	LCS_HQ			x	x
	LCS_HQ_el			x	x
	LCS_HP			x	x
Alarm switch	**Type**				
Trip alarm switch	TAS_HQ	x x	x x x x	x x x x	x x x x x x
	TAS_HQ_el	x x	x x x x	x x x x	x x x x x x
	TAS_HP	x		x x	x x
Short circuit alarm switch	SAS_HQ			x	x
	SAS_HQ_el			x	x
Auxiliary release	**Type**				
Shunt trip flexible	STF	x	x	x	x
Shunt trip left	STL	x	x	x	x
	STL (EI)	x	x	x	x
Residual current release	RCR [1]		x	x	x
Undervoltage release	UVR	x	x	x	x
Universal release	UNI	x	x	x	x
Other					
Cylinder lock (type Ronis)			x	x	x

[1] Included in the scope of supply for side mounted residual current devices

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Internal accessories
Optional equipment

	Slot No.:	3VA2 100/160/250 A 3-pole	3VA2 100/160/250 A 4-pole
		24 23 22 21 250 A 11 12 13 14	34 33 32 31 24 23 22 21 250 A 11 12 13 14
Auxiliary switch	**Type**		
Auxiliary switch	AUX_HQ	x x x x x x x x	x x x x x x x x x x x x x x x x
	AUX_HQ_el	x x x x x x x x	x x x x x x x x x x x x x x x x
	AUX_HP	x x x x	x x x x x x x x
		x x	x x x x
Leading changeover switch	LCS_HQ	x	x
	LCS_HQ_el	x	x
	LCS_HP	x	x
Alarm switch	**Type**		
Trip alarm switch	TAS_HQ	x x x x	x x x x
	TAS_HQ_el	x x x x	x x x x
	TAS_HP	x x	x x
Electrical alarm switch	EAS_HQ	x	x
	EAS_HQ_el	x	x
Auxiliary release	**Type**		
Shunt trip flexible	STF	x x	x x
Shunt trip left	STL	x	x
	STL (EI)	x	x
Undervoltage release	UVR	x	x
Universal release	UNI	x	x
ETU/communication	**Type**		
Breaker data server communication module	COM060	x	x
24 V module		x	x
Other			
Cylinder lock (type Ronis)		x	x

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Internal accessories

Internal accessories
Optional equipment

	Slot No.:	3VA2 400/630 A 3-pole										3VA2 400/630 A 4-pole									
		25	24	23	22	21	630 A	11	12	13	14	15	35	34	33	32	31	25	24	23	22	21	630 A	11	12	13	14	15
Auxiliary switch	**Type**																											
Auxiliary switch	AUX_HQ	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x
	AUX_HQ_el	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x
	AUX_HP		x		x				x		x			x		x			x		x				x		x
		x		x				x		x			x		x			x		x			x		x		
Leading changeover switch	LCS_HQ							x																x				
	LCS_HQ_el							x																x				
	LCS_HP							x																x				
Alarm switch	**Type**																											
Trip alarm switch	TAS_HQ				x	x		x	x												x	x		x	x			
	TAS_HQ_el				x	x		x	x												x	x		x	x			
	TAS_HP				x			x													x			x				
Electrical alarm switch	EAS_HQ											x																x
	EAS_HQ_el											x																x
Auxiliary release	**Type**																											
Shunt trip flexible	STF			x				x												x				x				
Shunt trip left	STL			x																x								
	STL (EI)			x																x								
Undervoltage release	UVR			x																x								
Universal release	UNI			x																x								
ETU/communication	**Type**																											
Breaker data server communication module	COM060							x																x				
24 V module								x																x				
Other																												
Cylinder lock (type Ronis)								x																x				

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Selection and ordering data

	Version		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Auxiliary Switches and Alarm Switches								
3VA9988-0AA11 3VA9988-0AA12	**Auxiliary switch AUX**							
	Type/switching capacity/size	Electronic-compatible						
	HP/high switching capacity/2 slots	--		3VA9988-0AA11		1	1 unit	1CB
	HQ/compact size/1 slot	--		3VA9988-0AA12		1	1 unit	1CB
	HQ_el/compact size/1 slot	✓		3VA9988-0AA13		1	1 unit	1CB
3VA9988-0AA21 3VA9988-0AA22	**Leading changeover switch LCS**							
	Type/switching capacity/size	Electronic-compatible						
	HP/high switching capacity/2 slots	--		3VA9988-0AA21		1	1 unit	1CB
	HQ/compact size/1 slot	--		3VA9988-0AA22		1	1 unit	1CB
	HQ_el/compact size/1 slot	✓		3VA9988-0AA23		1	1 unit	1CB
3VA9988-0AB11 3VA9988-0AB12	**Trip alarm switch TAS**							
	Type/switching capacity/size	Electronic-compatible						
	HP/high switching capacity/2 slots	--		3VA9988-0AB11		1	1 unit	1CB
	HQ/compact size/1 slot	--		3VA9988-0AB12		1	1 unit	1CB
	HQ_el/compact size/1 slot	✓		3VA9988-0AB13		1	1 unit	1CB
3VA9988-0AB32	**Short-circuit alarm switches SAS (3VA1 only)**							
	For molded case circuit breakers, frame size	Electronic-compatible						
	For 3VA1 100 A/160 A							
	• HQ/compact size/1 slot	--		3VA9988-0AB32		1	1 unit	1CB
	• HQ_el/compact size/1 slot	✓		3VA9988-0AB33		1	1 unit	1CB
	For 3VA1 250 A							
	• HQ/compact size/1 slot	--		3VA9988-0AB34		1	1 unit	1CB
	• HQ_el/compact size/1 slot	✓		3VA9988-0AB35		1	1 unit	1CB
3VA9988-0AB22	**Electrical alarm switches EAS (3VA2 only)**							
	Type/switching capacity/size	Electronic-compatible						
	HQ/compact size/1 slot	--		3VA9988-0AB22		1	1 unit	1CB
	HQ_el/compact size/1 slot	✓		3VA9988-0AB23		1	1 unit	1CB
Undervoltage releases								
3VA9908-0BB15	**Undervoltage release UVR**							
	50/60 Hz V AC	V DC						
	--	12		3VA9908-0BB10		1	1 unit	1CB
	--	24		3VA9908-0BB11		1	1 unit	1CB
	--	48		3VA9908-0BB12		1	1 unit	1CB
	--	60		3VA9908-0BB13		1	1 unit	1CB
	--	125 ... 127		3VA9908-0BB14		1	1 unit	1CB
	--	220 ... 230		3VA9908-0BB15		1	1 unit	1CB
	--	250		3VA9908-0BB16		1	1 unit	1CB
	24	--		3VA9908-0BB20		1	1 unit	1CB
	48	--		3VA9908-0BB21		1	1 unit	1CB
	60	--		3VA9908-0BB22		1	1 unit	1CB
	110	--		3VA9908-0BB23		1	1 unit	1CB
	120 ... 127	--		3VA9908-0BB24		1	1 unit	1CB
	208 ... 230	--		3VA9908-0BB25		1	1 unit	1CB
	380 ... 400	--		3VA9908-0BB26		1	1 unit	1CB
	440 ... 480	--		3VA9908-0BB27		1	1 unit	1CB

*** You can order this quantity or a multiple thereof.**

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Internal accessories

Shunt trip left

3VA9988-0BL33

Shunt trip left STL

Version 50/60 Hz V AC	Version V DC	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
--	12		3VA9988-0BL10		1	1 unit	1CB
24	24 ... 30		3VA9988-0BL30		1	1 unit	1CB
110 ... 127	110 ... 127		3VA9988-0BL32		1	1 unit	1CB
208 ... 277	220 ... 250		3VA9988-0BL33		1	1 unit	1CB
--	12		3VA9988-0BL10		1	1 unit	1CB
380 ... 600	--		3VA9988-0BL20		1	1 unit	1CB

Shunt trip left STL (EI)

50/60 Hz V AC	V DC						
--	24		3VA9988-0BM10		1	1 unit	1CB

Shunt trip flexible STF

3VA9988-0BA23

Shunt trip flexible

50/60 Hz V AC	V DC						
24	--		3VA9988-0BA20		1	1 unit	1CB
48 ... 60	--		3VA9988-0BA21		1	1 unit	1CB
110 ... 127	--		3VA9988-0BA22		1	1 unit	1CB
208 ... 277	--		3VA9988-0BA23		1	1 unit	1CB
380 ... 500	--		3VA9988-0BA24		1	1 unit	1CB
600	--		3VA9988-0BA25		1	1 unit	1CB

Universal release UNI

3VA9908-0BD13

Universal release

50/60 Hz V AC	V DC						
--	12		3VA9908-0BD11		1	1 unit	1CB
--	24		3VA9908-0BD12		1	1 unit	1CB
--	48		3VA9908-0BD13		1	1 unit	1CB

Time-delay device for undervoltage releases

3VA9988-0BF22

Time-delay device

V AC	V DC	Delay time					
110	110	Fixed	3VA9988-0BF21		1	1 unit	1CB
230	230	Fixed	3VA9988-0BF22		1	1 unit	1CB
--	24	Fixed	3VA9988-0BF23		1	1 unit	1CB

* You can order this quantity or a multiple thereof.

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Overview

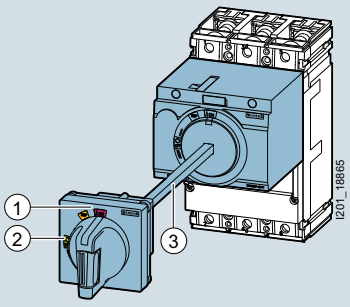
Manual operators are provided to facilitate manual operation of the 3VA molded case circuit breakers, either directly at the circuit breaker or through the door or side wall of the cubicle.

Front mounted rotary operators

The front mounted rotary operator is mounted directly on the molded case circuit breaker and is available with or without a door interlocking system. It meets the requirements for degree of protection IP30. The door interlock locks the cubicle door when the molded case circuit breaker is closed, but can be deliberately overridden if necessary.

Door mounted rotary operator

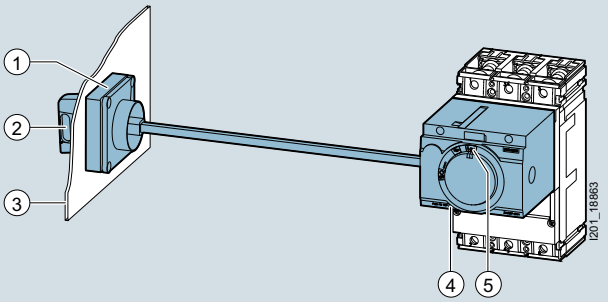
The door mounted rotary operator enables operation of the molded case circuit breaker from the cubicle door. The door element meets the requirements for degree of protection IP65 and features a door interlocking system and tolerance compensation. A variable depth adapter can be deployed to allow use of the door mounted rotary operator in conjunction with draw-out units. A supplementary handle can be attached directly to the shaft shoulder to allow convenient operation of the molded case circuit breaker when the cubicle door is open (i.e. when the control element is decoupled).



1 Door element
2 Switching position indicator ON, TRIP, OFF, RESET
3 Shaft

Side wall mounted rotary operators

The side wall mounted rotary operator is designed for installation in the cubicle side wall. It is available optionally with short shaft and mounting plate for mounting directly adjacent to the cubicle wall. The wall element meets the requirements for degree of protection IP65.



1 Side wall mounted rotary operator
2 Padlock device
3 Side wall of cubicle
4 PUSH-to-TRIP button
5 Switching position indicator ON, TRIP, OFF, RESET

All manual operators as well as the supplementary handle for the door mounted rotary operator are also available in a version for use in EMERGENCY-STOP applications. These are colored a conspicuous yellow/red for easier identification.

Interlocking methods

All manual operators are designed to allow locking of the operator at the handle and at the rotary operator with up to three padlocks in each case. It is also possible to fit a cylinder lock which can be used either to lock or to interlock molded case circuit breakers depending on the application.

If the cylinder lock is applied as a lock, it can be used to prevent the molded case circuit breaker from closing. The key can be removed at any time. If the lock is used to create an interlock, the key can be removed only when it is in the OFF position, allowing the creation of an interlock by the use of a single key for several breakers.

Active illumination

The manual operators are also available in illuminated variants in which the handle is illuminated red, yellow or green via LEDs (24 V DC) depending on the position of the breaker. This means that the switching position of the molded case circuit breaker can be immediately identified, even when light conditions are poor. This option can also be retrofitted.

Benefits

- Convenient circuit breaker operation inside and outside the cubicle
- Locking and interlocking for all manual operators prevents unauthorized breaker operation
- Conspicuously colored variant for EMERGENCY-STOP circuits
- Illumination for clear indication of switching position even when light conditions are poor
- All manual operators meet the standards for isolating characteristics defined by IEC / EN 60947-1

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Selection and ordering data

Version		For molded case circuit breakers/ frame size				DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
		3VA1 100 A, 160 A	3VA1 250 A	3VA2 100 A, 160 A, 250 A	3VA2 400 A, 630 A						
Front mounted rotary operators											
3VA9267-0EK11	**Front mounted rotary operators** • Rotary operating mechanisms • Handle • For IEC • Degree of protection IP30										
Type	Color										
• Standard, without illumination kit	Gray	✓	--	--	--		3VA9157-0EK11		1	1 unit	1CB
		--	✓	--	--		3VA9257-0EK11		1	1 unit	1CB
		--	--	✓	--		3VA9267-0EK11		1	1 unit	1CB
		--	--	--	✓		3VA9467-0EK11		1	1 unit	1CB
• Standard, with illumination kit	Gray	✓	--	--	--		3VA9157-0EK13		1	1 unit	1CB
		--	✓	--	--		3VA9257-0EK13		1	1 unit	1CB
		--	--	✓	--		3VA9267-0EK13		1	1 unit	1CB
		--	--	--	✓		3VA9467-0EK13		1	1 unit	1CB
• EMERGENCY-STOP, without illumination kit	Yellow-red	✓	--	--	--		3VA9157-0EK15		1	1 unit	1CB
		--	✓	--	--		3VA9257-0EK15		1	1 unit	1CB
		--	--	✓	--		3VA9267-0EK15		1	1 unit	1CB
		--	--	--	✓		3VA9467-0EK15		1	1 unit	1CB
• EMERGENCY-STOP, with illumination kit	Yellow-red	✓	--	--	--		3VA9157-0EK17		1	1 unit	1CB
		--	✓	--	--		3VA9257-0EK17		1	1 unit	1CB
		--	--	✓	--		3VA9267-0EK17		1	1 unit	1CB
		--	--	--	✓		3VA9467-0EK17		1	1 unit	1CB
• Standard, with door interlock	Gray	✓	--	--	--		3VA9157-0EK21		1	1 unit	1CB
		--	✓	--	--		3VA9257-0EK21		1	1 unit	1CB
		--	--	✓	--		3VA9267-0EK21		1	1 unit	1CB
		--	--	--	✓		3VA9467-0EK21		1	1 unit	1CB
• Standard, with door interlock, with illumination kit	Gray	✓	--	--	--		3VA9157-0EK23		1	1 unit	1CB
		--	✓	--	--		3VA9257-0EK23		1	1 unit	1CB
		--	--	✓	--		3VA9267-0EK23		1	1 unit	1CB
		--	--	--	✓		3VA9467-0EK23		1	1 unit	1CB
• EMERGENCY-STOP, with door interlock	Yellow-red	✓	--	--	--		3VA9157-0EK25		1	1 unit	1CB
		--	✓	--	--		3VA9257-0EK25		1	1 unit	1CB
		--	--	✓	--		3VA9267-0EK25		1	1 unit	1CB
		--	--	--	✓		3VA9467-0EK25		1	1 unit	1CB
• EMERGENCY-STOP, with door interlock, with illumination kit	Yellow-red	✓	--	--	--		3VA9157-0EK27		1	1 unit	1CB
		--	✓	--	--		3VA9257-0EK27		1	1 unit	1CB
		--	--	✓	--		3VA9267-0EK27		1	1 unit	1CB
		--	--	--	✓		3VA9467-0EK27		1	1 unit	1CB
3VA9267-0GK00	• Without handle, with shaft stub, without door interlock • For retrofitting with 3VL handle	✓	--	--	--		3VA9157-0GK00		1	1 unit	1CB
		--	✓	--	--		3VA9257-0GK00		1	1 unit	1CB
		--	--	✓	--		3VA9267-0GK00		1	1 unit	1CB
		--	--	--	✓		3VA9467-0GK00		1	1 unit	1CB

* You can order this quantity or a multiple thereof.

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	Version	For molded case circuit breakers/ frame size 3VA1 100 A, 160 A	3VA1 250 A	3VA2 100 A, 160 A, 250 A	3VA2 400 A, 630 A	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Door mounted rotary operator											
3VA9267-0FK21	**Door mounted rotary operator** • Rotary operating mechanisms • Shaft 300 mm • Mounting tolerance compensation • Handle with masking plate 75 × 75 mm • Degree of protection IP65										
	Type / Color										
	• Standard / Gray	✓	--	--	--		3VA9157-0FK21		1	1 unit	1CB
		--	✓	--	--		3VA9257-0FK21		1	1 unit	1CB
		--	--	✓	--		3VA9267-0FK21		1	1 unit	1CB
		--	--	--	✓		3VA9467-0FK21		1	1 unit	1CB
	• Standard, with illumination kit / Gray	✓	--	--	--		3VA9157-0FK23		1	1 unit	1CB
		--	✓	--	--		3VA9257-0FK23		1	1 unit	1CB
		--	--	✓	--		3VA9267-0FK23		1	1 unit	1CB
		--	--	--	✓		3VA9467-0FK23		1	1 unit	1CB
	• EMERGENCY-STOP / Yellow-red	✓	--	--	--		3VA9157-0FK25		1	1 unit	1CB
		--	✓	--	--		3VA9257-0FK25		1	1 unit	1CB
		--	--	✓	--		3VA9267-0FK25		1	1 unit	1CB
		--	--	--	✓		3VA9467-0FK25		1	1 unit	1CB
	• EMERGENCY-STOP, with illumination kit / Yellow-red	✓	--	--	--		3VA9157-0FK27		1	1 unit	1CB
		--	✓	--	--		3VA9257-0FK27		1	1 unit	1CB
		--	--	✓	--		3VA9267-0FK27		1	1 unit	1CB
		--	--	--	✓		3VA9467-0FK27		1	1 unit	1CB
3VA9487-0GC01	**Supplementary handle for door mounted rotary operator**										
	Type / Color										
	• Standard / Gray	✓	✓	--	--		3VA9287-0GC01		1	1 unit	1CB
		--	--	✓	--		3VA9487-0GC01		1	1 unit	1CB
		--	--	--	✓		3VA9487-0GC11		1	1 unit	1CB
	• EMERGENCY-STOP / Yellow-red	✓	✓	--	--		3VA9287-0GC05		1	1 unit	1CB
		--	--	✓	--		3VA9487-0GC05		1	1 unit	1CB
		--	--	--	✓		3VA9487-0GC15		1	1 unit	1CB
8UD1900-2WB00	**Shaft** 8 mm										
	Versions										
	• 300 mm long						8UD1900-2WA00		1	1 unit	1CB
	• 600 mm long						8UD1900-2WB00		1	1 unit	1CB
8UD1900-2DA00	**Adapter for shaft 8 mm x 8 mm** With door mounted rotary operator and side wall mounted rotary operator						8UD1900-2DA00		1	1 unit	1CB
8UD1900-2HA00	**Door coupling** 8 × 8 mm						8UD1900-2HA00		1	1 unit	1CB
3VA9487-0GA80	**Fixing bracket for shaft**	✓	✓	--	--		3VA9287-0GA80		1	1 unit	1CB
		--	--	✓	✓		3VA9487-0GA80		1	1 unit	1CB
3VA9487-0GB10	**Variable depth adapter** 8 × 8 mm						3VA9487-0GB10		1	1 unit	1CB
8UD1900-2GA00	**Mounting tolerance compensation** 8 × 8 mm						8UD1900-2GA00		1	1 unit	1CB

* You can order this quantity or a multiple thereof.

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Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers – Accessories, IEC NEW

Manual operators

	Version	For molded case circuit breakers/ frame size 3VA1 100 A, 160 A	3VA1 250 A	3VA2 100 A, 160 A, 250 A	3VA2 400 A, 630 A	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Side wall mounted rotary operators											
3VA9267-0PK11	**Side wall mounted rotary operators** • Without mounting plate - Rotary operator with shaft 300 mm - Handle with masking plate 75 x 75 mm - Degree of protection IP65										
	Type: • Standard; Color: Gray	✓	--	--	--		3VA9157-0PK11		1	1 unit	1CB
		--	✓	--	--		3VA9257-0PK11		1	1 unit	1CB
		--	--	✓	--		3VA9267-0PK11		1	1 unit	1CB
		--	--	--	✓		3VA9467-0PK11		1	1 unit	1CB
	Type: • Standard, with illumination kit; Color: Gray	✓	--	--	--		3VA9157-0PK13		1	1 unit	1CB
		--	✓	--	--		3VA9257-0PK13		1	1 unit	1CB
		--	--	✓	--		3VA9267-0PK13		1	1 unit	1CB
		--	--	--	✓		3VA9467-0PK13		1	1 unit	1CB
	Type: • EMERGENCY-STOP; Color: Yellow-red	✓	--	--	--		3VA9157-0PK15		1	1 unit	1CB
			✓	--	--		3VA9257-0PK15		1	1 unit	1CB
		--	--	✓	--		3VA9267-0PK15		1	1 unit	1CB
		--	--	--	✓		3VA9467-0PK15		1	1 unit	1CB
	Type: • EMERGENCY-STOP, with illumination kit; Color: Yellow-red	✓	--	--	--		3VA9157-0PK17		1	1 unit	1CB
		--	✓	--	--		3VA9257-0PK17		1	1 unit	1CB
		--	--	✓	--		3VA9267-0PK17		1	1 unit	1CB
		--	--	--	✓		3VA9467-0PK17		1	1 unit	1CB
3VA9267-0PK51	• With mounting plate - Rotary operator with short shaft - Handle with masking plate 75 x 75 mm - Degree of protection IP65										
	Type: • Standard; Color: Gray	✓	--	--	--		3VA9157-0PK51		1	1 unit	1CB
		--	✓	--	--		3VA9257-0PK51		1	1 unit	1CB
		--	--	✓	--		3VA9267-0PK51		1	1 unit	1CB
	Type: • Standard, with illumination kit; Color: Gray	✓	--	--	--		3VA9157-0PK53		1	1 unit	1CB
		--	✓	--	--		3VA9257-0PK53		1	1 unit	1CB
		--	--	✓	--		3VA9267-0PK53		1	1 unit	1CB
	Type: • EMERGENCY-STOP; Color: Yellow-red	✓	--	--	--		3VA9157-0PK55		1	1 unit	1CB
		--	✓	--	--		3VA9257-0PK55		1	1 unit	1CB
		--	--	✓	--		3VA9267-0PK55		1	1 unit	1CB
	Type: • EMERGENCY-STOP, with illumination kit; Color: Yellow-red	✓	--	--	--		3VA9157-0PK57		1	1 unit	1CB
		--	✓	--	--		3VA9257-0PK57		1	1 unit	1CB
		--	--	✓	--		3VA9267-0PK57		1	1 unit	1CB
3VA9987-0GL30	**Extended DIN rail for N/PE terminal** • For mounting plate • Up to 250 A						3VA9987-0GL30		1	1 unit	1CB
Handles											
8UD1731-0AB11	**Handles** • With masking plate										
	Type: • Standard; Color: Gray; Tolerance compensation: None	✓	✓	✓	--		8UD1721-0AB11		1	1 unit	1CB
	Tolerance compensation: With	✓	✓	✓	--		8UD1721-0AB21		1	1 unit	1CB
	Tolerance compensation: None	--	--	--	✓		8UD1731-0AB11		1	1 unit	1CB
	Tolerance compensation: With	--	--	--	✓		8UD1731-0AB21		1	1 unit	1CB
	Type: • EMERGENCY-STOP; Color: Yellow-red; Tolerance compensation: None	✓	✓	✓	--		8UD1721-0AB15		1	1 unit	1CB
	Tolerance compensation: With	✓	✓	✓	--		8UD1721-0AB25		1	1 unit	1CB
	Tolerance compensation: None	--	--	--	✓		8UD1731-0AB15		1	1 unit	1CB
	Tolerance compensation: With	--	--	--	✓		8UD1731-0AB25		1	1 unit	1CB

* You can order this quantity or a multiple thereof.

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	Version		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
General accessories for manual operators								
3VA9087-0SX10	**Labeling plate for manual operators**			3VA9087-0SX10		1	10 units	1CB
8UD1900-0KA20	**Illumination kit for manual operators** 24 V DC voltage	For molded case circuit breakers						
		3VA1, 100 ... 250 A	Front mounted rotary operators	8UD1900-0KA10		1	1 unit	1CB
		3VA2, 100 ... 630 A	Front mounted rotary operators	8UD1900-0KA20		1	1 unit	1CB
		3VA1, 3VA2, 100 … 630 A	Door mounted rotary operator and side wall mounted rotary operator	8UD1900-0KA20		1	1 unit	1CB
8UD1900-0MB01	**Cylinder lock (type Kaba)** • For door mounted rotary operator and side wall mounted rotary operator (in the masking plate) • Standard masking plate	Key 1		8UD1900-0MB01		1	1 unit	1CB
		Key 2		8UD1900-0NB01		1	1 unit	1CB
		Key 3		8UD1900-0PB01		1	1 unit	1CB
		Key 4		8UD1900-0QB01		1	1 unit	1CB
8UD1900-0MB05	**Cylinder lock (type Kaba)** • For door mounted rotary operator and side wall mounted rotary operator (in the masking plate) • EMERGENCY-STOP masking plate	Key 1		8UD1900-0MB05		1	1 unit	1CB
		Key 2		8UD1900-0NB05		1	1 unit	1CB
		Key 3		8UD1900-0PB05		1	1 unit	1CB
		Key 4		8UD1900-0QB05		1	1 unit	1CB
3VA9488-0VF20	**Rotary operator interlock**[1] • Contains 1 unit • For interlocking up to 3 operators (with 3 modules) • Interlocking via Bowden cable (not included in scope of delivery), see page 2/113	For molded case circuit breakers						
		3VA1, 160 A		3VA9158-0VF20				
		3VA1, 250 A		3VA9258-0VF20				
		3VA2, 250 A		3VA9268-0VF20				
		3VA2, 630 A		3VA9468-0VF20				
3VA9980-0VL10	**Cylinder lock (type Ronis)** • Includes a lock with 2 keys • For locking or interlocking • For installation in all rotary operators with shaft stub • For mounting in the adapter kit for the accessories compartment							
		Key 1		3VA9980-0VL10		1	1 unit	1CB
		Key 2		3VA9980-0VL20		1	1 unit	1CB
		Key 3		3VA9980-0VL30		1	1 unit	1CB
		Key 4		3VA9980-0VL40		1	1 unit	1CB
	Note							
	The cylinder lock adapter for rotary operators is also needed for locking or interlocking circuit breakers via rotary operators.							
3VA9980-0LF20	**Cylinder lock adapter for rotary operators** To mount the cylinder lock in the rotary operator (also possible with door mounted rotary operator and side wall mounted rotary operator)			3VA9980-0LF20		1	1 unit	1CB

1) Start of delivery scheduled for 1st quarter 2016

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Overview

Lateral motorized operator MO310

The lateral motor operator MO310 is optimized for use in in the area of electrical installation. It is mounted on the side of the 3VA1 molded-case circuit breaker and, thanks to the cover size of 45 mm, is suitable for side-by-side arrangement with miniature circuit breakers.

The motor operator MO310 can also be locked with several padlocks.

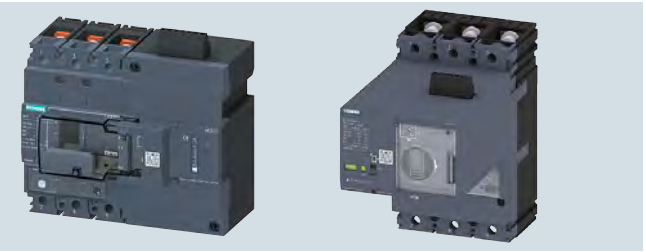
MO320 front motor operator

The MO320 motor operator is mounted on the front of the 3VA molded-case circuit breaker and opens and closes the molded case circuit breaker by means of control cable commands (e.g. from pushbuttons or a PLC). It can also be operated manually, however, and a handle is provided on the unit for this purpose.

The motor operator also features a clear switching position indicator which indicates ON and OFF and, via LED, whether the circuit breaker has tripped (TRIP). The motor operator therefore meets the standards for isolating characteristics defined by IEC / EN 60947-1. It is thus possible to identify the switching position of the molded case circuit breaker at any time.

Two different reset modes can be selected, i.e. in one mode, the operator resets the molded case circuit breaker automatically and in the other, it waits for confirmation by an OFF signal before it resets the breaker.

Furthermore, the motor operator can be locked in the OFF position by means of several padlocks.



Benefits

- Remote operation of the molded case circuit breaker by means of control cable commands
- Clear switching position indication including TRIP provides a quick visual overview and prevents operating errors
- Locking capability prevents unauthorized operations
- Meets the standards for isolating characteristics defined by IEC / EN 60947-1

Design

- The MO320 motor operator is simply snapped into position on a mounting frame which is installed instead of the accessories lid of the molded case circuit breaker.

Technical specifications

MO310 motor operator	**3VA1**
	160 A
Degree of protection	IP20, with escutcheon IP30
Rated control supply voltage (operating range of control supply voltage)	42 V ... 60 V AC/ 24 V ... 60 V DC (0.85 ... 1.26) 110 V ... 230 V AC/ 110 V ... 250 V DC (0.85 ... 1.1)
Rating	250 W, max. 500 W (60 ms)
Make time, typically	< 300 ms
Break time, typically	< 300 ms

MO320 motor operator	**3VA1**		**3VA2**	
	160 A	250 A	250 A	630 A
Degree of protection	IP20, with escutcheon IP30			
Rated control supply voltage (operating range of control supply voltage)	24 V ... 60 V DC (0,85 ... 1.26) 110 V ... 230 V AC/ 110 V ... 250 V DC (0.85 ... 1.1)			
Rating	250 W, max. 500 W (60 ms)			
Make time, typically	< 800 ms	< 800 ms	< 1000 ms	< 1700 ms
Break time, typically	< 800 ms	< 800 ms	< 1000 ms	< 1400 ms

Selection and ordering data

	Version	For molded case circuit breakers/ frame size 3VA1 160 A	3VA1 250 A	3VA2 100 A, 160 A, 250 A	3VA2 400 A, 630 A	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Motorized operating mechanisms											
3VA9267-0HB10	**Lateral motor operator (MO310)**										
	Versions										
	• 24 ... 60 V DC 42 ... 60 V AC	✓	--	--	--		3VA9117-0HB10		1	1 unit	1CB
	• 110 ... 230 V AC, 110 ... 250 V DC	✓	--	--	--		3VA9117-0HB20		1	1 unit	1CB
3VA9267-0HA10	**Motor operators without stored energy feature (MO320)**										
	Versions										
	• 24 ... 60 V DC	✓	--	--	--		3VA9157-0HA10		1	1 unit	1CB
		--	✓	--	--		3VA9257-0HA10		1	1 unit	1CB
		--	--	✓	--		3VA9267-0HA10		1	1 unit	1CB
		--	--	--	✓		3VA9467-0HA10		1	1 unit	1CB
	• 110 ... 230 V AC, 110 ... 250 V DC	✓	--	--	--		3VA9157-0HA20		1	1 unit	1CB
		--	✓	--	--		3VA9257-0HA20		1	1 unit	1CB
		--	--	✓	--		3VA9267-0HA20		1	1 unit	1CB
		--	--	--	✓		3VA9467-0HA20		1	1 unit	1CB

* You can order this quantity or a multiple thereof.

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Overview

The proper functioning and in particular the safety of electrical installations does not just depend on the quality and design of the components, but also on the method of installation.

The following aspects of electrical installations are of crucial importance for the implementation of a safe, properly functioning connection to the 3VA molded case circuit breakers:

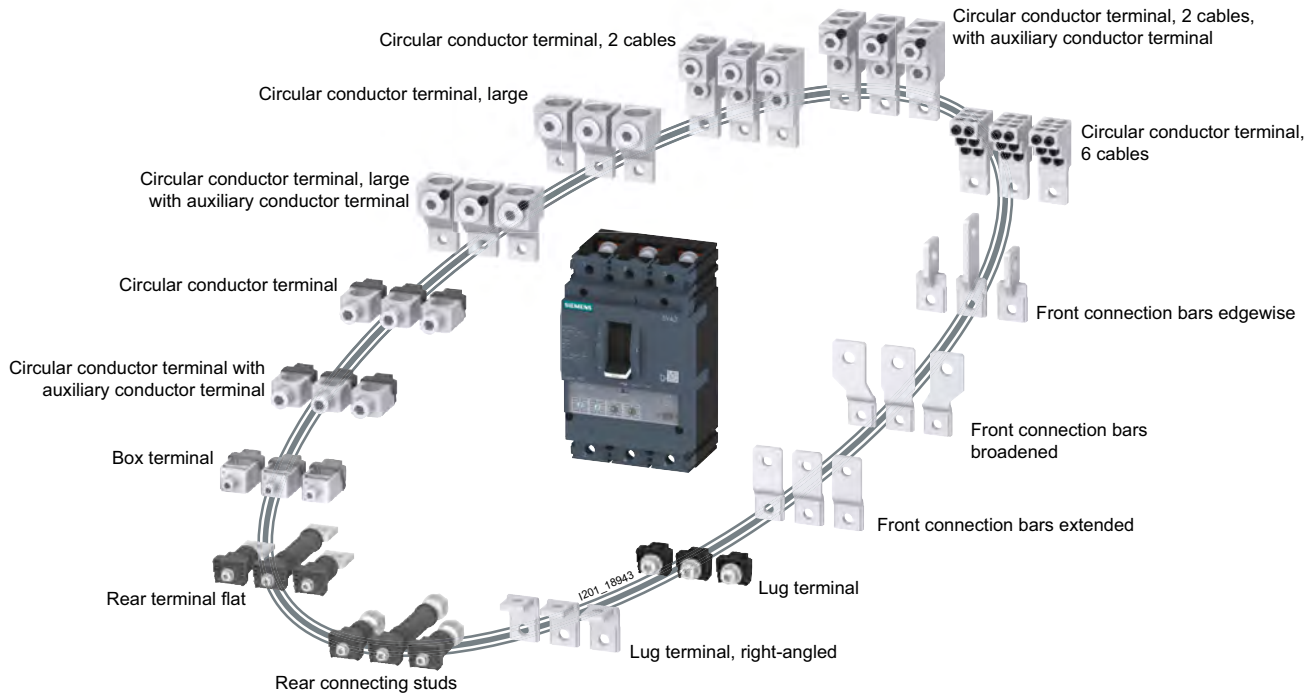
- Installation, e.g. connection to cables or busbars
- Dimensioning of the cables and busbars
- Installation medium, e.g. rigid or flexible

The following catalog pages provide all the information needed to ensure that a 3VA molded case circuit breaker is safely connected.

Connection technology for the 3VA molded case circuit breaker

The connection technology of the 3VA molded case circuit breakers is designed to support uncomplicated and convenient commissioning of the 3VA molded case circuit breakers and to meet all installation requirements.

To meet this objective, an extensive portfolio of connection components is available.



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Connection technology

Conductor cross-sections

Connection technology	Cable medium	Cables and busbars	Dimensions	3VA1		3VA2		
				100 A/160 A	250 A	100 A/160 A/250 A	400 A	630 A
Box terminal	Solid cable	Cu cable	mm^2	1.5 ... 16	6 ... 16	6 ... 16	--	--
	Stranded cable	Cu cable	mm^2	1.5 ... 70	6 ... 120 50 ... 185	6 ... 120 25 ... 185	35 ... 300	35 ... 300
	Finely stranded cable	Cu cable	mm^2	1.5 ... 50	10 ... 95 95 ... 150	10 ... 95 35 ... 150	25 ... 240	25 ... 240
	Finely stranded with insulated end sleeve	Cu cable	mm^2	1.5 ... 50	6 ... 95 50 ... 150	6 ... 95 25 ... 150	25 ... 240	25 ... 240
	Flexible copper busbar	Flexible busbar	mm x mm	2x ..6x [13 x 0.5] ... 2x ..9x [9 x 0.8]	2x ..6x [13 x 0.5] ... 2x ..6x [15.5 x 0.8] ... 2x ..6x [20 x 1]	2x ..6x [13 x 0.5] ... 2x ..6x [15.5 x 0.8] ... 2x ..6x [20 x 1]	2x ..10x [20 x 1] ... 2x ..10x [24 x 1]	2x ..10x [20 x 1] ... 2x ..10x [24 x 1]
Circular conductor terminals	Solid cable	Cu/Al cable	mm^2	2.5/4 ... 16	--	1.5/4 ... 16	--	--
	Stranded cable	Cu/Al cable	mm^2	1.5/4 ... 50	35 ... 185	1.5/4 ... 50 16 ... 185	50 ... 300	--
	Finely stranded cable	Cu cable	mm^2	1.5 ... 35	35 ... 150	1.5 ... 35 25 ... 150	50 ... 240	--
	Finely stranded with insulated end sleeve	Cu cable	mm^2	1.5 ... 35	35 ... 150	1.5 ... 35 16 ... 120	50 ... 240	--
Circular conductor terminal, large	Solid cable			--	--	--	--	--
	Stranded cable	Cu/Al cable	mm^2	25 ... 150	50 ... 240	50 ... 240	--	--
	Finely stranded cable	Cu cable	mm^2	25 ... 120	50 ... 185	50 ... 185	--	--
	Finely stranded with insulated end sleeve	Cu cable	mm^2	25 ... 95	50 ... 185	50 ... 185	--	--
Circular conductor terminal for 2 cables	Solid cable			--	--	--	--	--
	Stranded cable	Cu/Al cable	mm^2	--	25 ... 150	25 ... 150	70 ... 300	70 ... 300
	Finely stranded cable	Cu cable	mm^2	--	25 ... 150	25 ... 150	70 ... 240	70 ... 240
	Finely stranded with insulated end sleeve	Cu cable	mm^2	--	25 ... 70	25 ... 70	70 ... 185	70 ... 185
Circular conductor terminal for 6 cables	Solid cable	Cu/Al cable	mm^2	1.5/4 ... 16	1.5/4 ... 16	1.5/4 ... 16	1.5/4 ... 16	1.5/4 ... 16
	Stranded cable	Cu/Al cable	mm^2	1.5/4 ... 35	1.5/4 ... 35	1.5/4 ... 35	1.5/4 ... 35	1.5/4 ... 35
	Finely stranded cable	Cu cable	mm^2	1.5 ... 25	1.5 ... 25	1.5 ... 25	1.5 ... 25	1.5 ... 25
	Finely stranded with insulated end sleeve	Cu cable	mm^2	1.5 ... 25	1.5 ... 25	1.5 ... 25	1.5 ... 25	1.5 ... 25
Busbar connection	Direct (width x height)	Busbar	mm x mm	17 x 6.5	25 x 8	25 x 8	35 x 10	35 x 10
	Front connection bars extended	Busbar	mm x mm	22 x 8	32 x 10	32 x 10	40 x 12.5	40 x 12.5
	Front connection bars broadened	Busbar	mm x mm	30 x 8	35 x 10	35 x 10	60 x 12.5	60 x 12.5

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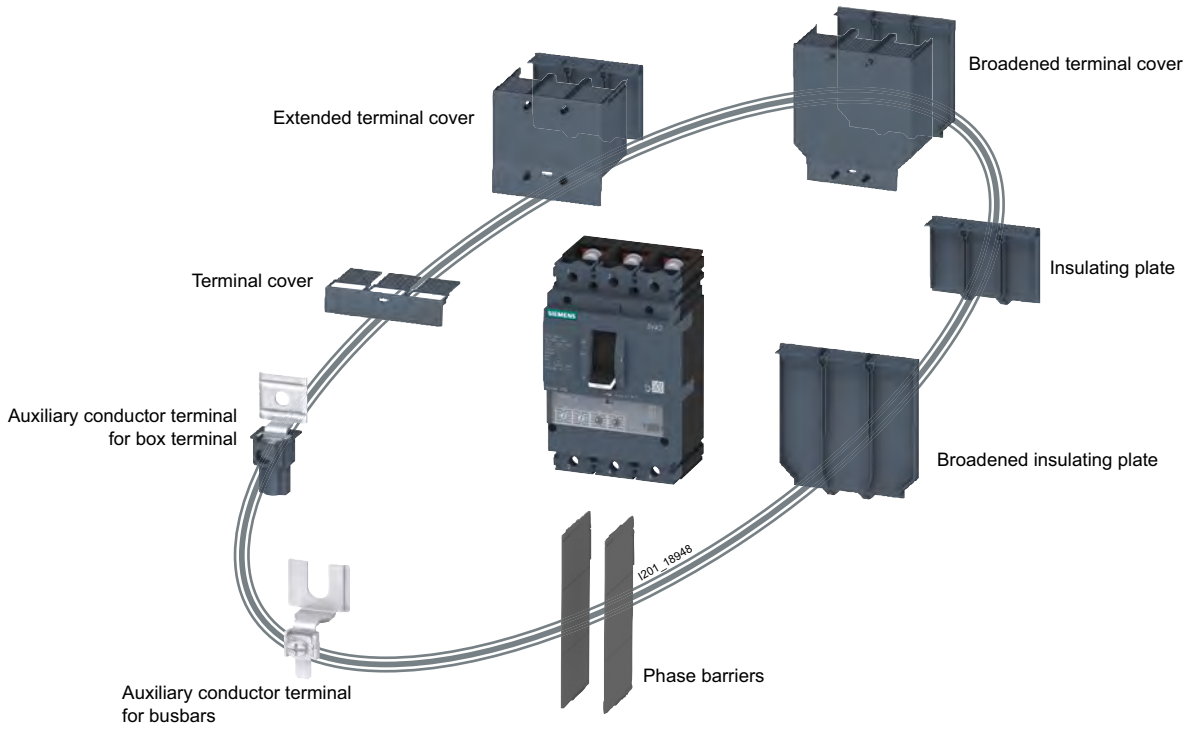
Further connection accessories

Insulation / auxiliary conductor connections

The connection accessories portfolio includes an extensive selection of insulating components (phase barriers, terminal covers, etc.). Auxiliary conductor connections for box terminals and busbars are also available.



Terminal covers

Terminal covers are insulating and sealable insulation accessories which protect against accidental contact with main current paths. When mounted on the circuit breaker, terminal covers at the front provide degree of protection IP4x and when correctly installed at the infeed and load ends of the breaker, degree of protection IP2x. All terminal covers have a recess on the inside face which can be drilled out if necessary so that safe isolation can be afforded by commercially available voltage detectors.

- Short terminal covers are normally installed for all types of front termination which do not exceed the geometric dimensions of the molded-case circuit breaker (the termination area) (e.g. box terminal, lug terminal, etc.).
- Extended terminal covers are required when bar extensions or external terminals (i.e. terminals which exceed the dimensions of the termination area of the molded case circuit breaker) are installed. The extended terminal cover consists of two parts, an insulating plate and the top half of the terminal cover. Both parts are attached by screws and thus afford the degrees of protection specified above.
- Broad terminal covers are required when broadened connection bars are installed. The extended terminal cover consists of two parts, a broadened insulating plate and the top half of the terminal cover. Both parts are attached by screws and thus afford the degrees of protection specified above.

Insulating plates

The purpose of insulating plates is to insulate the main terminals of the molded case circuit breaker from the mounting plate (cubicle).

- Insulating plate: in combination with bar extensions, for example
- Insulating plate broadened: in combination with broadened connection bars, for example

Auxiliary conductor terminals

All circular conductor terminals can be ordered with or without auxiliary conductor terminal (see page 2/10, Front terminals). The following accessories are available to allow the implementation of an auxiliary conductor terminal in combination with a box terminal or busbar connection:

- Auxiliary conductor terminal for box terminal: This terminal is fastened by screws in the box terminal with the cable.
- Auxiliary conductor terminal for busbars: This terminal is attached by screws directly to the busbar.

All auxiliary conductor terminals are rated for a maximum load of 6 A. Cables of up to 2.5 mm^2 can be connected.

Benefits

- High degree of flexibility
- Cables and busbars can be connected quickly and easily to the 3VA molded case circuit breaker
- Extensive selection of connection accessories

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Connection parts – suitable for all installation types (fixed mounting, plug-in and draw-out versions)

Selection and ordering data

	Version	Minimum mm² for stranded cable	Maximum mm² for stranded cable	For molded case circuit breakers/frame size 3VA1 100 A 160 A	3VA1 250 A	3VA2 100 A 160 A 250 A	3VA2 400 A 630 A	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Box terminals suitable for all installation types (fixed mounting, plug-in and draw-out versions)													
3VA9163-0JA12	**Box terminal** • Connection of Cu cable • Included in scope of supply: 3 single terminals	1.5 mm²	70 mm²	✓	--	--	--		3VA9153-0JA11		1	1 unit	1CB
		6 mm²	120 mm²	--	✓	--	--		3VA9253-0JA11		1	1 unit	1CB
		50 mm²	185 mm²	--	✓	--	--		3VA9253-0JA12		1	1 unit	1CB
		6 mm²	120 mm²	--	--	✓	--		3VA9163-0JA12		1	1 unit	1CB
		25 mm²	185 mm²	--	--	✓	--		3VA9263-0JA12		1	1 unit	1CB
		35 mm²	300 mm²	--	--	--	✓		3VA9483-0JA13		1	1 unit	1CB
3VA9164-0JA12	**Box terminal** • Connection of Cu cable • Included in scope of supply: 4 single terminals	1.5 mm²	70 mm²	✓	--	--	--		3VA9154-0JA11		1	1 unit	1CB
		6 mm²	120 mm²	--	✓	--	--		3VA9254-0JA11		1	1 unit	1CB
		50 mm²	185 mm²	--	✓	--	--		3VA9254-0JA12		1	1 unit	1CB
		6 mm²	120 mm²	--	--	✓	--		3VA9164-0JA12		1	1 unit	1CB
		25 mm²	185 mm²	--	--	✓	--		3VA9264-0JA12		1	1 unit	1CB
		35 mm²	300 mm²	--	--	--	✓		3VA9484-0JA13		1	1 unit	1CB
Circular conductor terminals suitable for all installation types (fixed mounting, plug-in and draw-out versions)													
3VA9103-0JB11	**Circular conductor terminals** • Connection of Cu/Al cable • Included in scope of supply: 3 single terminals	1.5 mm²	50 mm²	✓	--	--	--		3VA9113-0JB11		1	1 unit	1CB
		35 mm²	185 mm²	--	✓	--	--		3VA9253-0JB12		1	1 unit	1CB
		1.5 mm²	50 mm²	--	--	✓	--		3VA9103-0JB11		1	1 unit	1CB
		16 mm²	185 mm²	--	--	✓	--		3VA9263-0JB12		1	1 unit	1CB
		50 mm²	300 mm²	--	--	--	✓		3VA9383-0JB13		1	1 unit	1CB
3VA9104-0JB11	**Circular conductor terminals** • Connection of Cu/Al cable • Included in scope of supply: 4 single terminals	1.5 mm²	50 mm²	✓	--	--	--		3VA9114-0JB11		1	1 unit	1CB
		35 mm²	185 mm²	--	✓	--	--		3VA9254-0JB12		1	1 unit	1CB
		1.5 mm²	50 mm²	--	--	✓	--		3VA9104-0JB11		1	1 unit	1CB
		16 mm²	185 mm²	--	--	✓	--		3VA9264-0JB12		1	1 unit	1CB
		50 mm²	300 mm²	--	--	--	✓		3VA9384-0JB13		1	1 unit	1CB
3VA9103-0JG11	**Circular conductor terminal with auxiliary conductor terminal** • Connection of Cu/Al cable • Included in scope of supply: 3 single terminals	16 mm²	50 mm²	✓	--	--	--		3VA9113-0JG11		1	1 unit	1CB
		35 mm²	185 mm²	--	✓	--	--		3VA9253-0JG12		1	1 unit	1CB
		1.5 mm²	50 mm²	--	--	✓	--		3VA9103-0JG11		1	1 unit	1CB
		16 mm²	185 mm²	--	--	✓	--		3VA9263-0JG12		1	1 unit	1CB
		50 mm²	300 mm²	--	--	--	✓		3VA9383-0JG13		1	1 unit	1CB
3VA9104-0JG11	**Circular conductor terminal with auxiliary conductor terminal** • Connection of Cu/Al cable • Included in scope of supply: 4 single terminals	16 mm²	50 mm²	✓	--	--	--		3VA9114-0JG11		1	1 unit	1CB
		35 mm²	185 mm²	--	✓	--	--		3VA9254-0JG12		1	1 unit	1CB
		1.5 mm²	50 mm²	--	--	✓	--		3VA9104-0JG11		1	1 unit	1CB
		16 mm²	185 mm²	--	--	✓	--		3VA9264-0JG12		1	1 unit	1CB
		50 mm²	300 mm²	--	--	--	✓		3VA9384-0JG13		1	1 unit	1CB
Lug terminals suitable for all installation types (fixed mounting, plug-in and draw-out versions)													
3VA9203-0QA00	**Lug terminal** Included in scope of supply: • 3 single terminals	17 mm	6.5 mm	✓	--	--	--		3VA9113-0QA00		1	1 unit	1CB
		25 mm	8 mm	--	✓	--	--		3VA9213-0QA00		1	1 unit	1CB
		25 mm	8 mm	--	--	✓	--		3VA9203-0QA00		1	1 unit	1CB
		35 mm	10 mm	--	--	--	✓		3VA9403-0QA00		1	1 unit	1CB
3VA9204-0QA00	**Lug terminal** Included in scope of supply: • 4 single terminals	17 mm	6.5 mm	✓	--	--	--		3VA9114-0QA00		1	1 unit	1CB
		25 mm	8 mm	--	✓	--	--		3VA9214-0QA00		1	1 unit	1CB
		25 mm	8 mm	--	--	✓	--		3VA9204-0QA00		1	1 unit	1CB
		35 mm	10 mm	--	--	--	✓		3VA9404-0QA00		1	1 unit	1CB

* You can order this quantity or a multiple thereof.

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Connection parts – suitable for all installation types (fixed mounting, plug-in and draw-out versions)

	Version	Max. terminal width	Max. bus-bar thick-ness	For molded case circuit breakers/frame size				DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
				3VA1 100 A 160 A	3VA1 250 A	3VA2 100 A 160 A 250 A	3VA2 400 A 630 A						
Bar extensions suitable for all installation types (fixed mounting, plug-in and draw-out versions)													
3VA9263-0QB00	**Front connection bars extended** Included in scope of supply: • 3 single terminals • 2 phase barriers	22 mm	8 mm	✓	--	--	--		3VA9153-0QB00		1	1 unit	1CB
		32 mm	10 mm	--	✓	--	--		3VA9253-0QB00		1	1 unit	1CB
		32 mm	10 mm	--	--	✓	--		3VA9263-0QB00		1	1 unit	1CB
		40 mm	12.5 mm	--	--	--	✓		3VA9483-0QB00		1	1 unit	1CB
3VA9264-0QB00	**Front connection bars extended** Included in scope of supply: • 4 single terminals • 3 phase barriers	22 mm	8 mm	✓	--	--	--		3VA9154-0QB00		1	1 unit	1CB
		32 mm	10 mm	--	✓	--	--		3VA9254-0QB00		1	1 unit	1CB
		32 mm	10 mm	--	--	✓	--		3VA9264-0QB00		1	1 unit	1CB
		40 mm	12.5 mm	--	--	--	✓		3VA9484-0QB00		1	1 unit	1CB
3VA9263-0QC00	**Front connection bars broadened** Included in scope of supply: • 3 single terminals • 2 phase barriers Distance between pole centers: 100/160 A = 35 mm 250 A = 45 mm 400/630 A = 70 mm	30 mm	8 mm	✓	--	--	--		3VA9153-0QC00		1	1 unit	1CB
		35 mm	10 mm	--	✓	--	--		3VA9253-0QC00		1	1 unit	1CB
		35 mm	10 mm	--	--	✓	--		3VA9263-0QC00		1	1 unit	1CB
		60 mm	12.5 mm	--	--	--	✓		3VA9483-0QC00		1	1 unit	1CB
3VA9264-0QC00	**Front connection bars broadened** Included in scope of supply: • 4 single terminals • 3 phase barriers Distance between pole centers: 100/160 A = 35 mm 250 A = 45 mm 400/630 A = 70 mm	30 mm	8 mm	✓	--	--	--		3VA9154-0QC00		1	1 unit	1CB
		35 mm	10 mm	--	✓	--	--		3VA9254-0QC00		1	1 unit	1CB
		35 mm	10 mm	--	--	✓	--		3VA9264-0QC00		1	1 unit	1CB
		60 mm	12.5 mm	--	--	--	✓		3VA9484-0QC00		1	1 unit	1CB
3VA9263-0QD00	**Front connection bars edgewise** Included in scope of supply: • 3 single terminals • 2 phase barriers	20 mm	6 mm	✓	--	--	--		3VA9153-0QD00		1	1 unit	1CB
		25 mm	7 mm	--	✓	--	--		3VA9253-0QD00		1	1 unit	1CB
		25 mm	7 mm	--	--	✓	--		3VA9263-0QD00		1	1 unit	1CB
		40 mm	8 mm	--	--	--	✓		3VA9483-0QD00		1	1 unit	1CB
3VA9264-0QD00	**Front connection bars edgewise** Included in scope of supply: • 4 single terminals • 3 phase barriers	20 mm	6 mm	✓	--	--	--		3VA9154-0QD00		1	1 unit	1CB
		25 mm	7 mm	--	✓	--	--		3VA9254-0QD00		1	1 unit	1CB
		25 mm	7 mm	--	--	✓	--		3VA9264-0QD00		1	1 unit	1CB
		40 mm	8 mm	--	--	--	✓		3VA9484-0QD00		1	1 unit	1CB

*** You can order this quantity or a multiple thereof.**

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Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers – Accessories, IEC NEW

Connection parts – suitable for all installation types (fixed mounting, plug-in and draw-out versions)

	Version	Max. terminal width	Max. busbar thickness	For molded case circuit breakers/frame size 3VA1 100 A 160 A	3VA1 250 A	3VA2 100 A 160 A 250 A	3VA2 400 A 630 A	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
3VA9223-0QG00	**Lug terminal, right-angled**[1] Included in scope of supply: • 3 single terminals • 2 phase barriers	22 mm	8 mm	✓	--	--	--		3VA9113-0QG00		1	1 unit	1CB
		32 mm	10 mm	--	✓	--	--		3VA9213-0QG00		1	1 unit	1CB
		32 mm	10 mm	--	--	✓	--		3VA9223-0QG00		1	1 unit	1CB
		40 mm	12.5 mm	--	--	--	✓		3VA9403-0QG00		1	1 unit	1CB
3VA9224-0QG00	**Lug terminal, right-angled**[1] Included in scope of supply: • 4 single terminals • 3 phase barriers	22 mm	8 mm	✓	--	--	--		3VA9114-0QG00		1	1 unit	1CB
		32 mm	10 mm	--	✓	--	--		3VA9214-0QG00		1	1 unit	1CB
		32 mm	10 mm	--	--	✓	--		3VA9224-0QG00		1	1 unit	1CB
		40 mm	12.5 mm	--	--	--	✓		3VA9404-0QG00		1	1 unit	1CB

[1] Can only be connected to breaker side N,1,3,5

	Version	For molded case circuit breakers/frame size 3VA1 100 A 160 A	3VA1 250 A	3VA2 100 A 160 A 250 A	3VA2 400 A 630 A	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Rear flat terminals suitable for all installation types (fixed mounting, plug-in and draw-out versions)											
3VA9203-0QE00	**Rear terminal flat** Included in scope of supply: • 2 short terminals flat • 1 long terminal flat	✓	--	--	--		3VA9113-0QE00		1	1 unit	1CB
		--	✓	--	--		3VA9213-0QE00		1	1 unit	1CB
		--	--	✓	--		3VA9203-0QE00		1	1 unit	1CB
		--	--	--	✓		3VA9403-0QE00		1	1 unit	1CB
3VA9204-0QE00	**Rear terminal flat** Included in scope of supply: • 2 short terminals flat • 2 long terminals flat	✓	--	--	--		3VA9114-0QE00		1	1 unit	1CB
		--	✓	--	--		3VA9214-0QE00		1	1 unit	1CB
		--	--	✓	--		3VA9204-0QE00		1	1 unit	1CB
		--	--	--	✓		3VA9404-0QE00		1	1 unit	1CB
3VA9201-0QE10	**Rear terminal flat** Included in scope of supply: • 1 short terminal flat	✓	--	--	--		3VA9111-0QE10		1	1 unit	1CB
		--	✓	--	--		3VA9211-0QE10		1	1 unit	1CB
		--	--	✓	--		3VA9201-0QE10		1	1 unit	1CB
		--	--	--	✓		3VA9401-0QE10		1	1 unit	1CB
3VA9201-0QE20	**Rear terminal flat** Included in scope of supply: • 1 long terminal flat	✓	--	--	--		3VA9111-0QE20		1	1 unit	1CB
		--	✓	--	--		3VA9211-0QE20		1	1 unit	1CB
		--	--	✓	--		3VA9201-0QE20		1	1 unit	1CB
		--	--	--	✓		3VA9401-0QE20		1	1 unit	1CB

* You can order this quantity or a multiple thereof.

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Connection parts – suitable for all installation types (fixed mounting, plug-in and draw-out versions)

	Version	For molded case circuit breakers/frame size				DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
		3VA1 100 A 160 A	3VA1 250 A	3VA2 100 A 160 A 250 A	3VA2 400 A 630 A						
Rear connecting stud terminals suitable for all installation types (fixed mounting, plug-in and draw-out versions)											
3VA9203-0QF00	**Rear connecting stud** Included in scope of supply: • 1 long connecting stud • 2 short connecting studs	✓	--	--	--		3VA9113-0QF00		1	1 unit	1CB
			✓	--	--		3VA9213-0QF00		1	1 unit	1CB
		--	--	✓	--		3VA9203-0QF00		1	1 unit	1CB
		--	--	--	✓		3VA9403-0QF00		1	1 unit	1CB
3VA9204-0QF00	**Rear connecting stud** Included in scope of supply: • 2 long connecting studs • 2 short connecting studs	✓	--	--	--		3VA9114-0QF00		1	1 unit	1CB
		--	✓	--	--		3VA9214-0QF00		1	1 unit	1CB
		--	--	✓	--		3VA9204-0QF00		1	1 unit	1CB
		--	--	--	✓		3VA9404-0QF00		1	1 unit	1CB
3VA9201-0QF10	**Rear connecting stud** Included in scope of supply: • 1 short connecting stud	✓	--	--	--		3VA9111-0QF10		1	1 unit	1CB
		--	✓	--	--		3VA9211-0QF10		1	1 unit	1CB
		--	--	✓	--		3VA9201-0QF10		1	1 unit	1CB
		--	--	--	✓		3VA9401-0QF10		1	1 unit	1CB
3VA9111-0QF20	**Rear connecting stud** Included in scope of supply: • 1 long connecting stud	✓	--	--	--		3VA9111-0QF20		1	1 unit	1CB
		--	✓	--	--		3VA9211-0QF20		1	1 unit	1CB
		--	--	✓	--		3VA9201-0QF20		1	1 unit	1CB
		--	--	--	✓		3VA9401-0QF20		1	1 unit	1CB
Phase barriers suitable for all installation types (fixed mounting, plug-in and draw-out versions)											
3VA9262-0WA00	**Phase barriers** Included in scope of supply: • 2 phase barriers	✓	--	--	--		3VA9152-0WA00		1	1 unit	1CB
		--	✓	--	--		3VA9252-0WA00		1	1 unit	1CB
		--	--	✓	--		3VA9262-0WA00		1	1 unit	1CB
		--	--	--	✓		3VA9482-0WA00		1	1 unit	1CB

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Connection parts – specially for fixed mounting

	Version	Minimum mm² for stranded cable	Maximum mm² for stranded cable	For molded case circuit breakers/frame size				DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
				3VA1 100 A 160 A	3VA1 250 A	3VA2 100 A 160 A 250 A	3VA2 400 A 630 A						
Front connection bars specially for fixed mounting													
3VA9151-0QB00	**Front connection bars extended** Included in scope of supply: • 1 busbar connection piece	32 mm	10 mm	✓	--	--	--		3VA9151-0QB00		1	1 unit	1CB
3VA9152-0QC00	**Front connection bars broadened** Included in scope of supply: • 2 individual busbar connection pieces • 1 phase barriers Note Distance between pole centers 44.6 mm	35 mm	10 mm	✓	--	--	--		3VA9152-0QC00		1	1 unit	1CB
Circular conductor terminals specially for fixed mounting													
3VA9112-0JJ12	**Circular conductor terminal, large** • Connection of Cu/Al cable • Included in scope of supply: 2 single terminals and 1 extended terminal cover	25 mm²	150 mm²	✓	--	--	--		3VA9112-0JJ12		1	1 unit	1CB
3VA9113-0JJ12	**Circular conductor terminal, large** • Connection of Cu/Al cable • Included in scope of supply: 3 single terminals and 1 extended terminal cover	25 mm²	150 mm²	✓	--	--	--		3VA9113-0JJ12		1	1 unit	1CB
		50 mm²	240 mm²	--	✓	--	--		3VA9213-0JJ13		1	1 unit	1CB
		50 mm²	240 mm²	--	--	✓	--		3VA9223-0JJ13		1	1 unit	1CB
3VA9114-0JJ12	**Circular conductor terminal, large** • Connection of Cu/Al cable • Included in scope of supply: 4 single terminals and 1 extended terminal cover	25 mm²	150 mm²	✓	--	--	--		3VA9114-0JJ12		1	1 unit	1CB
		50 mm²	240 mm²	--	✓	--	--		3VA9214-0JJ13		1	1 unit	1CB
		50 mm²	240 mm²	--	--	✓	--		3VA9224-0JJ13		1	1 unit	1CB
3VA9112-0JC12	**Circular conductor terminal, large, with auxiliary conductor terminal** • Connection of Cu/Al cable • Included in scope of supply: 2 single terminals and 1 extended terminal cover	25 mm²	150 mm²	✓	--	--	--		3VA9112-0JC12		1	1 unit	1CB

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	Version	Minimum mm² for stranded cable	Maximum mm² for stranded cable	For molded case circuit breakers/frame size				DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
				3VA1 100 A 160 A	3VA1 250 A	3VA2 100 A 160 A 250 A	3VA2 400 A 630 A						
3VA9223-0JC13	**Circular conductor terminal, large, with auxiliary conductor terminal** • Connection of Cu/Al cable • Included in scope of supply: 3 single terminals and 1 extended terminal cover	25 mm²	150 mm²	✓	--	--	--		3VA9113-0JC12		1	1 unit	1CB
		50 mm²	240 mm²	--	✓	--	--		3VA9213-0JC13		1	1 unit	1CB
		50 mm²	240 mm²	--	--	✓	--		3VA9223-0JC13		1	1 unit	1CB
3VA9114-0JC12	**Circular conductor terminal, large, with auxiliary conductor terminal** • Connection of Cu/Al cable • Included in scope of supply: 4 single terminals and 1 extended terminal cover	25 mm²	150 mm²	✓	--	--	--		3VA9114-0JC12		1	1 unit	1CB
		50 mm²	240 mm²	--	✓	--	--		3VA9214-0JC13		1	1 unit	1CB
		50 mm²	240 mm²	--	--	✓	--		3VA9224-0JC13		1	1 unit	1CB
3VA9223-0JJ22	**Circular conductor terminal, 2 cables** • Connection of Cu/Al cable • Included in scope of supply: 3 single terminals and 1 extended terminal cover	2 x 25 mm²	2 x 150 mm²	--	✓	--	--		3VA9213-0JJ22		1	1 unit	1CB
		2 x 25 mm²	2 x 150 mm²	--	--	✓	--		3VA9223-0JJ22		1	1 unit	1CB
		2 x 70 mm²	2 x 300 mm²	--	--	--	✓		3VA9403-0JJ23		1	1 unit	1CB
3VA9224-0JJ22	**Circular conductor terminal, 2 cables** • Connection of Cu/Al cable • Included in scope of supply: 4 single terminals and 1 extended terminal cover	2 x 25 mm²	2 x 150 mm²	--	✓	--	--		3VA9214-0JJ22		1	1 unit	1CB
		2 x 25 mm²	2 x 150 mm²	--	--	✓	--		3VA9224-0JJ22		1	1 unit	1CB
		2 x 70 mm²	2 x 300 mm²	--	--	--	✓		3VA9404-0JJ23		1	1 unit	1CB
3VA9223-0JC22	**Circular conductor terminal, 2 cables, with auxiliary conductor terminal** • Connection of Cu/Al cable • Included in scope of supply: 3 single terminals and 1 extended terminal cover	2 x 25 mm²	2 x 150 mm²	--	✓	--	--		3VA9213-0JC22		1	1 unit	1CB
		2 x 25 mm²	2 x 150 mm²	--	--	✓	--		3VA9223-0JC22		1	1 unit	1CB
		2 x 70 mm²	2 x 300 mm²	--	--	--	✓		3VA9403-0JC23		1	1 unit	1CB
3VA9224-0JC22	**Circular conductor terminal, 2 cables, with auxiliary conductor terminal** • Connection of Cu/Al cable • Included in scope of supply: 4 single terminals and 1 extended terminal cover	2 x 25 mm²	2 x 150 mm²	--	✓	--	--		3VA9214-0JC22		1	1 unit	1CB
		2 x 25 mm²	2 x 150 mm²	--	--	✓	--		3VA9224-0JC22		1	1 unit	1CB
		2 x 70 mm²	2 x 300 mm²	--	--	--	✓		3VA9404-0JC23		1	1 unit	1CB
3VA9112-0JF60	**Circular conductor terminal, 6 cables** • Connection of Cu/Al cable • Included in scope of supply: 2 single terminals and 1 extended terminal cover	6 x 1.5 mm²	6 x 35 mm²	✓	--	--	--		3VA9112-0JF60		1	1 unit	1CB

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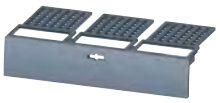
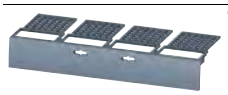
Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers – Accessories, IEC NEW

Connection parts – specially for fixed mounting

	Version	Minimum mm² for stranded cable	Maximum mm² for stranded cable	For molded case circuit breakers/frame size 3VA1 100 A 160 A	3VA1 250 A	3VA2 100 A 160 A 250 A	3VA2 400 A 630 A	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
3VA9223-0JF60	**Circular conductor terminal, 6 cables** • Connection of Cu/Al cable • Included in scope of supply: 3 single terminals and 1 extended terminal cover	6 x 1.5 mm²	6 x 35 mm²	✓	--	--	--		3VA9113-0JF60		1	1 unit	1CB
				--	✓	--	--		3VA9213-0JF60		1	1 unit	1CB
				--	--	✓	--		3VA9223-0JF60		1	1 unit	1CB
				--	--	--	✓		3VA9303-0JF60		1	1 unit	1CB
3VA9224-0JF60	**Circular conductor terminal, 6 cables** • Connection of Cu/Al cable • Included in scope of supply: 4 single terminals and 1 extended terminal cover	6 x 1.5 mm²	6 x 35 mm²	✓	--	--	--		3VA9114-0JF60		1	1 unit	1CB
				--	✓	--	--		3VA9214-0JF60		1	1 unit	1CB
				--	--	✓	--		3VA9224-0JF60		1	1 unit	1CB
				--	--	--	✓		3VA9304-0JF60		1	1 unit	1CB

	Version	For molded case circuit breakers/frame size 3VA1 100 A 160 A	3VA1 250 A	3VA2 100 A 160 A 250 A	3VA2 400 A 630 A	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Terminal covers specially for fixed mounting											
3VA9111-0WD10	**Terminal cover for 1-pole breakers**	✓	--	--	--		3VA9111-0WD10		1	1 unit	1CB
3VA9111-0WD20	**Terminal cover for 2-pole breakers**	✓	--	--	--		3VA9111-0WD20		1	1 unit	1CB
 3VA9221-0WD30	**Terminal cover for 3-pole breakers**	✓	--	--	--		3VA9111-0WD30		1	1 unit	1CB
		--	✓	--	--		3VA9211-0WD30		1	1 unit	1CB
		--	--	✓	--		3VA9221-0WD30		1	1 unit	1CB
		--	--	--	✓		3VA9481-0WD30		1	1 unit	1CB
 3VA9221-0WD40	**Terminal cover for 4-pole breakers**	✓	--	--	--		3VA9111-0WD40		1	1 unit	1CB
		--	✓	--	--		3VA9211-0WD40		1	1 unit	1CB
		--	--	✓	--		3VA9221-0WD40		1	1 unit	1CB
		--	--	--	✓		3VA9481-0WD40		1	1 unit	1CB
3VA9111-0WF20	**Extended terminal cover, 2-pole**	✓	--	--	--		3VA9111-0WF20		1	1 unit	1CB

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	Version	For molded case circuit breakers/frame size				DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
		3VA1 100 A 160 A	3VA1 250 A	3VA2 100 A 160 A 250 A	3VA2 400 A 630 A						
3VA9221-0WF30	**Extended terminal cover for 3-pole breakers**	✓	--	--	--		**3VA9111-0WF30**		1	1 unit	1CB
		--	✓	--	--		**3VA9211-0WF30**		1	1 unit	1CB
		--	--	✓	--		**3VA9221-0WF30**		1	1 unit	1CB
		--	--	--	✓		**3VA9481-0WF30**		1	1 unit	1CB
3VA9221-0WF40	**Extended terminal cover for 4-pole breakers**	✓	--	--	--		**3VA9111-0WF40**		1	1 unit	1CB
		--	✓	--	--		**3VA9211-0WF40**		1	1 unit	1CB
		--	--	✓	--		**3VA9221-0WF40**		1	1 unit	1CB
		--	--	--	✓		**3VA9481-0WF40**		1	1 unit	1CB
3VA9221-0WG30	**Broadened terminal cover for 3-pole breakers**	✓	--	--	--		**3VA9111-0WG30**		1	1 unit	1CB
		--	✓	--	--		**3VA9211-0WG30**		1	1 unit	1CB
		--	--	✓	--		**3VA9221-0WG30**		1	1 unit	1CB
		--	--	--	✓		**3VA9401-0WG30**		1	1 unit	1CB
3VA9221-0WG40	**Broadened terminal cover for 4-pole breakers**	✓	--	--	--		**3VA9111-0WG40**		1	1 unit	1CB
			✓	--	--		**3VA9211-0WG40**		1	1 unit	1CB
		--	--	✓	--		**3VA9221-0WG40**		1	1 unit	1CB
		--	--	--	✓		**3VA9401-0WG40**		1	1 unit	1CB
Insulating plates specially for fixed mounting											
3VA9111-0WJ20	**Insulating plate, 2-pole**	✓	--	--	--		**3VA9111-0WJ20**		1	1 unit	1CB
3VA9221-0WJ30	**Insulating plate, 3-pole**	✓	--	--	--		**3VA9111-0WJ30**		1	1 unit	1CB
			✓				**3VA9211-0WJ30**		1	1 unit	1CB
		--	--	✓	--		**3VA9221-0WJ30**		1	1 unit	1CB
		--	--	--	✓		**3VA9481-0WJ30**		1	1 unit	1CB
3VA9221-0WJ40	**Insulating plate, 4-pole**	✓	--	--	--		**3VA9111-0WJ40**		1	1 unit	1CB
		--	✓	--	--		**3VA9211-0WJ40**		1	1 unit	1CB
		--	--	✓	--		**3VA9221-0WJ40**		1	1 unit	1CB
		--	--	--	✓		**3VA9481-0WJ40**		1	1 unit	1CB

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Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers – Accessories, IEC NEW

Connection parts – specially for fixed mounting

	Version	For molded case circuit breakers/frame size				DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
		3VA1 100 A 160 A	3VA1 250 A	3VA2 100 A 160 A 250 A	3VA2 400 A 630 A						
3VA9221-0WK30	**Insulating plate broadened, 3-pole**	✓	--	--	--		3VA9111-0WK30		1	1 unit	1CB
		--	✓	--	--		3VA9211-0WK30		1	1 unit	1CB
		--	--	✓	--		3VA9221-0WK30		1	1 unit	1CB
		--	--	--	✓		3VA9481-0WK30		1	1 unit	1CB
3VA9221-0WK40	**Insulating plate broadened, 4-pole**	✓	--	--	--		3VA9111-0WK40		1	1 unit	1CB
		--	✓	--	--		3VA9211-0WK40		1	1 unit	1CB
		--	--	✓	--		3VA9221-0WK40		1	1 unit	1CB
		--	--	--	✓		3VA9481-0WK40		1	1 unit	1CB
Auxiliary conductor terminals specially for fixed mounting											
3VA9200-0WB00	**Auxiliary conductor terminal for box terminal**	✓	--	--	--		3VA9110-0WB00		1	10 units	1CB
		--	✓	✓	--		3VA9200-0WB00		1	10 units	1CB
		--	--	--	✓		3VA9480-0WB00		1	10 units	1CB
3VA9200-0WC00	**Auxiliary conductor terminal for busbar**	✓	--	--	--		3VA9110-0WC00		1	10 units	1CB
		--	✓	✓	--		3VA9200-0WC00		1	10 units	1CB
		--	--	--	✓		3VA9480-0WC00		1	10 units	1CB
DC insulating plate specially for fixed mounting											
3VA9113-0SG10	**DC insulating plate for 3VA1**										
	Versions										
	• For fixed-mounted molded case circuit breakers										
	- 3-pole	✓	--	--	--		3VA9113-0SG10		1	10 units	1CB
	- 4-pole	✓	--	--	--		3VA9114-0SG10		1	10 units	1CB
Side plate specially for fixed mounting											
3VA9112-0SG20	**Side plate for 3VA1**										
	Versions										
	• For fixed-mounted molded case circuit breakers										
	- 2-pole	✓	--	--	--		3VA9112-0SG20		1	5 units	1CB

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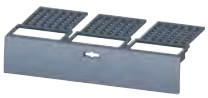
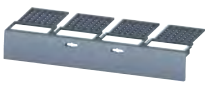
	Version	For molded case circuit breakers/frame size				DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
		3VA1 100 A 160 A	3VA1 250 A	3VA2 100 A 160 A 250 A	3VA2 400 A 630 A						
Terminal covers specially for plug-in and draw-out units											
	Terminal cover for plug-in/draw-out unit (spare part) • To provide circuit breaker touch protection • For mounting on the molded case circuit breaker										
	Versions										
	• 3-pole	✓	--	--	--		3VA9113-0KB01		1	1 unit	1CB
		--	✓	--	--		3VA9213-0KB01		1	1 unit	1CB
		--	--	✓	--		3VA9123-0KB01		1	1 unit	1CB
		--	--	--	✓		3VA9353-0KB01		1	1 unit	1CB
3VA9123-0KB01											
	• 4-pole	✓		--	--		3VA9114-0KB01		1	1 unit	1CB
		--	✓	--	--		3VA9214-0KB01		1	1 unit	1CB
		--	--	✓	--		3VA9124-0KB01		1	1 unit	1CB
		--	--	--	✓		3VA9354-0KB01		1	1 unit	1CB
3VA9124-0KB01											
	Terminal cover for plug-in or draw-out socket • For touch protection in the termination area of the plug-in or draw-out socket • For mounting on the plug-in or draw-out socket										
	Versions										
	• 3-pole	✓	--	--	--		3VA9153-0KB03		1	1 unit	1CB
		--	✓	--	--		3VA9253-0KB03		1	1 unit	1CB
		--	--	✓	--		3VA9163-0KB03		1	1 unit	1CB
		--	--	--	✓		3VA9353-0KB03		1	1 unit	1CB
3VA9153-0KB03											
	• 4-pole	✓	--	--	--		3VA9154-0KB03		1	1 unit	1CB
		--	✓	--	--		3VA9254-0KB03		1	1 unit	1CB
		--	--	✓	--		3VA9164-0KB03		1	1 unit	1CB
3VA9154-0KB03		--	--	--	✓		3VA9354-0KB03		1	1 unit	1CB
	Terminal cover, extended for plug-in or draw-out socket • For touch protection in the termination area of the plug-in or draw-out socket • For mounting on the plug-in or draw-out socket										
	Versions										
	• 3-pole	✓	--	--	--		3VA9153-0KB04		1	1 unit	1CB
		--	✓	--	--		3VA9253-0KB04		1	1 unit	1CB
		--	--	✓	--		3VA9163-0KB04		1	1 unit	1CB
		--	--	--	✓		3VA9353-0KB04		1	1 unit	1CB
3VA9153-0KB04											
	• 4-pole	✓	--	--	--		3VA9154-0KB04		1	1 unit	1CB
		--	✓	--	--		3VA9254-0KB04		1	1 unit	1CB
		--	--	✓	--		3VA9164-0KB04		1	1 unit	1CB
3VA9154-0KB04		--	--	--	✓		3VA9354-0KB04		1	1 unit	1CB

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Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers – Accessories, IEC NEW

Connection methods – specially for plug-in and draw-out units

	Version	For molded case circuit breakers/frame size 3VA1 100 A 160 A	3VA1 250 A	3VA2 100 A 160 A 250 A	3VA2 400 A 630 A	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
	Terminal cover, broadened, for plug-in or draw-out socket • For touch protection in the termination area of the plug-in or draw-out socket • For mounting on the plug-in or draw-out socket										
	Versions										
3VA9153-0KB05	• 3-pole	✓	--	--	--		3VA9153-0KB05		1	1 unit	1CB
		--	✓	--	--		3VA9253-0KB05		1	1 unit	1CB
		--	--	✓	--		3VA9163-0KB05		1	1 unit	1CB
		--	--	--	✓		3VA9353-0KB05		1	1 unit	1CB
3VA9154-0KB05	• 4-pole	✓	--	--	--		3VA9154-0KB05		1	1 unit	1CB
		--	✓	--	--		3VA9254-0KB05		1	1 unit	1CB
		--	--	✓	--		3VA9164-0KB05		1	1 unit	1CB
		--	--	--	✓		3VA9354-0KB05		1	1 unit	1CB

	Version	Minimum mm² for stranded cable	Maximum mm² for stranded cable	For molded case circuit breakers/frame size 3VA1 160 A	3VA1 250 A	3VA2 100 A 160 A 250 A	3VA2 400 A 630 A	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Circular conductor terminals specially for plug-in and draw-out units													
3VA9153-0JC12	**Circular conductor terminal, large, with auxiliary conductor terminal** Included in scope of supply: 3 single terminals and 1 extended terminal cover	25 mm²	150 mm²	✓	--	--	--		3VA9153-0JC12		1	1 unit	1CB
		50 mm²	240 mm²	--	✓	--	--		3VA9253-0JC13		1	1 unit	1CB
		50 mm²	240 mm²	--	--	✓	--		3VA9263-0JC13		1	1 unit	1CB
3VA9154-0JC12	**Circular conductor terminal, large, with auxiliary conductor terminal** Included in scope of supply: 4 single terminals and 1 extended terminal cover	25 mm²	150 mm²	✓	--	--	--		3VA9154-0JC12		1	1 unit	1CB
		50 mm²	240 mm²	--	✓	--	--		3VA9254-0JC13		1	1 unit	1CB
		50 mm²	240 mm²	--	--	✓	--		3VA9264-0JC13		1	1 unit	1CB

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	Version	Minimum mm² for stranded cable	Maximum mm² for stranded cable	For molded case circuit breakers/frame size 3VA1 160 A	3VA1 250 A	3VA2 100 A 160 A 250 A	3VA2 400 A 630 A	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
3VA9263-0JC22	**Circular conductor terminal, 2 cables, with auxiliary conductor terminal** Included in scope of supply: 3 single terminals and 1 extended terminal cover	2 x 25 mm²	2 x 150 mm²	--	✓	--	--		**3VA9253-0JC22**		1	1 unit	1CB
		2 x 25 mm²	2 x 150 mm²	--	--	✓	--		**3VA9263-0JC22**		1	1 unit	1CB
		2 x 70 mm²	2 x 300 mm²	--	--	--	✓		**3VA9483-0JC23**		1	1 unit	1CB
3VA9264-0JC22	**Circular conductor terminal, 2 cables, with auxiliary conductor terminal** Included in scope of supply: 4 single terminals and 1 extended terminal cover	2 x 25 mm²	2 x 150 mm²	--	✓	--	--		**3VA9254-0JC22**		1	1 unit	1CB
		2 x 25 mm²	2 x 150 mm²	--	--	✓	--		**3VA9264-0JC22**		1	1 unit	1CB
		2 x 70 mm²	2 x 300 mm²	--	--	--	✓		**3VA9484-0JC23**		1	1 unit	1CB
3VA9153-0JF60	**Circular conductor terminal, 6 cables** Included in scope of supply: 3 single terminals and 1 extended terminal cover	6 x 1.5 mm²	6 x 35 mm²	✓	--	--	--		**3VA9153-0JF60**		1	1 unit	1CB
		6 x 1.5 mm²	6 x 35 mm²	--	✓	--	--		**3VA9253-0JF60**		1	1 unit	1CB
		6 x 1.5 mm²	6 x 35 mm²	--	--	✓	--		**3VA9263-0JF60**		1	1 unit	1CB
		6 x 1.5 mm²	6 x 35 mm²	--	--	--	✓		**3VA9383-0JF60**		1	1 unit	1CB
3VA9154-0JF60	**Circular conductor terminal, 6 cables** Included in scope of supply: 4 single terminals and 1 extended terminal cover	6 x 1.5 mm²	6 x 35 mm²	✓	--	--	--		**3VA9154-0JF60**		1	1 unit	1CB
		6 x 1.5 mm²	6 x 35 mm²	--	✓	--	--		**3VA9254-0JF60**		1	1 unit	1CB
		6 x 1.5 mm²	6 x 35 mm²	--	--	✓	--		**3VA9264-0JF60**		1	1 unit	1CB
		6 x 1.5 mm²	6 x 35 mm²	--	--	--	✓		**3VA9384-0JF60**		1	1 unit	1CB
Auxiliary conductor terminals specially for plug-in and draw-out units													
3VA9280-0WB00	**Auxiliary conductor terminal for box terminal**			✓	--	--	--		**3VA9150-0WB00**		1	10 units	1CB
				--	✓	✓	--		**3VA9280-0WB00**		1	10 units	1CB
				--	--	--	✓		**3VA9480-0WB00**		1	10 units	1CB
3VA9280-0WC00	**Auxiliary conductor terminal for busbar**			✓	--	--	--		**3VA9150-0WC00**		1	10 units	1CB
				--	✓	✓	--		**3VA9280-0WC00**		1	10 units	1CB
				--	--	--	✓		**3VA9480-0WC00**		1	10 units	1CB

*** You can order this quantity or a multiple thereof.**

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Plug-in and draw-out technology

Overview

Using plug-in and draw-out technology the 3VA molded case circuit breakers can be installed/removed or replaced quickly and safely. In this case, the cables or busbars of the main current paths are connected to the connectors of the plug-in socket or the draw-out socket.

The termination areas of the sockets for these versions are designed in the same way as those of the molded case circuit breakers but, due to the different requirements for creepages and clearances, have slightly different dimensions.

This means that all connections without insulating measures (e.g. box terminals) from the range of breakers can also be used with the socket for plug-in or draw-out units.

Connections with insulating measures have their own article numbers and are listed below.

A 3VA molded case circuit breaker in the plug-in or draw-out version has plug-in contacts on the input and load side of the main terminals. When the circuit breaker is plugged or moved into the socket, the plug-in contacts slide into the socket-side tulip contacts and connect the main current paths with the circuit breaker. In addition, auxiliary circuit connectors can be used to connect the auxiliary and control signals from the internal accessories of the molded case circuit breaker to the outside.

The main differences between plug-in units and draw-out units are convenience of operation and the potential for functional expansion.

Plug-in technology

Plug-in technology is the less expensive and more space-saving of the two solutions. The plug-in version of the molded case circuit breaker is equipped with plug-in contacts on the back of the 3VA molded case circuit breaker. These make a friction-locked and keyed connection with the corresponding mating connectors in the plug-in socket. The plug-in unit can be supplied as a complete kit or as a conversion kit for breakers including screw-fastened terminal covers.

Draw-out technology

Draw-out versions of the molded case circuit breaker are also equipped with plug-in contacts at the main current paths. In addition, side walls including guide and support bolts are bolted to the sides of the molded case circuit breaker. With this version, the mating component is the draw-out socket. It is also equipped with a guide mechanism via which the molded case circuit breaker is moved into the draw-out socket by means of a handle in order to connect the breaker to the main circuits. The operator can clearly read from a position indicator whether the breaker is properly connected to the main circuits or safely isolated from them (so that it can be withdrawn).

Position signaling switches which transmit the position information CONNECT, TEST, and DISCONNECT can be integrated in the right-hand side wall of the draw-out unit. A special set of position signaling switches transfers the position data to the COM060 communication module via a preassembled wires.

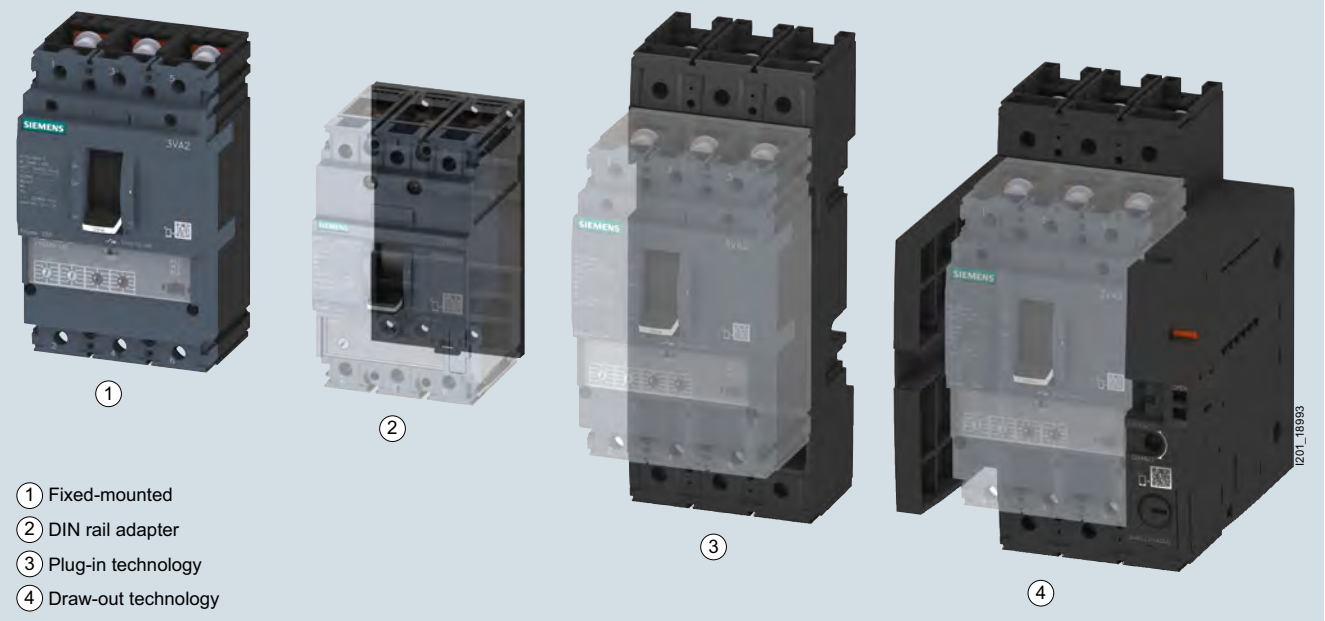
The draw-out complete kit as well as the draw-out conversion kit for one breaker are available. Both kits include screw-fastened terminal covers for the breaker. The crank handle for the draw-out unit must be ordered separately.

Benefits

- Molded case circuit breakers can be replaced quickly and easily for the purpose of overhaul or servicing
- Electrical isolation and clearly visible isolating distance
- Socket can be interlocked to prevent the 3VA molded case circuit breaker from being plugged in or moved in
- Identical connection technology for all molded case circuit breakers, whether they are plug-in, draw-out or fixed-mounted units
- Test of the auxiliary and control circuit connections in the test position of the draw-out unit possible without contacted main current paths

Installation variants

3VA molded case circuit breakers are available in the following installation variants:



1 Fixed-mounted
2 DIN rail adapter
3 Plug-in technology
4 Draw-out technology

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Selection and ordering data

	Version	For molded case circuit breakers/frame size				DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
		3VA1 160 A	3VA1 250 A	3VA2 100 A 160 A, 250 A	3VA2 400 A, 630 A						
Plug-in socket											
	Plug-in unit, complete kit Comprising: • Plug-in socket • Conversion sets • Mounting screw kit										
	Versions										
 3VA9123-0KP00	• 3-pole	✓	--	--	--		3VA9113-0KP00		1	1 unit	1CB
		--	✓	--	--		3VA9213-0KP00		1	1 unit	1CB
		--	--	✓	--		3VA9123-0KP00		1	1 unit	1CB
		--	--	--	✓		3VA9323-0KP00		1	1 unit	1CB
 3VA9124-0KP00	• 4-pole	✓	--	--	--		3VA9114-0KP00		1	1 unit	1CB
		--	✓	--	--		3VA9214-0KP00		1	1 unit	1CB
		--	--	✓	--		3VA9124-0KP00		1	1 unit	1CB
		--	--	--	✓		3VA9324-0KP00		1	1 unit	1CB
	Plug-in unit, conversion kit Comprising: • Screw-fastened terminal covers for molded case circuit breakers • Plug-in contacts • Cable cage • Autotrip plunger										
	Versions										
 3VA9123-0KP10	• 3-pole	✓	--	--	--		3VA9113-0KP10		1	1 unit	1CB
		--	✓	--	--		3VA9213-0KP10		1	1 unit	1CB
		--	--	✓	--		3VA9123-0KP10		1	1 unit	1CB
		--	--	--	✓		3VA9323-0KP10		1	1 unit	1CB
 3VA9124-0KP10	• 4-pole	✓	--	--	--		3VA9114-0KP10		1	1 unit	1CB
		--	✓	--	--		3VA9214-0KP10		1	1 unit	1CB
		--	--	✓	--		3VA9124-0KP10		1	1 unit	1CB
		--	--	--	✓		3VA9324-0KP10		1	1 unit	1CB

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Plug-in and draw-out technology

Draw-out units

	Version	For molded case circuit breakers/frame size 3VA1 160 A	3VA1 250 A	3VA2 100 A 160 A, 250 A	3VA2 400 A, 630 A	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
	Draw-out unit, complete kit Comprising: • Draw-out socket • Conversion sets • Mounting screw kit										
	Versions										
 3VA9123-0KD00	• 3-pole	--	✓	--	--		3VA9213-0KD00		1	1 unit	1CB
		--	--	✓	--		3VA9123-0KD00		1	1 unit	1CB
		--	--	--	✓		3VA9323-0KD00		1	1 unit	1CB
 3VA9124-0KD00	• 4-pole	--	✓	--	--		3VA9214-0KD00		1	1 unit	1CB
		--	--	✓	--		3VA9124-0KD00		1	1 unit	1CB
		--	--	--	✓		3VA9324-0KD00		1	1 unit	1CB
	Draw-out unit, conversion kit Conversion kit comprising: • Screw-fastened terminal covers for molded case circuit breakers • Side wall • Plug-in contacts • Cable cage • Autotrip plunger										
	Versions										
 3VA9123-0KD10	• 3-pole	--	✓	--	--		3VA9213-0KD10		1	1 unit	1CB
		--	--	✓	--		3VA9123-0KD10		1	1 unit	1CB
		--	--	--	✓		3VA9323-0KD10		1	1 unit	1CB
 3VA9124-0KD10	• 4-pole	--	✓	--	--		3VA9214-0KD10		1	1 unit	1CB
		--	--	✓	--		3VA9124-0KD10		1	1 unit	1CB
		--	--	--	✓		3VA9324-0KD10		1	1 unit	1CB

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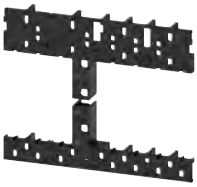
	Version	For molded case circuit breakers/frame size 3VA1 160 A	3VA1 250 A	3VA2 100 A, 160 A, 250 A	3VA2 400 A, 630 A	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Cable cage											
 3VA9167-0KB02	**Cable cage for plug-in/draw-out unit 3-/4-pole (spare part)** Cable duct for routing of the required cables from the internal accessories on the back of the circuit breaker	✓	--	--	--		3VA9157-0KB02		1	1 unit	1CB
		--	✓	--	--		3VA9257-0KB02		1	1 unit	1CB
		--	--	✓	--		3VA9167-0KB02		1	1 unit	1CB
		--	--	--	✓		3VA9367-0KB02		1	1 unit	1CB
Door feedthrough											
3VA9167-0KT00	**Door feedthrough**	--	✓	--	--		3VA9257-0KT00		1	1 unit	1CB
		--	--	✓	--		3VA9167-0KT00		1	1 unit	1CB
		--	--	--	✓		3VA9367-0KT00		1	1 unit	1CB

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Plug-in and draw-out technology

	Version	For molded case circuit breakers/frame size				DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
		3VA1 160 A	3VA1 250 A	3VA2 100 A 160 A 250 A	3VA2 400 A 630 A						
Other accessories											
3VA9987-0KC00	**Communication link for draw-out unit** Comprising: • Cable kit with 3 special position signaling switches • Connecting cable 3VA9987-0KC10						3VA9987-0KC00		1	1 unit	1CB
3VA9987-0KB00	**Position signaling switches** • For draw-out unit • For plug-in unit						3VA9987-0KB00		1	1 unit	1CB
3VA9987-0KC10	**Spare connecting cable** To connect the position signaling switches for communication with the COM060						3VA9987-0KC10		1	1 unit	1CB
3VA9987-0KD81	**Crank handle for draw-out unit** Insulated, incl. crank holder						3VA9987-0KD81		1	1 unit	1CB
3VA9987-0KD80	**Auxiliary circuit connector**										
	Versions										
	• For all draw-out units						3VA9987-0KD80		1	1 unit	1CB
	• For all plug-in units						3VA9987-0KP80		1	1 unit	1CB
	Note										
	All auxiliary circuit connectors are designed to connect 4 cables.						3VA9987-0KD80		1	1 unit	1CB

	Version		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
3VA9980-0VL10	**Cylinder lock (type Ronis)** • Includes a lock with 2 keys • For locking • For installation in all rotary operators with shaft stub • For mounting in the adapter kit for the accessories compartment	Key 1		3VA9980-0VL10		1	1 unit	1CB
		Key 2		3VA9980-0VL20		1	1 unit	1CB
		Key 3		3VA9980-0VL30		1	1 unit	1CB
		Key 4		3VA9980-0VL40		1	1 unit	1CB
3VA9980-0LF40	**Cylinder lock adapter for draw-out unit** • For fitting a cylinder lock in the right-hand side wall of the draw-out unit • To prevent unauthorized withdrawal or insertion of the circuit breaker into the draw-out unit • Circuit breaker can be locked in the CONNECT, TEST and DISCONNECT positions			3VA9980-0LF40		1	1 unit	1CB

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Overview

Residual current devices can be used to prevent or reduce hazardous residual currents that could cause injury to personnel and livestock, and damage to property. These are available as accessory components for the 3VA series up to the largest circuit breaker size. All residual current devices detect both purely sinusoidal AC residual currents as well as pulsating DC residual currents (type A), and the combination of molded case circuit breakers or switch disconnectors with mounted residual current devices complies with IEC 60947-2 Annex B, while the combination with modular residual current devices complies with IEC 60947-2 Annex M.

RCD510 RCD520 RCD820

Residual current devices "Basic" type for 3VA1

The "Basic" type residual current devices are characterized by the following features:

- LEDs for signaling "ready" state and pre-alarms
- Tripped signal at device and via electrical contacts

On the residual current devices of the 5-series (RCD5..), tripping can be delayed by up to three seconds so that in the event of a fault, only the branch containing the fault is switched off by means of appropriate selective grading of the series-switched residual current devices. The device types of the 3-series (RCD3..) are instantaneous versions, in other words, they trip immediately.

RCD310 and RCD510

The RCD310/RCD510 can be combined with the 3VA1 molded case circuit breaker and the switch disconnector. They are mounted on the left side of the breaker. In the event of a residual current, the breaker is tripped by an RCR (residual current release) built into the left accessories compartment of the breaker.

RCD320 and RCD520

The RCD320 or RCD520 can be installed below the trip unit of the 3VA1 molded case circuit breaker. Equipping the molded case circuit breaker fully with internal accessories is easy because with these residual current devices, the molded case circuit breaker is tripped by a tappet that is already integrated into the residual current device and the circuit breaker.

Residual current devices "Advanced" type for 3VA2

RCD820

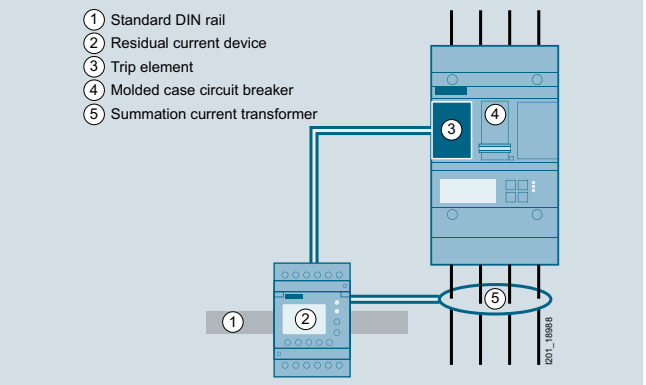
"Advanced" residual current devices can detect fault type A currents up to 10 A and type AC up to 30 A. Status message can be forwarded via the large number of auxiliary contacts on the unit or via the communication connection. LEDs for signaling the "ready" state of the residual current device, the communication connection, and the two pre-alarms on the residual current device provide information on the current status on-site.

Modular residual current device for 3VA1/3VA2

As well as a residual current device mounted direct on the breaker, an external solution is also available.

The modular solution consists of a residual current protection device, a separate summation current transformer and a trip element. If the trip element is omitted, the combination of residual current device and summation current transformer works purely as a display unit.

For further information, see chapter "Monitoring Devices"in the section on residual current protection devices (MRCD).



Modular residual current device

Benefits

RCD310 and RCD510

- Increased packaging density in the cubicle thanks to the compact L-shaped design
- Through-hole technology saves inconvenient wiring of the breaker and the residual current device
- Mounting of a DIN rail adapter enables attachment to a DIN rail
- Side-by-side arrangement with miniature circuit breakers possible thanks to 45 mm cover size
- Function of a shunt trip automatically integrated by RCR dual functionality
- Deliberate acknowledgment of a residual current prevents unintentional restart
- Can be used purely as a display unit

RCD320 and RCD520

- Compact design saves space in the cubicle
- Deliberate acknowledgment of a residual current prevents unintentional restart

RCD820

- Communication connection or alternatively electrical contacts ensure fast status messages – even remotely
- Advanced RCD820 is also suitable for use as a display unit
- Staggered pre-alarms prevent/avoid plant downtimes
- Local presence not required thanks to remote test, acknowledgment and commissioning of the RCD820 via electrical contacts or communication

Modular residual current device

- Modular design allows mounting on different breaker designs (e.g. 1, 2, 3 and 4-pole breakers)
- Reuse in the event of a change of application ensures cost savings
- Time savings thanks to simple upgrading of the residual current functionality in an existing plant
- Especially suitable for use where installation space is restricted

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Selection and ordering data

	Version	For molded case circuit breakers/ frame size 3VA1 160 A	For molded case circuit breakers/ frame size 3VA1 250 A	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Side mounted residual current devices RCD for 3VA1									
	Type A (pulse current sensitive) • Mounted on the side (left) • Trip element (RCR) included in the scope of delivery • Can be mounted on molded case circuit breakers and switch disconnectors with box terminal • U_e = 127 - 480 V AC, 50/60 Hz								
	Note If the molded case circuit breaker has no box terminals as connections, a set of box terminals must be ordered additionally.								
3VA9114- 0RS10	**RCD310** • 4-pole • Rated residual response current, adjustable: $I_{\Delta n}$ = 0.03 - 0.05 - 0.1 - 0.3 - 0.5 - 1 - 3 - 5 A; default: 30 mA • Instantaneous (INS)	✓	--		3VA9114- 0RS10		1	1 unit	1CB
3VA9113-0RS20	**RCD510** • Rated residual response current, adjustable: $I_{\Delta n}$ = 0.03 - 0.05 - 0.1 - 0.3 - 0.5 - 1 - 3 - 5 A; default: 30 mA • Delay time, adjustable: Δt = instantaneous (INS) - 0.06 - 0.15 - 0.3 - 0.5 - 1 - 2 - 3 s; default: instantaneous (INS)								
	Versions								
	• 3-pole	✓	--		3VA9113-0RS20		1	1 unit	1CB
		--	✓		3VA9213-0RS20		1	1 unit	1CB
	• 4-pole	✓	--		3VA9114-0RS20		1	1 unit	1CB
3VA9114-0RS20		--	✓		3VA9214-0RS20		1	1 unit	1CB
	Type A (pulse current sensitive) • Mounted below (under trip unit) • Can be mounted on molded case circuit breakers • U_e = 127 - 480 V AC, 50/60 Hz								
3VA9114-0RL10	**RCD320** • 4-pole • Rated residual response current, adjustable: $I_{\Delta n}$ = 0.03 - 0.05 - 0,1 - 0,3 - 0,5 - 1 - 3 - 5 A; default: 30 mA • Instantaneous (INS)	✓	--		3VA9114-0RL10		1	1 unit	1CB
3VA9113-0RL20	**RCD520** • Rated residual response current, adjustable: $I_{\Delta n}$ = 0.03 - 0.05 - 0.1 - 0.3 - 0.5 - 1 - 3 - 5 A; default: 30 mA • Delay time, adjustable: Δt = instantaneous (INS) - 0.06 - 0.15 - 0.3 - 0.5 - 1 - 2 - 3 s; default: instantaneous (INS)								
	Versions								
	• 3-pole	✓	--		3VA9113-0RL20		1	1 unit	1CB
		--	✓		3VA9213-0RL20		1	1 unit	1CB
	• 4-pole	✓	--		3VA9114-0RL20		1	1 unit	1CB
3VA9114-0RL20		--	✓		3VA9214-0RL20		1	1 unit	1CB

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	Version	For molded case circuit breakers/frame size				DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
		3VA2 100 A 160 A	3VA2 250 A	3VA2 400 A	3VA2 630 A						
Residual current devices RCD for 3VA2											
	Type A (pulse current sensitive) • Mounted below (under trip unit) • With energy infeed from below, the required auxiliary switch (AUX) must be ordered separately. • U_e = 127 - 690 V AC, 50/60 Hz										
 3VA9123-0RL30	**RCD820** • Rated residual response current, adjustable: $I_{\Delta n}$ = 0.03 - 0.05 - 0.1 - 0.3 - 0.5 - 1 - 3 - 5 - 10 - 30 A; default: 30 mA • Delay time, adjustable: Δt = 0 - 0.06 - 0.15 - 0.3 - 0.5 - 1 - 2 - 3 - 5 - 10 s; default: instantaneous (INS) • Note: 30 A setting range only for type AC applications										
	Versions										
	• 3-pole	✓	--	--	--		3VA9123-0RL30		1	1 unit	1CB
		--	✓	--	--		3VA9223-0RL30		1	1 unit	1CB
		--	--	✓	--		3VA9323-0RL30		1	1 unit	1CB
		--	--	--	✓		3VA9423-0RL30		1	1 unit	1CB
 3VA9124-0RL30	• 4-pole	✓	--	--	--		3VA9124-0RL30		1	1 unit	1CB
		--	✓	--	--		3VA9224-0RL30		1	1 unit	1CB
		--	--	✓	--		3VA9324-0RL30		1	1 unit	1CB
		--	--	--	✓		3VA9424-0RL30		1	1 unit	1CB

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Overview

Metering function

The Rogowski coils integrated in the 3VA2 molded case circuit breakers are capable of delivering particularly accurate current measurements. An additional voltage tap is integrated in molded case circuit breakers equipped with an 8-series ETU, which means that energy data can also be measured – the 3VA2 molded case circuit breaker therefore offers a range of metering functions similar to those available with the tried-and-tested 7KM PAC measuring device!

An external current transformer for N conductors is available to allow direct measurement of the neutral conductor current with 3-pole molded case circuit breakers. When the 3-pole circuit breaker is installed in the 4-pole network, it is advisable to deploy the voltage tap at the neutral conductor so that the neutral point of the voltage network can be fixed.

Communication via the COM800/COM100 breaker data server

The 3VA2 molded case circuit breaker utilizes an innovative, modern communication concept. This concept is based on the COM800 breaker data server which can link up to eight molded case circuit breakers to different bus systems. For applications involving only one 3VA2 molded case circuit breaker, the COM100 is an ideal alternative to the COM800 breaker data server.

The COM060 communication module in the molded case circuit breaker is wired via a T-Connector to the COM800/COM100 breaker data server. Integrated as standard in the COM800/COM100 breaker data server is an Ethernet interface with the Modbus TCP protocol to allow communication with powerconfig and the powermanager. Optional communication modules can be installed to provide different communication protocols. An additional benefit of this structure is that the communication costs per molded case circuit breaker decrease with every further circuit breaker that is connected to the COM800 breaker data server.

The communication equipment for the molded case circuit breakers can be installed and connected extremely easily, reliably and efficiently thanks to the connector system used. The 24 V DC supply to the electronic trip units is also reliably provided by these connections. The breaker data server utilizes independent supplementary functions to deliver valuable information about the connected molded case circuit breakers and the power distribution system.

Flexible communication thanks to optional expansion modules

With COM800/COM100, the 3VA2 molded case circuit breakers can be integrated into the relevant communication networks via the following optional expansion modules:

- Switched Ethernet PROFINET IO
- PROFIBUS DPV1
- RS 485 / Modbus RTU

GSDML or GSD files are also available for PROFINET and PROFIBUS for integration into the engineering system, e.g. STEP 7.

DSP800 display

The DSP800 display can be used to show breaker information (status, measured values, parameters) on the cubicle door. It communicates via the integral Ethernet interface with the COM800/COM100 and is thus able to display the data of up to 8 3VA2 molded case circuit breakers simultaneously.

EFB300 external function box

The EFB300 external function box is linked directly to the ETU of the 3VA2 molded case circuit breaker by a cable. It provides four digital outputs and one digital input. The powerconfig software can be used to set which information is to be output from the ETU via the four digital outputs:

- All reasons for tripping, categorized according to LSING
- Overload alarms AL1 and AL2
- Pre-trip alarm from overload protection system
- Load shedding and load pick-up
- Temperature alarm
- Output of an energy pulse (S0 signal), in combination with an 8-series ETU only

A zone selective interlocking functionality (ZSI) can also be implemented via the module.

Note:

A TD500 or the COM060 and COM800/COM100 combination is needed to program a change in the output assignments with powerconfig.

TD300 and TD500 test devices

The TD300 activation and trip box is a mobile, battery-operated local test device. One of its functions is to provide a temporary power supply to the Electronic Trip Units (ETUs) so that they can be operated and parameterized. It is also used to test the tripping function of the molded case circuit breaker.

The TD500 mobile test device allows the proper functioning and connections of all connected system components to be tested at the breaker commissioning stage because it is capable of simulating every conceivable cause of breaker tripping. The molded case circuit breaker responds as if the emergency were real – it trips in accordance with the set parameters and transmits all alarm and trip signals to the connected components.

The TD500 test device can be used as a hand-held tester or in conjunction with a PC. In the latter case, the TD500 test device is connected to the PC via a supplied USB cable and acts as a gateway to the 3VA2 molded case circuit breaker. Using the powerconfig software, it is possible to read out or modify the setting parameters of the molded case circuit breaker and monitor the measured values.

Benefits

- The metering function integrated in 8-series ETUs can acquire energy data without requiring additional external transformers
- The COM800 breaker data server provides a cost-efficient communication interface for up to 8 3VA2 molded case circuit breakers
- Universal bus interfaces are available for the COM800/COM100 breaker data server
- Universal S0 interface for the output of energy pulses
- 100 test results can be stored with the TD500 test device
- Status and measured values of up to 8 molded case circuit breakers are displayed in the cubicle door using the DSP800

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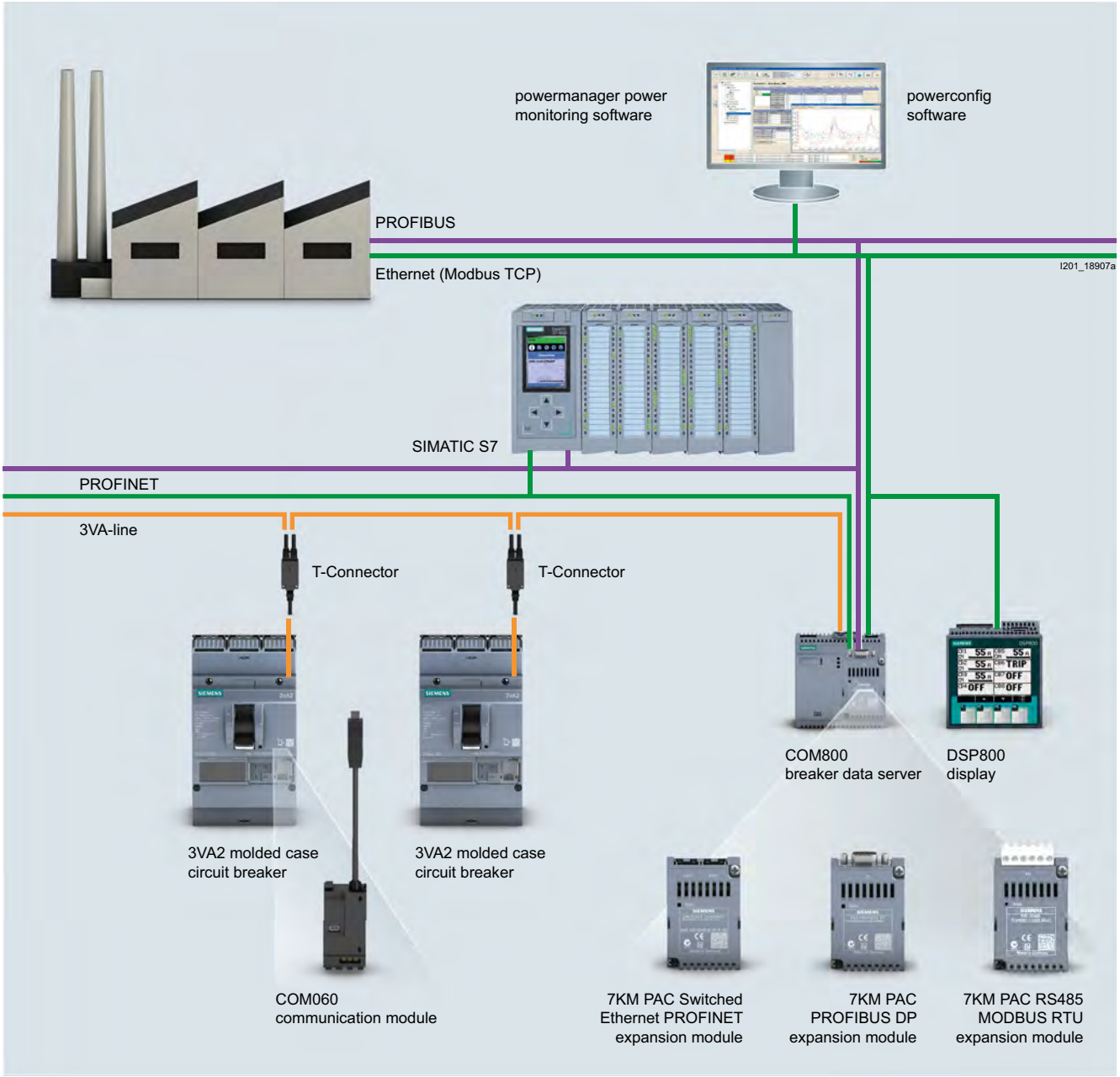
Design



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Communication and testing/commissioning devices

Overview of the metering functions

Metering function[1]			ETUs of the 5-series	ETUs of the 8-series	Display In ETU	Display DSP800	Communication COM800 / COM100
Current							
Phase and neutral conductor currents	I_1, I_2, I_3, I_N	A	✓	✓	👁	👁	👁
Residual current to ground	I_g	A	✓	✓	👁	👁	👁
Phase with highest load		A	✓	✓	👁	👁	👁
Mean value over the three phase currents	$I_{LAVG} = (I_1+I_2+I_3)/3$	A	--	✓	--	👁	👁
Asymmetry of the phase currents	I_{nba}	%	--	✓	--	👁	👁
THD of the 3 phases	$THDI_1$, $THDI_2$, $THDI_3$	%	--	✓	--	👁	👁
Voltage							
Phase voltages incl. mean value	U_{12}, U_{23}, U_{31}, U_{phavg}	V	--	✓	👁	👁	👁
Voltages to N conductor incl. mean value	U_{1N}, U_{2N}, U_{3N}, U_{Navg}	V	--	✓	--	👁	👁
Asymmetry of the voltages		%	--	✓	--	👁	👁
THD phase/phase and phase/N	$THDI_1$, $THDI_2$, $THDI_3$	%	--	✓	--	👁	👁
Rating							
Active power, total and per phase	P_1, P_2, P_3, P_{tot}	kW	--	✓	👁 (P_{tot})	👁	👁
Apparent power, total and per phase	S_1, S_2, S_3, S_{tot}	kVA	--	✓	--	👁	👁
Reactive power, total and per phase	Q_1, Q_2, Q_3, Q_{tot}	kVAr	--	✓	👁	👁	👁
Fundamental power factor	PF_1, PF_2, PF_3, PF_{avg}		--	✓	👁 (PF_{avg})	👁	👁
Energy							
Active energy, infeed and feedback	E_p	kWh	--	✓	👁	👁	👁
Reactive energy, infeed and feedback	E_q	kVArh	--	✓	--	👁	👁
Apparent energy	E_s	kVAh	--	✓	--	👁	👁
Frequency							
Present frequency	f	Hz	--	✓	👁	👁	👁
Maximum pointer function							
Min/max current, voltage, power	with time stamp		--	--	--	--	👁

[1] Depending on ETU version

✓ Available -- Not available

👁 Displayable

Accuracy specifications

Accuracy levels of the specified measured values of the 8-series ETU, including the integrated current sensors:

Measured value	Accuracy
Current	1 % in the range from 0.2 ... 1.2 I_n
Voltage	1 % in the range from 80 ... 800 V
Active power, active energy	Class 2 acc. to IEC 61557-12

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Selection and ordering data

	Version	For molded case circuit breakers/ frame size 3VA2 100 A 160 A, 250 A	For molded case circuit breakers/ frame size 3VA2 400 A, 630 A	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
24 V module									
3VA9187-0TB50	**24 V module** • 24 V DC • For mounting in the right accessories compartment of the 3VA2 • Optional energy supply for the ETU, also includes continuous operation of the ETU display and the metering function of the ETU 8-series	✓	--		**3VA9187-0TB50**		1	1 unit	1CB
		--	✓		**3VA9387-0TB50**		1	1 unit	1CB
Communication accessories in the molded case circuit breaker									
3VA9187-0TB10	**COM060 communication module** • For mounting in the right-hand accessories compartment of the 3VA2 molded case circuit breaker (including ETU power supply) • Communication with the COM800/COM100 breaker data server via the 3VA-line • Including a T-Connector	✓	--		**3VA9187-0TB10**		1	1 unit	1CB
		--	✓		**3VA9387-0TB10**		1	1 unit	1CB
Breaker data server									
3VA9987-0TA10	**COM800 breaker data server** • 2 terminating resistors • Central communication module for connecting up to eight 3VA2 molded case circuit breakers via the 3VA-line • Ethernet 10/100 Mbit/s interface • Module slot for plugging on an optional PROFIBUS DP or PROFINET module				**3VA9987-0TA10**		1	1 unit	1CB
3VA9987-0TA20	**COM100 breaker data server** • 2 terminating resistors • Optimized, central communication module for connecting a 3VA2 molded case circuit breaker via the 3VA-line • Ethernet 10/100 Mbit/s interface • Module slot for plugging on an optional PROFIBUS DP or PROFINET module				**3VA9987-0TA20**		1	1 unit	1CB
7KM9300-0AB01-0AA0	**7KM PAC PROFIBUS DP expansion module** • The 7KM PAC PROFIBUS DP expansion module is used for connecting the COM800/COM100 breaker data server, and the 3VA molded case circuit breakers connected to it, to PROFIBUS DPV1. • The 7KM PAC PROFIBUS DP expansion module provides the status and measured quantities of the 3VA molded case circuit breaker for the PROFIBUS DP master. It receives information (e.g. commands) from the PROFIBUS DP master, and forwards this information to the 3VA molded case circuit breaker.				**7KM9300-0AB01-0AA0**		1	1 unit	1DD
7KM9300-0AE01-0AA0	**7KM PAC Switched Ethernet PROFINET expansion module** • The 7KM PAC Switched Ethernet PROFINET expansion module is used to connect the COM800/COM100 breaker data server, and the connected 3VA molded cased circuit breaker, to PROFINET via two Ethernet interfaces. • The 7KM PAC Switched Ethernet PROFINET expansion module provides the status and measured quantities of the 3VA molded case circuit breaker to PROFINET via the PROFINET IO, PROFIenergy and Modbus TCP protocols.				**7KM9300-0AE01-0AA0**		1	1 unit	1DD
7KM9300-0AE01-0AA0	**7KM PAC RS485 Modbus RTU expansion module** • The 7KM PAC RS485 Modbus expansion module is used to connect the COM800/COM100 breaker data server, and the 3VA molded case circuit breakers connected to it, to Modbus RTU. • The 7KM PAC RS485 Modbus expansion module provides the status and measured quantities of the 3VA molded case circuit breaker for the Modbus RTU master. It receives information (e.g. commands) from the Modbus RTU master, and forwards this information to the 3VA molded case circuit breaker.				**7KM9300-0AM00-0AA0**		1	1 unit	1DD

*** You can order this quantity or a multiple thereof.**

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Communication and testing/commissioning devices

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Accessories for communication							
3VA9987-0TG10	**T-Connector** • Spare part • Provides spur line feeder to COM060 and loops through to the next circuit breaker.		3VA9987-0TG10		1	1 unit	1CB
3VA9987-0TC10	**Preassembled T-Connector-to-T-Connector or T-Connector-to-COM800/COM100 connecting cable**						
	• 0.4 m long		3VA9987-0TC10		1	1 unit	1CB
	• 1 m long		3VA9987-0TC20		1	1 unit	1CB
	• 2 m long		3VA9987-0TC30		1	1 unit	1CB
	• 4 m long		3VA9987-0TC40		1	1 unit	1CB
3VA9987-0TF20	**Preassembled connecting cable for extending the COM060-to-T-Connector spur line connection**						
	• 0.4 m long		3VA9987-0TF20		1	1 unit	1CB
	• 0.8 m long		3VA9987-0TF10		1	1 unit	1CB
3VA9987-0TE10	**Additional bus terminating resistors**		3VA9987-0TE10		1	5 units	1CB
3VA9987-0UC10	**Voltage tap to external N conductor** Cable for connecting the neutral point for the metering function of the 8-series ETU, length 1.5 m		3VA9987-0UC10		1	1 unit	1CB
3VA9107-0NA10	**External current transformer for N conductor** Connection of an external current transformer for the N conductor for 3-pole 3VA2 molded case circuit breakers for 5-series and 8-series ETUs, including connecting cable						
		• I_n = 25 ... 100 A	3VA9007-0NA10		1	1 unit	1CB
		• I_n = 160 ... 250 A	3VA9107-0NA10		1	1 unit	1CB
		• I_n = 400 ... 630 A	3VA9307-0NA10		1	1 unit	1CB
	Spare part: cable for connecting external current transformer for N conductor		3VA9907-0NB10		1	1 unit	1CB
Displays							
3VA9987-0TD10	**DSP800 display** • For displaying the status, measured values and parameters of up to 8 3VA2 molded case circuit breakers • Connection to the COM800/COM100 via Ethernet for displaying information of the COM800/COM100 and the connected 3VA2 molded case circuit breaker		3VA9987-0TD10		1	1 unit	1CB
External function box							
3VA9987-0UA10	**EFB300** • External function box for connection to the ETU of the 3VA2 molded case circuit breaker • 4 digital outputs for information output • 1 digital input • ZSI functionality • S0 interface • Including cable 1.5 m in length		3VA9987-0UA10		1	1 unit	1CB
	Connecting cable for EFB300 Spare part						
	• Length 1.5 m		3VA9987-0UB10		1	1 unit	1CB
	• Length 3.0 m		3VA9987-0UB20		1	1 unit	1CB
	• Length 3.0 m for 3VA2 with EFB and RCD820		3VA9987-0UB30		1	1 unit	1CB

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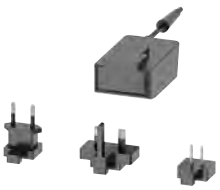
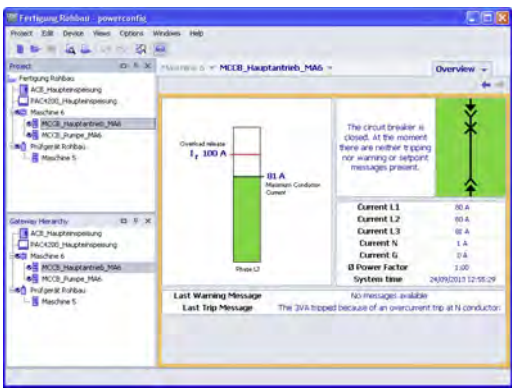
	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Test devices							
3VA9987-0MA10	**TD300** • Connection to the front interface of the ETU • Test device for activating the ETU and triggering a test trip		**3VA9987-0MA10**		1	1 unit	1CB
3VA9987-0MB10	**TD500** • Connection to the front interface of the ETU • Initiation of various test trips (LSING) • USB interface for connection of a PC using powerconfig • ETU parameterization • Including an external power supply • Including connecting cable to the 3VA2 molded case circuit breaker		**3VA9987-0MB10**		1	1 unit	1CB
 3VA9987-0MX10	**Spare part: external power supply for TD500** Spare part 110 ... 240 V AC		**3VA9987-0MX10**		1	1 unit	1CB
3VA9987-0MY10	**Spare part: cable for connecting the TD500 to the 3VA2 molded case circuit breaker**		**3VA9987-0MY10**		1	1 unit	1CB
Commissioning and service software: powerconfig							
	 • Commissioning and service software for 3VA2 molded case circuit breakers and further SENTRON components • For Windows XP, Windows 7 and Windows 8 • Connection via TD500 or COM800/COM100 • Languages: German, English, Chinese, Spanish, Portuguese • Enables complete use of the electronic components of the 3VA2 such as ETU, EFB300, DSP800, TD500 • Communication via PROFINET, PROFIBUS, Ethernet Modbus TCP and RS 485 with Modbus RTU • see chapter "Software""Configuring, visualizing and controlling with SENTRON". • powerconfig can be downloaded free of charge from Siemens Industry Online Support at http://support.automation.siemens.com/WW/view/en/63452759 • More information can be found on the Internet at www.siemens.com/sentron.						

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Overview

With all types of 3VA molded case circuit breakers, a basic distinction is made between:

- Locking of molded case circuit breakers
- Interlocking of molded case circuit breakers

The padlock devices make it possible to lock the 3VA molded case circuit breaker in either the OFF or the ON operating position.

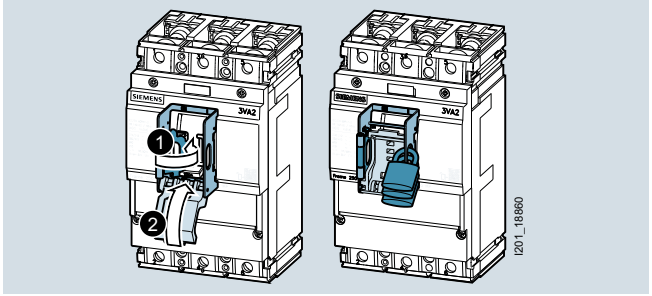
Using the interlocking technology, it is possible to mutually interlock two or more molded case circuit breakers. The interlock system is designed to ensure that no more than one molded case circuit breaker can be operated at a time. The following methods of interlocking can be used on 3VA molded case circuit breakers:

- Front interlock
- Rear interlock

Locking technology

Padlock device for the handle

A padlock device mounted and latched on the handle allows the 3VA molded case circuit breaker to be locked in the OFF or the ON position.

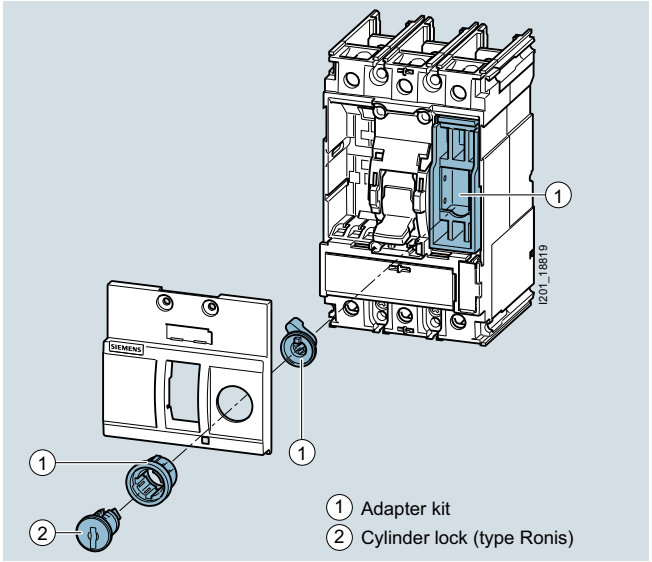


Locking with cylinder lock

The 3VA molded case circuit breaker can also be locked in the OFF (O) or ON (I) position by means of a cylinder lock supplied by Ronis. This prevents further operation of the circuit breaker.

In order to lock a molded case circuit breaker in a specific operating state, the following two components need to be ordered.

- Cylinder lock (type Ronis)
- Lock adapter kit for mounting the cylinder lock in the accessories compartment

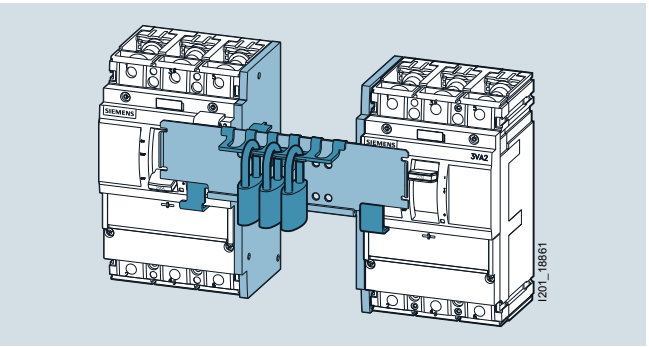


Interlocking technology

Interlocking by means of a sliding bar

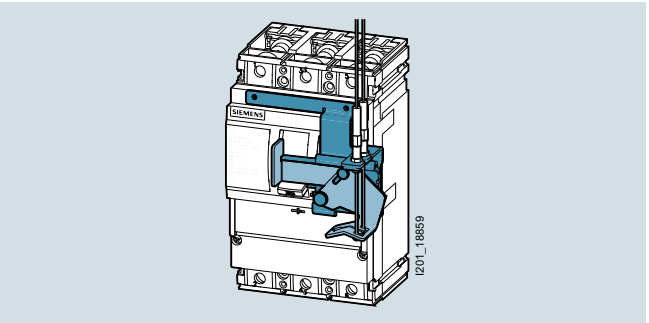
The sliding bar allows between two and three 3VA molded case circuit breakers of the same size to be mutually interlocked by means of a sliding bar.

With this device, the sliding bar is moved to block the handle of the interlocked molded case circuit breaker. For this reason, a molded case circuit breaker is always locked in the safe OFF position, while the released circuit breaker can still be operated.



Handle interlock using a Bowden cable

With the front Bowden cable interlock, it is possible to implement a mutual interlock between two or three molded case circuit breakers of different sizes. The front Bowden cable interlock operates according to the blocking principle. In order to implement this system, modules for the Bowden cable interlock must be mounted on the molded case circuit breakers to be included in the interlock arrangement. Each of these modules is equipped with a slide which blocks or releases operation of the handle.



Interlocking with cylinder locks

Using the cylinder lock (type Ronis), it is not only possible to lock a molded case circuit breaker, but also to create an interlock between an optional number of molded case circuit breakers of different sizes. To implement an interlocking application using cylinder locks, the adapter kit with the cylinder lock (type Ronis) must be fitted in the right-hand accessories compartment of each molded case circuit breaker to be included in the interlock arrangement and all breakers must be locked in the OFF position. In order to ensure reliable functioning of the interlock, only one key may be used for the entire interlock application! All other keys must be kept or locked away in a safe place. This one key must be used as the release instrument for only one molded case circuit breaker at a time! To release or operate a molded case circuit breaker, the cylinder lock must be turned to the "Unlocked" position with this one particular key. Only then can the handle of the circuit breaker be moved to the ON position. When the cylinder lock is in the "Unlocked" position, the key cannot be removed and must be left in the lock.

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To implement an interlocking application involving multiple molded case circuit breakers, the following two components must be ordered for each circuit breaker:

- Cylinder lock (type Ronis) with identical key number
- Interlock adapter kit for mounting the cylinder lock in the accessories compartment

Interlocking using an interlocking module in the rotary operator

In addition to the interlocking options described above, it is also possible to mutually interlock molded case circuit breakers with rotary operators of different sizes. This type of interlock can be employed with door mounted rotary operators, side wall mounted rotary operators, front operators and rotary operators with shaft stub or combinations thereof.

For this purpose, a rotary operator interlock module must be fitted in each individual rotary operator of the molded case circuit breakers to be included in the interlock arrangement. The interlocking modules are interconnected by means of Bowden cables in a similar manner to the handle interlock.

Rear interlock

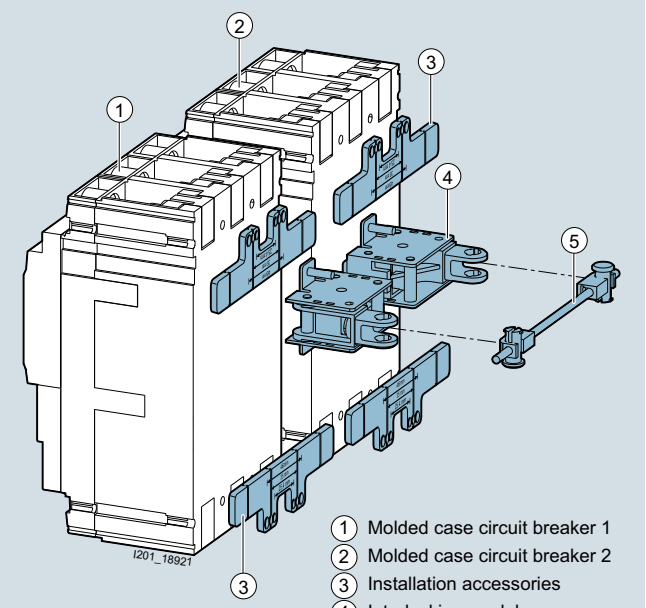
The rear interlock system allows implementation of an interlock without restricting the number of accessories which can be installed at the front of the 3VA molded case circuit breaker. Using the rear interlock, it is possible to create an interlock between two molded case circuit breakers of different sizes based on the blocking principle. When one molded case circuit breaker closes, the other circuit breaker is prevented from closing by a tappet which engages in the breaker mechanism directly from the rear panel of the molded case circuit breaker.

This system requires the installation of two interlocking modules which are mounted behind the molded case circuit breakers and behind the mounting frame of the cubicle. The two interlocking modules are interconnected by means of the interlocking rod.

A mounting plate comprising a plate and two DIN rails is available as an accessory to assist installation.

Rear interlock for plug-in or draw-out units

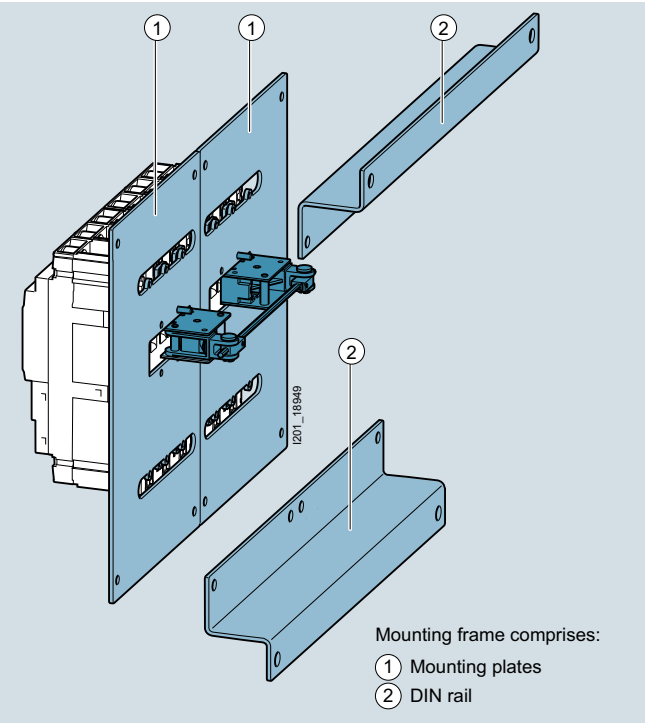
In order to install a rear interlock for plug-in or draw-out versions of the molded case circuit breakers, the tappet needs to be lengthened. The rear interlock for plug-in or draw-out versions is offered as a complete kit.



Rear interlock without mounting frame

Benefits

- Broad range of applications thanks to flexibility of interlocking technology
- Locking technology ensures safe locking of molded case circuit breakers, e.g. for maintenance purposes
- No restriction to use of internal accessories or to scope of accessories installed at the front of the molded case circuit breaker (when a rear interlock is deployed)
- Molded case circuit breakers of different sizes can be mutually interlocked.



Rear interlock with mounting frame

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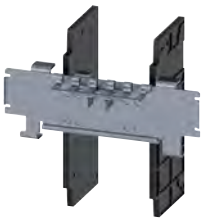
Selection and ordering data

	Version	For molded case circuit breakers/frame size				DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
		3VA1 100 A 160 A	3VA1 250 A	3VA2 100 A 160 A 250 A	3VA2 400 A 630 A						
Accessories for locking and interlocking											
3VA9388-0LB10	**Locking devices for toggle levers**	✓	✓	--	--		3VA9088-0LB10		1	1 unit	1CB
		--	--	✓	✓		3VA9388-0LB10		1	1 unit	1CB
3VA9167-0LF10	**Adapter kit for mounting the cylinder lock (type Ronis) in the accessories compartment of the molded case circuit breaker** Comprising 2 cylinder lock casings (one for locking and one for interlocking) and the appropriate mounting module										
	Notes	✓	--	--	--		3VA9157-0LF10		1	1 unit	1CB
	• To implement an interlock or a lock: select suitable cylinder lock(s) • For an interlock: select the same cylinder lock number	--	✓	--	--		3VA9257-0LF10		1	1 unit	1CB
		--	--	✓	--		3VA9167-0LF10		1	1 unit	1CB
		--	--	--	✓		3VA9367-0LF10		1	1 unit	1CB
3VA9980-0VL10	**Cylinder lock (type Ronis)** • Includes a lock with 2 keys • For locking or interlocking • For installation in all rotary operators with shaft stub • For mounting in the adapter kit for the accessories compartment										
	Versions										
	• Key 1 (lock number 1)	✓	✓	✓	✓		3VA9980-0VL10		1	1 unit	1CB
	• Key 2 (lock number 2)	✓	✓	✓	✓		3VA9980-0VL20		1	1 unit	1CB
	• Key 3 (lock number 3)	✓	✓	✓	✓		3VA9980-0VL30		1	1 unit	1CB
	• Key 4 (lock number 4)	✓	✓	✓	✓		3VA9980-0VL40		1	1 unit	1CB
 3VA9168-0VF30	**Sliding bar** Complete kit for interlocking 2 circuit breakers										
	Note	✓	--	--	--		3VA9158-0VF30		1	1 unit	1CB
	The article number must be ordered 2 x to implement an interlock between 3 breakers of the same size.	--	✓	--	--		3VA9258-0VF30		1	1 unit	1CB
		--	--	✓	--		3VA9168-0VF30		1	1 unit	1CB
		--	--	--	✓		3VA9368-0VF30		1	1 unit	1CB
3VA9167-0VF10	**Module for handle interlock using a Bowden cable**										
	Notes	✓	--	--	--		3VA9157-0VF10		1	1 unit	1CB
	• A separate handle interlock module is required for each 3VA. • A Bowden cable must be ordered separately.	--	✓	--	--		3VA9257-0VF10		1	1 unit	1CB
		--	--	✓	--		3VA9167-0VF10		1	1 unit	1CB
		--	--	--	✓		3VA9367-0VF10		1	1 unit	1CB
3VA9088-0VM10	**Rear interlock with rod** Complete kit	✓	✓	✓	✓		3VA9088-0VM10		1	1 unit	1CB
	Note Mounting frames are not included in scope of supply.										
3VA9088-0VM30	**Rear interlock with rod** Complete kit for plug-in/draw-out unit	✓	✓	✓	✓		3VA9088-0VM30		1	1 unit	1CB
	Note Mounting frames are not included in scope of supply.										

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	Version	For molded case circuit breakers/frame size				DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
		3VA1 100 A 160 A	3VA1 250 A	3VA2 100 A 160 A 250 A	3VA2 400 A 630 A						
3VA9980-0VC10	**Bowden cable**										
	Versions										
	• Length 0.6 m	✓	✓	✓	✓		**3VA9980-0VC10**		1	1 unit	1CB
	• Length 1.0 m	✓	✓	✓	✓		**3VA9980-0VC20**		1	1 unit	1CB
	• Length 1.5 m	✓	✓	✓	✓		**3VA9980-0VC30**		1	1 unit	1CB
3VA9488-0VF20	**Rotary operator interlock**[1] • Contains 1 unit • For interlocking up to 3 operators (with 3 modules) • Interlocking via Bowden cable (not included in scope of delivery)	For molded case circuit breakers									
		3VA1, 160 A					**3VA9158-0VF20**			On request	
		3VA1, 250 A					**3VA9258-0VF20**			On request	
		3VA2, 250 A					**3VA9268-0VF20**			On request	
		3VA2, 630 A					**3VA9468-0VF20**			On request	
	Mounting frame for rear interlock with rod The following are required for the complete mounting frame kit:										
	Versions										
	• DIN rails	✓	✓	✓	✓		**3VA9088-0VK10**		1	1 unit	1CB
	• Mounting plates	✓	--	--	--		**3VA9158-0VK20**		1	1 unit	1CB
		--	✓	--	--		**3VA9258-0VK20**		1	1 unit	1CB
		--	--	✓	--		**3VA9268-0VK20**		1	1 unit	1CB
		--	--	--	✓		**3VA9468-0VK20**		1	1 unit	1CB
	Note										
	2 mounting plates are required. They are screwed onto the DIN rail that can be ordered above. Different breakers can be mutually interlocked.										

[1] Start of delivery scheduled for 1st quarter 2016

*** You can order this quantity or a multiple thereof.**

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Selection and ordering data

Version	For molded case circuit breakers/frame size 3VA1 100 A, 160 A	3VA1 250 A	3VA2 100 A 160 A, 250 A	3VA2 400 A, 630 A	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Escutcheon for door cutout										
3VA9163-0SB10 **Escutcheon for door cutout for molded case circuit breaker**										
Versions										
• 3-pole, door cutout without ETU	✓	--	--	--		3VA9053-0SB10		1	1 unit	1CB
	--	✓	--	--		3VA9253-0SB10		1	1 unit	1CB
	--	--	✓	--		3VA9163-0SB10		1	1 unit	1CB
	--	--	--	✓		3VA9383-0SB10		1	1 unit	1CB
• 3-pole, door cutout with ETU	✓	--	--	--		3VA9053-0SB20		1	1 unit	1CB
	--	✓	--	--		3VA9253-0SB20		1	1 unit	1CB
	--	--	✓	--		3VA9163-0SB20		1	1 unit	1CB
	--	--	--	✓		3VA9363-0SB20		1	1 unit	1CB
• 4-pole, door cutout without ETU	✓	--	--	--		3VA9054-0SB10		1	1 unit	1CB
	--	✓	--	--		3VA9254-0SB10		1	1 unit	1CB
	--	--	✓	--		3VA9164-0SB10		1	1 unit	1CB
	--	--	--	✓		3VA9384-0SB10		1	1 unit	1CB
• 4-pole, door cutout with ETU	✓	--	--	--		3VA9054-0SB20		1	1 unit	1CB
	--	✓	--	--		3VA9254-0SB20		1	1 unit	1CB
	--	--	✓	--		3VA9164-0SB20		1	1 unit	1CB
	--	--	--	✓		3VA9364-0SB20		1	1 unit	1CB
Escutcheon for MO320 motor operators	✓	--	--	--		3VA9053-0SB20		1	1 unit	1CB
	--	✓	✓	--		3VA9257-0SB30		1	1 unit	1CB
	--	--	--	✓		3VA9387-0SB30		1	1 unit	1CB
Masking frame for RCD320, RCD520 and RCD820 residual current protection device										
Versions										
• 3-pole	✓	--	--	--		3VA9053-0SB10		1	1 unit	1CB
	--	✓	✓	--		3VA9253-0SB10		1	1 unit	1CB
	--	--	--	✓		3VA9303-0SB40		1	1 unit	1CB
• 4-pole	✓	--	--	--		3VA9054-0SB10		1	1 unit	1CB
	--	✓	✓	--		3VA9254-0SB10		1	1 unit	1CB
	--	--	--	✓		3VA9304-0SB40		1	1 unit	1CB
Escutcheon for front mounted rotary operator	✓	--	--	--		3VA9053-0SB10		1	1 unit	1CB
	--	✓	--	--		3VA9253-0SB10		1	1 unit	1CB
	--	--	✓	--		3VA9163-0SB10		1	1 unit	1CB
	--	--	--	✓		3VA9383-0SB10		1	1 unit	1CB
Escutcheon for door feedthrough	--	✓	✓	--		3VA9253-0SB20		1	1 unit	1CB
	--	--	--	✓		3VA9353-0SB20		1	1 unit	1CB
3VA9087-0SX10 **Labeling plate for escutcheon**						3VA9087-0SX10		1	10 units	1CB

* You can order this quantity or a multiple thereof.

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	Version	For molded case circuit breakers/frame size				DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
		3VA1 100 A 160 A	3VA1 250 A	3VA2 100 A 160 A 250 A	3VA2 400 A 630 A						
Adapter for DIN rails for 3VA1 molded case circuit breakers											
3VA9187-0SH10	**Adapter for DIN rails for 3VA1 molded case circuit breakers**										
	Versions										
	• 1-pole[1)]	✓	--	--	--		3VA9181-0SH10		1	1 unit	1CB
	• 2-pole	✓	--	--	--		3VA9182-0SH10		1	1 unit	1CB
	• 3- and 4-pole	✓	--	--	--		3VA9187-0SH10		1	1 unit	1CB
	• 3 and 4-pole in conjunction with RCD310 or RCD510	✓	--	--	--		3VA9187-0SH20		1	1 unit	1CB
Adapter for 60 mm busbar system (8US)											
	Busbar adapter systems with 40 mm or 60 mm busbar center-to-center spacing with components for busbar runs, adapters and switching device holders for individual equipment possibilities, devices with an integrated adapter, as well as accessories and flat copper profiles. Observe the short-circuit strength of the busbar system. Short-circuit strength greater than 50 kA on request. For more information, see chapter "Busbar Systems".										
Mounting screw kit											
3VA9111-0SS10	**Mounting screw kit**										
	Versions										
	• For fixed-mounted molded case circuit breakers										
	- 1-pole	✓	--	--	--		3VA9111-0SS10		1	1 unit	1CB
	- 2 and 3-pole (apart from 125 A/160 A with 55 kA and 70 kA)	✓	✓	--	--		3VA9116-0SS10		1	1 unit	1CB
	- 3-pole (125 A/160 A with 55 kA and 70 kA) and 4-pole	✓	✓	--	--		3VA9114-0SS10		1	1 unit	1CB
	- 3-pole	--	--	✓	--		3VA9126-0SS10		1	1 unit	1CB
	- 4-pole	--	--	✓	--		3VA9124-0SS10		1	1 unit	1CB
	- 3- and 4-pole	--	--	--	✓		3VA9328-0SS10		1	1 unit	1CB
	• For plug-in technology	✓	✓	--	--		3VA9114-0SS10		1	1 unit	1CB
	• For plug-in and draw-out units	--	✓	--	--		3VA9114-0SS10		1	1 unit	1CB
		--	--	✓	--		3VA9124-0SS10		1	1 unit	1CB
		--	--	--	✓		3VA9328-0SS10		1	1 unit	1CB

[1)] For 3VA1 molded case circuit breakers, 160 A 1-pole up to 25 kA

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Overview

Devices		Page	Applications/ Individual components	Standards	Used in		
					Non-residential buildings	Residential buildings	Industry
	3VL molded case circuit breakers for line protection **3VL molded case circuit breakers for generator protection**	2/126 ... 2/141, 2/150 ... 2/167	The overload and short-circuit releases are designed for the protection of cables, leads and non-motor loads. The overload and short-circuit releases can be used for optimized protection of generators.	IEC 60947-1, EN 60947-1, IEC 60947-2, EN 60947-2.	✓	✓	✓
	3VL molded case circuit breakers for motor protection Are you IE3 ready?	2/142 ... 2/145	Circuit breakers for motor protection are specifically designed for the characteristic curve of the motor, and have additional functions such as phase failure detection and adjustable trip class.	IEC 60947-1, EN 60947-1, IEC 60947-2, EN 60947-2. IE3 ready	✓	✓	✓
	3VL molded case circuit breakers for starter protection Are you IE3 ready?	2/146, 2/147	Starter combinations consist of: Motor starter protector + contactor + overload relay. The motor starter protector provides short-circuit protection and the isolating function. The task of the contactor is the operational switching of the feeder. The overload relay provides overload protection, which is specifically designed for the motor.	IEC 60947-1, EN 60947-1, IEC 60947-2, EN 60947-2. IE3 ready	✓	✓	✓
	3VL non-automatic circuit breakers, molded case	2/146, 2/147, 2/168, 2/169	These circuit breakers are used as feeder circuit breakers, main control switches or disconnectors without overload protection. They have fixed short-circuit releases.	IEC 60947-1, EN 60947-1, IEC 60947-2, EN 60947-2. Isolating features according to IEC 60947-2 and EN 60947-2.	✓	✓	✓
	Auxiliary switches and auxiliary releases for 3VL molded case circuit breakers	2/175, 2/176	Auxiliary switches, alarm switches, undervoltage releases and shunt releases	As for circuit breakers	✓	✓	✓
	Operating mechanisms	2/178 ... 2/185	The manual operating mechanisms are available in two versions: • Front-operated rotary operating mechanism, • Door-coupling rotary operating mechanism In the case of the motorized operating mechanisms there are also two versions: • MO for standard applications • SEO for network synchronization tasks	As for circuit breakers	✓	✓	✓
	Plug-in versions/ withdrawable versions	2/186 ... 2/191	Assembly in plug-in and withdrawable versions allows the 3VL molded case circuit breaker to be replaced quickly without accessing the terminals.	As for circuit breakers	✓	✓	✓

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Devices		Page	Applications/ Individual components	Standards	Used in		
					Non-residential buildings	Residential buildings	Industry
	RCD modules	2/192	Protection of plant and personnel against damage or injury caused by residual currents and insulation faults.	IEC EN 60947-2 (Annex B)	✓	✓	✓
	Residual current devices (MRCD)	Ch. 12	Modular residual current devices (MRCD) monitor residual currents in electrical systems and trip the molded case circuit breaker via an auxiliary release after an adjustable advance warning if the residual current exceeds a defined value.	IEC EN 60947-2 (Annex M)	✓	✓	✓
	Connection parts for fixed-mounted circuit breakers	2/193 ... 2/198	Front connecting bars, rear terminals, box terminals, circular conductor terminals, multiple feed-in terminals, auxiliary conductor terminals, terminal plates, connections with screw terminals, terminal covers for circuit breakers, phase barriers for circuit breakers	As for circuit breakers	✓	✓	✓
	Interlocks	2/199 ... 2/204	Locking devices for toggle levers, rear interlocking modules, interlocking modules for Bowden wire interlocking	As for circuit breakers	✓	✓	✓
	3KC ATC5300 and NEW ATC3100 transfer control devices	Ch. 12	The 3KC ATC5300 and ATC3100 transfer control devices, equipped with two circuit breakers with motorized operating mechanism, serve as a transfer system that automatically or manually switches between two power supply systems in low-voltage power distribution applications.	IEC 60947-6-1 DIN VDE 0660-114 UL 508 CSA 22.2 No. 14	✓	✓	✓
	40 mm busbar systems and 60 mm busbar systems	Ch. 10	Busbar adapters	As for circuit breakers	✓	✓	✓
	Accessories for communication	2/207	Data transmission through COM20, COM21: COM20 (PROFIBUS) for Electronic Trip Units with communication function, COM21 (MODBUS) for Electronic Trip Units with communication function, powerconfig parameterization software	As for circuit breakers	✓	✓	✓
	Further accessories	2/208 ... 2/211	Masking frames (cover frames) for door cutouts, to increase degree of protection	As for circuit breakers	✓	✓	✓

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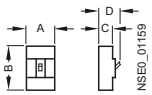
Type			VL160X/3VL1		VL160/3VL2		VL250/3VL3		VL400/3VL4	
Molded case circuit breakers										
3VL molded case circuit breakers up to 1600 A										
Rated current I_n at 50 °C ambient temperature		A	16 ... 160		50 ... 160		200 ... 250		200 ... 400	
Number of poles			3	4	3	4	3	4	3	4
Rated operational voltage U_e										
50/60 Hz AC		V	690	690	690	690	690	690	690	690
DC[1]		V	500	500[2]	600	600	600	600	600	600
Trip Units										
Thermal-magnetic			✓	✓	✓	✓	✓	✓	✓	✓
Electronic LCD ETU/ETU			--	--	✓	✓	✓	✓	✓	✓
PROFIBUS module COM20			--	--	✓	✓	✓	✓	✓	✓
Dimensions										
	A	mm	105	139	105	139	105	139	139	183
	B	mm	157	157	175	175	175	175	279	279
	C	mm	81	81	81	81	81	81	102	102
	D	mm	107	107	107	107	107	107	138	138
Breaking capacity I_{cu}/I_{cs} RMS value acc. to IEC 60947-2										
Standard breaking capacity N[3]	(N)									
Up to 240 V AC		kA	65/65		65/65		65/65		65/65	
Up to 415 V AC		kA	55/55		55/55		55/55		55/55	
Up to 440 V AC		kA	25/20		25/20		25/20		35/26	
Up to 500/525 V AC		kA	18/14		25/20		25/20		25/20	
Up to 690 V AC		kA	8/4[4]		12/6		12/6		15/8	
Up to 250 V DC[5]		kA	30/30		32/32		32/32		32/32	
Up to 500 V DC[5]		kA	--		--		--		--	
Up to 600 V DC[5]		kA	--		--		--		--	
NEMA breaking capacity[6]										
Up to 480 V AC		kA	25		25		25		35	
Up to 600 V AC		kA	8[4]		12		12		20	
High breaking capacity H[3]	(H)									
Up to 240 V AC		kA	100/75		100/75		100/75		100/75	
Up to 415 V AC		kA	70/70		70/70		70/70		70/70	
Up to 440 V AC		kA	42/32		50/38		50/38		50/38	
Up to 500/525 V AC		kA	30/23		40/30		40/30		40/30	
Up to 690 V AC		kA	12/6[4]		12/6		12/6		15/8	
Up to 250 V DC[5]		kA	30/30		32/32		32/32		32/32	
Up to 500 V DC[5]		kA	30/30		32/32		32/32		32/32	
Up to 600 V DC[5]		kA	--		--		--		--	
NEMA breaking capacity[6]										
Up to 480 V AC		kA	42		50		50		50	
Up to 600 V AC		kA	12[4]		12		12		20	
Very high breaking capacity L[3]	(L)									
Up to 240 V AC		kA	--		200/150		200/150		200/150	
Up to 415 V AC		kA	--		100/75		100/75		100/75	
Up to 440 V AC		kA	--		75/50		75/50		75/50	
Up to 500/525 V AC		kA	--		50/38		50/38		50/38	
Up to 690 V AC		kA	--		12/6		12/6		15/8	
Up to 250 V DC[5]		kA	--		32/32		32/32		32/32	
Up to 500 V DC[5]		kA	--		32/32		32/32		32/32	
Up to 600 V DC[5]		kA	--		32/32		32/32		32/32	
NEMA breaking capacity[6]										
Up to 480 V AC		kA	--		75		75		75	
Up to 600 V AC		kA	--		12		12		20	

✓ Available

-- Not available

For 3VL molded case circuit breakers according to UL 489, see page 2/214 or see Catalog LV 16.

[1] Rated DC voltage applies only for circuit breakers with thermal-magnetic trip unit.

[2] For PV applications up to U_{oc} = 1000 V DC.

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VL630/3VL5

VL800/3VL6

VL1250/3VL7

VL1600/3VL8

3VL molded case circuit breakers up to 1600 A							
315 ... 630		800		1000 ... 1250		1600	
3	4	3	4	3	4	3	4
690 600	690 600	690 --	690 --	690 --	690 --	690 --	690 --
✓ ✓ ✓	✓ ✓ ✓	-- ✓ ✓	-- ✓ ✓	-- ✓ ✓	-- ✓ ✓	-- ✓ ✓	-- ✓ ✓
190 279 102 138	253 279 102 138	190 406 114 151	253 406 114 151	229 406 152 207	305 406 152 207	229 406 152 207	305 406 152 207
65/65 55/55 35/26 25/20 20/10 32/32 -- -- 25 20		65/65 55/55 35/26 25/20 20/10 -- -- -- 25 20		65/35 55/28 35/26 25/20 20/10 -- -- -- 25 20		65/35 55/28 35/26 25/20 20/10 -- -- -- 25 20	
100/75 70/70 50/38 40/30 20/10 32/32 32/32 -- 50 30		100/75 70/70 50/38 40/30 20/10 -- -- -- 50 30		100/50 70/35 50/38 40/30 30/15 -- -- -- 50 30		100/50 70/35 50/38 40/30 30/15 -- -- -- 50 30	
200/150 100/75 75/50 50/38 20/10 32/32 32/32 32/32 65 35		200/150 100/75 75/50 50/38 20/10 -- -- -- 65 35		200/100 100/50 75/50 50/38 35/17 -- -- -- 65 35		200/100 100/50 75/50 50/38 35/17 -- -- -- 65 35	

3) At 240 V AC, 415 V AC, 525 V AC and 690 V AC max. 5 % overvoltage, at 440 V AC and 500 V AC max. 10 % overvoltage, at 250/500/600 V DC max. 5 % overvoltage.

4) Rated current $I_n \geq 25$ A.

5) The maximum permitted DC voltage for each conducting path needs to be taken into account for DC switching applications; see Technical Information at www.siemens.com/lowvoltage/product-support; time constant t = 15 ms.

6) The NEMA breaking capacity can be found on the rating plate of each IEC circuit breaker.

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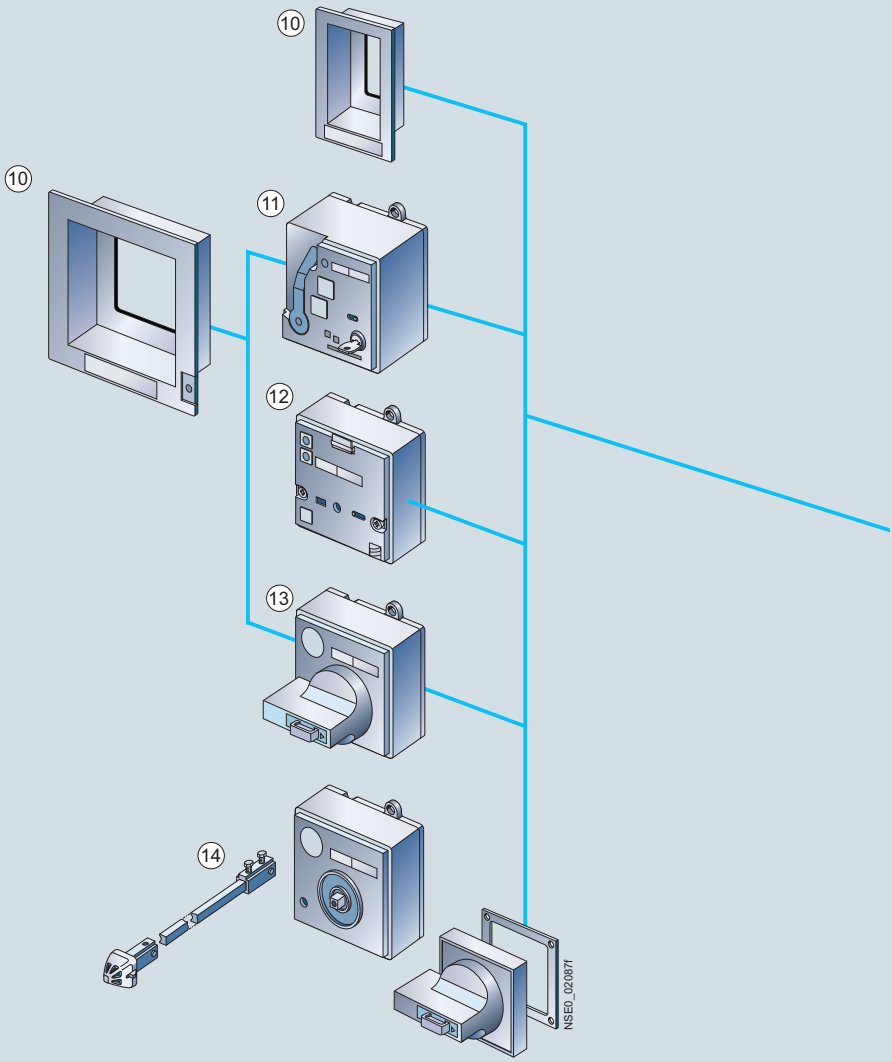
Introduction



① Withdrawable/plug-in bases (pages 2/186 to 2/191)
② Side walls of withdrawable unit (pages 2/186 to 2/191)
③ Phase barriers (pages 2/193 to 2/198)
④ Flared front busbar connecting bars (pages 2/193 to 2/198)
⑤ Straight connecting bars (pages 2/193 to 2/198)
⑥ Circular conductor terminals for Al/Cu (pages 2/193 to 2/195)
⑦ Box terminals for Cu (pages 2/193 to 2/198)
⑧ Extended connection covers (terminal covers) (pages 2/193 to 2/198)
⑨ Standard connection covers (pages 2/193 to 2/198)
⑩ Masking frames/cover frames for door cutout (pages 2/208 to 2/211)
⑪ Motorized operating mechanisms with stored energy mechanism (SEO) (page 2/182)
⑫ Motorized operating mechanism (MO) (page 2/182)
⑬ Front-operated rotary operating mechanisms (pages 2/178 to 2/181)
⑭ Door-coupling rotary operating mechanisms (pages 2/178 to 2/181)
⑮ 3VL molded case circuit breakers (pages 2/126 to 2/169)
⑯ Internal accessories (pages 2/173, 2/174, 2/175 to 2/177)
⑰ Electronic Trip Units LCD ETU (pages 2/136, 2/140, 2/144, 2/160 and 2/162)
⑱ Electronic Trip Units with communication function (pages 2/128 to 2/144 and 2/156 to 2/166)
⑲ Thermal/magnetic overcurrent releases (pages 2/126 to 2/128, 2/146, 2/150 to 2/154, 2/168)
⑳ RCD modules (page 2/192)
㉑ Rear terminals – flat and round (pages 2/193 to 2/198)
㉒ COM20/21 communication modules to the PROFIBUS DP/MODBUS (page 2/207)
㉓ Battery power supplies with test function for Electronic Trip Units (pages 2/200 to 2/204)

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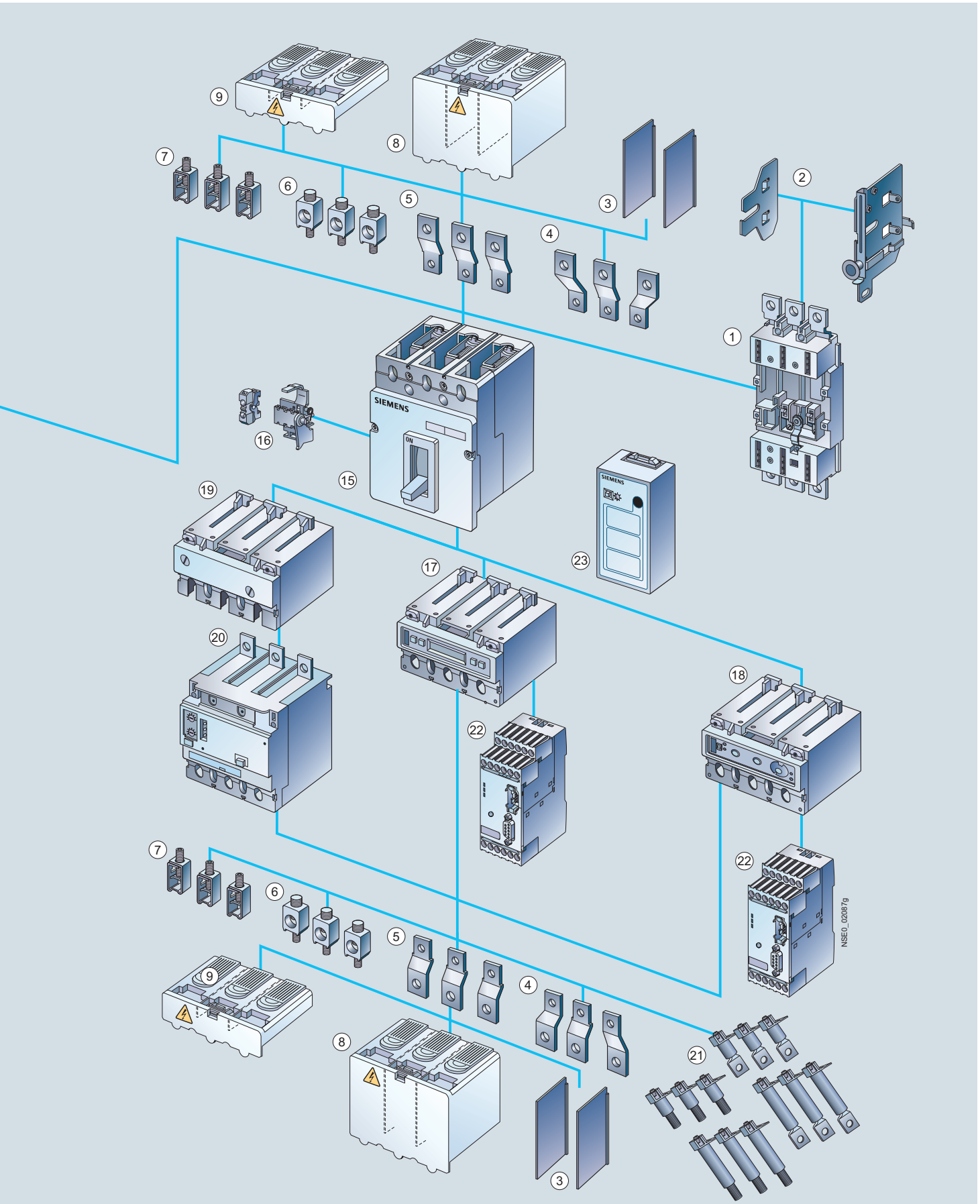

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2

Benefits

- The compact design of the 3VL molded case circuit breakers coupled with excellent characteristics fulfills the high demands of today's electrical distribution systems.
- These circuit breakers offer a broad product range, improved technology, space savings and easy operation.
- They are available both in thermal-magnetic (16 A to 630 A) and in electronic versions (63 A to 1,600 A).

Communication

The use of modern communication-capable circuit breakers opens up completely new possibilities in terms of start-up, parameterization, diagnostics, maintenance and operation. This allows many different ways of reducing costs and improving productivity in industrial plants, buildings and infrastructure projects to be achieved:

- Fast and reliable parameterization
- Timely information and response can prevent plant stoppages
- Effective diagnostics management

Measured values are the basis for efficient load management, for drawing up power demand profiles and for assigning power to cost centers.

Communication:

- For molded case circuit breakers with communication function, see pages 2/128 to 2/144, 2/156 to 2/144.
- For communication accessories, see page 2/207.
- For more information, see chapter "Measuring Devices and Power Monitoring" and see chapter "Software"

Application

The different versions of 3VL molded case circuit breakers are suitable for the following applications:

- Incoming and outgoing circuit breakers in distribution systems
- Switching and protection devices for motors, transformers and capacitors
- Disconnecting means with features for stopping and switching off in an emergency (main disconnecting means and EMERGENCY-STOP switches) in conjunction with lockable rotary operating mechanisms and terminal covers.

The 3VL molded case circuit breakers are available in the following versions:

1. For line protection (in 3- and 4-pole versions)
   The overload and short-circuit releases are designed for the protection of cables, leads and non-motor loads.
2. For motor protection (in 3-pole version)
   The overload and short-circuit releases are designed for optimized protection and direct-on-line starting of induction squirrel-cage motors. The circuit breakers for motor protection are susceptible to phase failure and feature an adjustable trip class. The Electronic Trip Units operate with a microprocessor.
3. For starter combinations (in 3-pole version)
   These circuit breakers are used both for short-circuit protection as well as for isolating functions, which may be required in starter combinations consisting of motor starter protectors, overload relays and motor contactors. These circuit breakers exclusively feature adjustable, instantaneous short-circuit releases.
4. As non-automatic air circuit breakers (in 3- and 4-pole versions)
   These circuit breakers can be used as feeder circuit breakers, main control switches or non-automatic circuit breakers without overload protection. They incorporate an integrated short-circuit self-protection system, eliminating the need for back-up fuses.

Breaking capacity

(N)	Circuit breakers with standard breaking capacity N (I_{cu} up to 55 kA at 415 V)
(H)	Circuit breakers with high breaking capacity H (I_{cu} up to 70 kA at 415 V)
(L)	Circuit breakers with very high breaking capacity L (I_{cu} up to 100 kA at 415 V)
	These breaking capacities are indicated in the corresponding tables by the symbols shown on orange backgrounds.

Standards and specifications

3VL molded case circuit breakers comply with:

IEC 60947-1, EN 60947-1,
VDE 0660-100,
IEC 60947-2, EN 60947-2,
VDE 0660-101.
Isolating features according IEC 60947-2, EN 60947-2.

Disconnecting means (main disconnecting means) according to EN 60204 (VDE 0113).
The 3VL molded case circuit breakers comply in addition with requirements for "disconnecting means with features for stopping and switching off in an emergency" (EMERGENCY-STOP switches) in conjunction with lockable rotary operating mechanisms (red-yellow) and terminal covers.

Please contact Siemens for details of other standards.

The Electronic Trip Units of the circuit breakers for motor protection also fulfill IEC 60947-4-1, VDE 0660-102.

VL160X to VL400 circuit breakers can be equipped with a 3VL RCD module. They then comply with IEC 60947-2 Annex B.

The 3VL RCD module complies with IEC 61000-4-2 to IEC 61000-4-6, IEC 61000-4-11 and EN 55011, Class B (equivalent to CISPR 11) with regard to electromagnetic compatibility.

Operating conditions

The 3VL molded case circuit breakers are designed for operation in enclosed areas.

Suitable enclosures must be provided for operation in areas with severe ambient conditions (such as dust, caustic vapors, hazardous gases).

The incoming and outgoing terminals for the circuit breaker can be freely selected. The electrical data remains unaffected.

IE3 ready

As from January 2015, the energy-efficiency class IE3 will be mandatory, with a few exceptions only, for three-phase asynchronous motors. This will have an effect on motors, low-voltage power distribution and electrical installation technology, as well as industrial controls.

For use of 3VL molded case circuit breakers in conjunction with highly energy-efficient IE3 motors, please observe the information on dimensioning and configuring, see "Configuration Manual for SIRIUS Controls with IE3 Motors", at http://support.automation.siemens.com/WW/view/en/94770820.

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RCD modules

The RCD module is designed for retrofitting to the circuit breaker. It can also be retrofitted by the customer.

The combination of 3VL molded case circuit breaker and RCD module can be fed from the top or bottom.

All 3VL molded case circuit breakers with RCD modules are available with auxiliary switches, alarm switches, undervoltage and shunt releases.

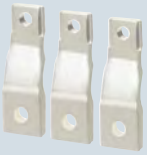
Protection of plant and equipment against overload or damage by ground faults (ground-fault protection).

The RCD module trips the circuit breaker through vectorial summation current formation for all phase currents if the vectorial sum of the currents in the poles (= the ground fault current) overshoots the pre-set response and delay time values.
AC currents and pulsating DC currents are measured (CBR, design A according to EN 60947-2).

Main connections, basic equipment and options

Box terminal
(for copper cables or solid/ flexible busbars)

Connection with screw terminal (available with direct cable lug connection on VL160X, VL160, VL250, VL400)



Connection to front busbar connecting bars (screw terminal required)

Circular conductor terminals multiple feed-in terminal (for Al/Cu terminal)

Main connections (for conductor cross-sections, see below)

Circuit breakers	Connection overview and further options				
	Box terminals	Screw terminals with metric thread for flat connection	Circular conductor terminal/multiple feed-in terminals	Rear terminals	Front-accessible connecting bars
VL160X	☐	☐	×	×	×
VL160	☐	☐	×	×	×
VL250	☐	☐	×	×	×
VL400	×	○	×[2)3)]	×	×
VL630	×[1)]	○	×[2)]	×	×
VL800	--	○	×[2)]	×	×
VL1250	--	○	×[2)]	×	×
VL1600	--	×	--	×	○

○ Scope of supply
☐ Optional scope of supply
× Available
-- Not available

1) Connecting terminal plate for flexible busbar; not for 690 V AC/600 V DC.
2) Multiple feed-in terminal.
3) Circular conductor terminal also available.

Conductor cross-sections

Type			VL160X 3VL1	VL160 3VL2	VL250 3VL3	VL400 3VL4	VL630 3VL5	VL800 3VL6	VL1250 3VL7	VL1600 3VL8
Conductor cross-sections										
Box terminals[1)]										
• Solid or stranded cable	Copper only	mm^2	2.5 ... 95	2.5 ... 95	25 ... 185	50 ... 300	--	--	--	--
• Finely stranded with end sleeve		mm^2	2.5 ... 50	2.5 ... 50	25 ... 120	50 ... 240	--	--	--	--
• Flexible busbar		mm	12 × 10	12 × 10	17 × 10	25 × 10	--	--	--	--
Connecting terminal plate for flexible busbar[2)]		mm	--	--	--	--	2 units 10 × 32	--	--	--
Circular conductor terminal for cable[1)]										
• Solid or stranded cable	Cu or Al	mm^2	16 ... 70	16 ... 70	25 ... 185	50 ... 300	--	--	--	--
- With terminal cover	Cu or Al	mm^2	16 ... 150	16 ... 150	120 ... 240	--	--	--	--	--
• Finely stranded with end sleeve		mm^2	10 ... 50	10 ... 50	25 ... 120	50 ... 240	--	--	--	--
Multiple feed-in terminal[1)]										
• Solid or stranded cable	Cu or Al	mm^2	--	--	--	2 units 50 ... 120	2 units 50 ... 240	3 units 50 ... 240	4 units 50 ... 240	--
- With terminal cover	Cu or Al	mm^2	--	--	--	2 units 70 ... 300	--	--	--	--
• Finely stranded with end sleeve		mm^2	--	--	--	2 units 50 ... 95	2 units 50 ... 185	3 units 50 ... 185	4 units 50 ... 185	--
• Direct connection of busbars	Cu or Al	mm	17 × 7	22 × 7	24 × 7	32 × 10	40 × 10	2 × 40 × 10	2 × 50 × 10	3 × 60 × 10
• Screw for connection with screw terminal			M6	M6	M8	M8	M6	M8	M8	--
Conductor cross-sections for control circuits with terminal connection										
Screw terminals										
• Solid		mm^2	0.75 ... 1.5	0.75 ... 1.5	0.75 ... 1.5	0.75 ... 1.5	0.75 ... 1.5	0.75 ... 1.5	0.75 ... 1.5	0.75 ... 1.5
• Finely stranded with end sleeve		mm^2	0.75 ... 1.0	0.75 ... 1.0	0.75 ... 1.0	0.75 ... 1.0	0.75 ... 1.0	0.75 ... 1.0	0.75 ... 1.0	0.75 ... 1.0

For details, see Mounting Instructions.

1) Cross-sections according to IEC 60999.
2) Not for 690 V AC/600 V DC.

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General data

VL160 to VL1600 Trip Units – Functional overview

Article No. supplement	Releases	Line protection	Line/generator protection	Motor protection	Starter protection	Non-automatic circuit breakers	Function	Setting options					
								L Overload protection	S[1] Short-circuit protection (short-time delayed)		I[1] Short-circuit protection (instantaneous)	G Ground-fault protection	
								$I_r = \times I_n$	$I_{sd} = \times I_r$	t_{sd} [s]	$I_i = \times I_n$	$I_g = \times I_n$	t_g [s]
DK	M	--	--	--	✓	--	I	--	--	--	7 ... 15	--	--
DE	M	--	--	--	--	✓	I	--	--	--	8 ... 18	--	--
EE	M	--	--	--	--	✓	I	--	--	--	8 ... 18	--	--
DA	TM[2]	✓	--	--	--	--	LI	1	--	--	9 ... 18[4]	--	--
DD	TM[2]	✓	--	--	--	--	LI	0.8 ... 1	--	--	9 ... 18[4]	--	--
DC	TM[2]	✓	--	--	--	--	LI	0.8 ... 1	--	--	5 ... 10	--	--
EH	TM[2]	✓	--	--	--	--	LI	1	--	--	9 ... 18[4]	--	--
EJ	TM[2]	✓	--	--	--	--	LI	0.8 ... 1	--	--	5 ... 10	--	--
EA/EL	TM[2]	✓	--	--	--	--	LIN	1	--	--	9 ... 18[4]	--	--
EC	TM[2]	✓	--	--	--	--	LIN	0.8 ... 1	--	--	5 ... 10	--	--
EM	TM[2]	✓	--	--	--	--	LIN	0.8 ... 1	--	--	5 ... 10	--	--
SP	ETU10M[3]	--	--	✓	--	--	LI	0.4 ... 1	--	--	1.25 ... 11	--	--
MP	ETU10M[3]	--	--	✓	--	--	LI	0.4 ... 1	--	--	1.25 ... 11	--	--
SB	ETU10	✓	--	--	--	--	LI	0.4 ... 1	--	--	1.25 ... 11	--	--
MB	ETU10	✓	--	--	--	--	LI	0.4 ... 1	--	--	1.25 ... 11	--	--
LB	ETU10	✓	--	--	--	--	LI	0.4 ... 1	--	--	1.25 ... 11	--	--
TA	ETU10	✓	--	--	--	--	LIN	0.4 ... 1	--	--	1.25 ... 11	--	--
NA	ETU10	✓	--	--	--	--	LIN	0.4 ... 1	--	--	1.25 ... 11	--	--
LA	ETU10	✓	--	--	--	--	LIN	0.4 ... 1	--	--	1.25 ... 11	--	--
TB	ETU10	✓	--	--	--	--	LI	0.4 ... 1	--	--	1.25 ... 11	--	--
NB	ETU10	✓	--	--	--	--	LI	0.4 ... 1	--	--	1.25 ... 11	--	--
SL	ETU12	✓	--	--	--	--	LIG	0.4 ... 1	--	--	1.25 ... 11	0.6 ... 1, OFF	0.1 ... 0.3
ML	ETU12	✓	--	--	--	--	LIG	0.4 ... 1	--	--	1.25 ... 11	0.6 ... 1, OFF	0.1 ... 0.3
SF	ETU12	✓	--	--	--	--	LIG	0.4 ... 1	--	--	1.25 ... 11	0.6 ... 1, OFF	0.1 ... 0.3
MF	ETU12	✓	--	--	--	--	LIG	0.4 ... 1	--	--	1.25 ... 11	0.6 ... 1, OFF	0.1 ... 0.3
TN	ETU12	✓	--	--	--	--	LING	0.4 ... 1	--	--	1.25 ... 11	0.6 ... 1, OFF	0.1 ... 0.3
NN	ETU12	✓	--	--	--	--	LING	0.4 ... 1	--	--	1.25 ... 11	0.6 ... 1, OFF	0.1 ... 0.3
SE	ETU20	--	✓	--	--	--	LSI	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	--	--
ME	ETU20	--	✓	--	--	--	LSI	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	--	--
LE	ETU20	--	✓	--	--	--	LSI	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	--	--
TE	ETU20	--	✓	--	--	--	LSI	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	--	--
NE	ETU20	--	✓	--	--	--	LSI	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	--	--
TF	ETU20	--	✓	--	--	--	LSIN	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	--	--
NF	ETU20	--	✓	--	--	--	LSIN	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	--	--
LF	ETU20	--	✓	--	--	--	LSIN	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	--	--
SG	ETU22	--	✓	--	--	--	LSIG	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	0.6 ... 1, OFF	0.1 ... 0.3
MG	ETU22	--	✓	--	--	--	LSIG	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	0.6 ... 1, OFF	0.1 ... 0.3
SH	ETU22	--	✓	--	--	--	LSIG	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	0.6 ... 1, OFF	0.1 ... 0.3
MH	ETU22	--	✓	--	--	--	LSIG	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	0.6 ... 1, OFF	0.1 ... 0.3
TH	ETU22	--	✓	--	--	--	LSING	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	0.6 ... 1, OFF	0.1 ... 0.3
NH	ETU22	--	✓	--	--	--	LSING	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	0.6 ... 1, OFF	0.1 ... 0.3
SS	ETU30M[3]	--	--	✓	--	--	LI	0.4 ... 1	--	--	6/8/11	--	--
MS	ETU30M[3]	--	--	✓	--	--	LI	0.4 ... 1	--	--	6/8/11	--	--
LS	ETU30M[3]	--	--	✓	--	--	LI	0.4 ... 1	--	--	6/8/11	--	--
UP	LCD ETU40M[3]	--	--	✓	--	--	LI	0.4 ... 1	--	--	1.25 ... 11	--	--
UH	LCD ETU40	--	✓	--	--	--	LI, LS, LSI	0.4 ... 1	1.5 ... 10	0 ... 0.5	1.25 ... 11	--	--
UJ	LCD ETU40	--	✓	--	--	--	LI, LSI, LIN, LSIN	0.4 ... 1	1.5 ... 10	0 ... 0.5	1.25 ... 11	--	--
UL	LCD ETU42	--	✓	--	--	--	LSIG	0.4 ... 1	1.5 ... 10	0 ... 0.5	1.25 ... 11	0.4 ... 1	0,1 ... 0.5
UM	LCD ETU42	--	✓	--	--	--	LSIG	0.4 ... 1	1.5 ... 10	0 ... 0.5	1.25 ... 11	0.4 ... 1	0,1 ... 0.5
UN	LCD ETU42	--	✓	--	--	--	LSIG, LSING	0.4 ... 1	1.5 ... 10	0 ... 0.5	1.25 ... 11	0.4 ... 1	0,1 ... 0.5

✓ Function is available.
-- Function not available.
[1] Size dependent.
[2] TM up to I_n = 630 A.
[3] Motor protection up to I_n = 500 A.
[4] Non-adjustable.

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Article No. supplement	Releases	Thermal image	Phase failure	Communication-capable	Ground-fault protection	Number of poles	N pole protected[1]	I^2t (ON/OFF)	Trip class (t_C)	Time-lag class (t_R)	Thermal-magnetic overcurrent releases	Magnetic releases	Electronic Trip Unit	LCD display
DK	M	--	--	--	--	3	--	--	--	--	--	✓	--	--
DE	M	--	--	--	--	3	--	--	--	--	--	✓	--	--
EE	M	--	--	--	--	4	--	--	--	--	--	✓	--	--
DA	TM[2]	✓	--	--	--	3	--	--	--	--	✓	--	--	--
DD	TM[2]	✓	--	--	--	3	--	--	--	--	✓	--	--	--
DC	TM[2]	✓	--	--	--	3	--	--	--	--	✓	--	--	--
EH	TM[2]	✓	--	--	--	4	--	--	--	--	✓	--	--	--
EJ	TM[2]	✓	--	--	--	4	--	--	--	--	✓	--	--	--
EA/EL	TM[2]	✓	--	--	--	4	100 %	--	--	--	✓	--	--	--
EC	TM[2]	✓	--	--	--	4	60 %	--	--	--	✓	--	--	--
EM	TM[2]	✓	--	--	--	4	100 %	--	--	--	✓	--	--	--
SP	ETU10M[3]	✓	40 % I_R	--	--	3	--	--	10	--	--	--	✓	--
MP	ETU10M[3]	✓	40 % I_R	✓[4]	--	3	--	--	10	--	--	--	✓	--
SB	ETU10	✓	--	--	--	3	--	--	--	2.5 ... 30	--	--	✓	--
MB	ETU10	✓	--	✓[4]	--	3	--	--	--	2.5 ... 30	--	--	✓	--
LB	ETU10	✓	--	--	--	3	--	--	--	2.5 ... 30	--	--	✓	--
TA	ETU10	✓	--	--	--	4	50/100 %	--	--	2.5 ... 30	--	--	✓	--
NA	ETU10	✓	--	✓[4]	--	4	50/100 %	--	--	2.5 ... 30	--	--	✓	--
LA	ETU10	✓	--	--	--	4	50/100 %	--	--	2.5 ... 30	--	--	✓	--
TB	ETU10	✓	--	--	--	4	--	--	--	2.5 ... 30	--	--	✓	--
NB	ETU10	✓	--	✓[4]	--	4	--	--	--	2.5 ... 30	--	--	✓	--
SL	ETU12	✓	--	--	①	3	--	--	--	2.5 ... 30	--	--	✓	--
ML	ETU12	✓	--	✓[4]	①	3	--	--	--	2.5 ... 30	--	--	✓	--
SF	ETU12	✓	--	--	②	3	--	--	--	2.5 ... 30	--	--	✓	--
MF	ETU12	✓	--	✓[4]	②	3	--	--	--	2.5 ... 30	--	--	✓	--
TN	ETU12	✓	--	--	②	4	50/100 %	--	--	2.5 ... 30	--	--	✓	--
NN	ETU12	✓	--	✓[4]	②	4	50/100 %	--	--	2.5 ... 30	--	--	✓	--
SE	ETU20	✓	--	--	--	3	--	✓	--	--	--	--	✓	--
ME	ETU20	✓	--	✓[4]	--	3	--	✓	--	--	--	--	✓	--
LE	ETU20	✓	--	--	--	3	--	✓	--	--	--	--	✓	--
TE	ETU20	✓	--	--	--	4	--	✓	--	--	--	--	✓	--
NE	ETU20	✓	--	✓[4]	--	4	--	✓	--	--	--	--	✓	--
TF	ETU20	✓	--	--	--	4	50/100 %	✓	--	--	--	--	✓	--
NF	ETU20	✓	--	✓[4]	--	4	50/100 %	✓	--	--	--	--	✓	--
LF	ETU20	✓	--	--	--	4	50/100 %	✓	--	--	--	--	✓	--
SG	ETU22	✓	--	--	①	3	--	✓	--	--	--	--	✓	--
MG	ETU22	✓	--	✓[4]	①	3	--	✓	--	--	--	--	✓	--
SH	ETU22	✓	--	--	②	3	--	✓	--	--	--	--	✓	--
MH	ETU22	✓	--	✓[4]	②	3	--	✓	--	--	--	--	✓	--
TH	ETU22	✓	--	--	②	4	50/100 %	✓	--	--	--	--	✓	--
NH	ETU22	✓	--	✓[4]	②	4	50/100 %	✓	--	--	--	--	✓	--
SS	ETU30M[3]	✓	40 % I_R	--	--	3	--	--	10, 20, 30	--	--	--	✓	--
MS	ETU30M[3]	✓	40 % I_R	✓[4]	--	3	--	--	10, 20, 30	--	--	--	✓	--
LS	ETU30M[3]	✓	40 % I_R	--	--	3	--	--	10, 20, 30	--	--	--	✓	--
UP	LCD ETU40M[3]	✓	5 ... 50 % I_R	✓[4]	--	3	--	--	5, 10, 15, 20, 30	--	--	--	✓	✓
UH	LCD ETU40	✓	--	✓[4]	--	3	--	✓	--	2.5 ... 30	--	--	✓	✓
UJ	LCD ETU40	✓	--	✓[4]	--	4	50 ... 100 %, OFF	✓	--	2.5 ... 30	--	--	✓	✓
UL	LCD ETU42	✓	--	✓[4]	①	3	--	✓	--	2.5 ... 30	--	--	✓	✓
UM	LCD ETU42	✓	--	✓[4]	①/③	3	--	✓	--	2.5 ... 30	--	--	✓	✓
UN	LCD ETU42	✓	--	✓[4]	②	4	50 ... 100 %, OFF	✓	--	2.5 ... 30	--	--	✓	✓

Ground-fault protection
① Vectorial summation current formation (3-conductor system)
② Vectorial summation current formation (4-conductor system)
③ Direct detection of ground-fault current in the neutral point of the transformer

✓ Function is available.
-- Function not available.

1) Size dependent.
2) TM up to I_n = 630 A.
3) Motor protection up to I_n = 500 A.
4) With COM20/COM21.

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Selection and ordering data

Type	Rated current I_n	Current setting range of the inverse-time delayed overcurrent protection "**L**" I_R	Operating current of the instantaneous short-circuit protection "**I**" I_i	DT	I_{cu} up to 55 kA at 415 V, standard breaking capacity N See "Overview". Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	A							kg

3-pole, fixed-mounted, for line protection, 16 A to 160 A, thermal-magnetic overcurrent releases LI

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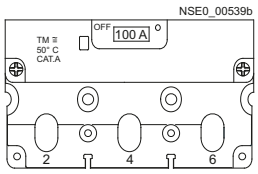

Line protection, TM, LI function

With non-adjustable thermal overcurrent releases, non-adjustable short-circuit releases

VL160X/ 3VL1	16	16	300	3VL1796-1DA3□-□□□□	1	1 unit	1CC	1.900
	20	20	300	3VL1702-1DA3□-□□□□	1	1 unit	1CC	1.900
	25	25	300	3VL1725-1DA3□-□□□□	1	1 unit	1CC	2.000
	32	32	300	3VL1703-1DA3□-□□□□	1	1 unit	1CC	2.000
	40	40	600	3VL1704-1DA3□-□□□□	1	1 unit	1CC	2.000
	50	50	600	3VL1705-1DA3□-□□□□	1	1 unit	1CC	2.000
	63	63	600	3VL1706-1DA3□-□□□□	1	1 unit	1CC	2.000
	80	80	1000	3VL1708-1DA3□-□□□□	1	1 unit	1CC	2.000
	100	100	1000	3VL1710-1DA3□-□□□□	1	1 unit	1CC	2.000
	125	125	1000	3VL1712-1DA3□-□□□□	1	1 unit	1CC	2.000
	160	160	1500	3VL1716-1DA3□-□□□□	1	1 unit	1CC	2.000

Connection type can be selected by assignment of the 12th position of the Article No.

• Connection with box terminal	**3**
• Connection with flat screw terminal not in conjunction with RCD module[1)]	**6**

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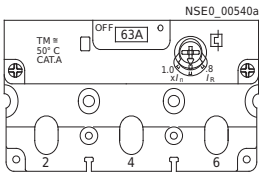

Line protection, TM, LI function

With adjustable thermal overcurrent releases, non-adjustable short-circuit releases

VL160X/ 3VL1	20	16 ... 20	300	3VL1702-1DD3□-□□□□	1	1 unit	1CC	1.900
	32	25 ... 32	300	3VL1703-1DD3□-□□□□	1	1 unit	1CC	2.000
	40	32 ... 40	600	3VL1704-1DD3□-□□□□	1	1 unit	1CC	2.000
	50	40 ... 50	600	3VL1705-1DD3□-□□□□	1	1 unit	1CC	2.000
	63	50 ... 63	600	3VL1706-1DD3□-□□□□	1	1 unit	1CC	2.000
	80	63 ... 80	1000	3VL1708-1DD3□-□□□□	1	1 unit	1CC	2.000
	100	80 ... 100	1000	3VL1710-1DD3□-□□□□	1	1 unit	1CC	2.000
	125	100 ... 125	1000	3VL1712-1DD3□-□□□□	1	1 unit	1CC	2.000
	160	125 ... 160	1500	3VL1716-1DD3□-□□□□	1	1 unit	1CC	2.000

Connection type can be selected by assignment of the 12th position of the Article No.

• Connection with box terminal	**3**
• Connection with flat screw terminal not in conjunction with RCD module[1)]	**6**

1) When the circuit breaker with flat screw terminal is ordered, the basic price is reduced.

*** You can order this quantity or a multiple thereof.**

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DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL1796-2DA3□-□□□□		1	1 unit	1CC	1.900		--					
	3VL1702-2DA3□-□□□□		1	1 unit	1CC	1.900		--					
	3VL1725-2DA3□-□□□□		1	1 unit	1CC	2.000		--					
	3VL1703-2DA3□-□□□□		1	1 unit	1CC	2.000		--					
	3VL1704-2DA3□-□□□□		1	1 unit	1CC	2.000		--					
	3VL1705-2DA3□-□□□□		1	1 unit	1CC	2.000		--					
	3VL1706-2DA3□-□□□□		1	1 unit	1CC	2.000		--					
	3VL1708-2DA3□-□□□□		1	1 unit	1CC	2.000		--					
	3VL1710-2DA3□-□□□□		1	1 unit	1CC	2.000		--					
	3VL1712-2DA3□-□□□□		1	1 unit	1CC	2.000		--					
	3VL1716-2DA3□-□□□□		1	1 unit	1CC	2.000		--					

3
6

	3VL1702-2DD3□-□□□□		1	1 unit	1CC	1.900		--					
	3VL1703-2DD3□-□□□□		1	1 unit	1CC	2.000		--					
	3VL1704-2DD3□-□□□□		1	1 unit	1CC	2.000		--					
	3VL1705-2DD3□-□□□□		1	1 unit	1CC	2.000		--					
	3VL1706-2DD3□-□□□□		1	1 unit	1CC	2.000		--					
	3VL1708-2DD3□-□□□□		1	1 unit	1CC	2.000		--					
	3VL1710-2DD3□-□□□□		1	1 unit	1CC	2.000		--					
	3VL1712-2DD3□-□□□□		1	1 unit	1CC	2.000		--					
	3VL1716-2DD3□-□□□□		1	1 unit	1CC	2.000		--					

3
6

*** You can order this quantity or a multiple thereof.**

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3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent protection "**L**" I_R	Operating current of the instantaneous short-circuit protection "**I**" I_i	DT	I_{cu} up to 55 kA at 415 V, standard breaking capacity N See "Overview". (N) Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	A							kg

3-pole, fixed-mounted, for line protection, 50 A to 630 A, thermal-magnetic overcurrent releases LI

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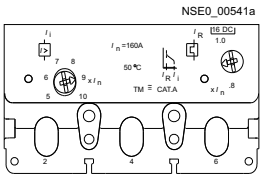

Line protection, TM, LI function

With adjustable thermal overcurrent releases, adjustable short-circuit releases

VL160/3VL2	50	40 ... 50	300 ... 600	3VL2705-1DC3□-□□□□	1	1 unit	1CC	2.200
	63	50 ... 63	300 ... 600	3VL2706-1DC3□-□□□□	1	1 unit	1CC	2.200
	80	63 ... 80	400 ... 800	3VL2708-1DC3□-□□□□	1	1 unit	1CC	2.200
	100	80 ... 100	500 ... 1000	3VL2710-1DC3□-□□□□	1	1 unit	1CC	2.200
	125	100 ... 125	625 ... 1250	3VL2712-1DC3□-□□□□	1	1 unit	1CC	2.200
	160	125 ... 160	800 ... 1600	3VL2716-1DC3□-□□□□	1	1 unit	1CC	2.200
VL250/3VL3	200	160 ... 200	1000 ... 2000	3VL3720-1DC3□-□□□□	1	1 unit	1CC	2.300
	250	200 ... 250	1250 ... 2500	3VL3725-1DC3□-□□□□	1	1 unit	1CC	2.300

Connection type can be selected by assignment of the 12th position of the Article No.

• Connection with box terminal	**3**
• Connection with flat screw terminal[1)]	**6**

VL400/3VL4	200	160 ... 200	1000 ... 2000	3VL4720-1DC36-□□□□	1	1 unit	1CC	5.700
	250	200 ... 250	1250 ... 2500	3VL4725-1DC36-□□□□	1	1 unit	1CC	5.700
	315	250 ... 315	1575 ... 3150	3VL4731-1DC36-□□□□	1	1 unit	1CC	5.700
	400	320 ... 400	2000 ... 4000	3VL4740-1DC36-□□□□	1	1 unit	1CC	5.700
VL630/3VL5	315	250 ... 315	1575 ... 3150	3VL5731-1DC36-□□□□	1	1 unit	1CC	9.000
	400	320 ... 400	2000 ... 4000	3VL5740-1DC36-□□□□	1	1 unit	1CC	9.000
	500	400 ... 500	2500 ... 5000	3VL5750-1DC36-□□□□	1	1 unit	1CC	9.000
	630	500 ... 630	3150 ... 6300	3VL5763-1DC36-□□□□	1	1 unit	1CC	9.000

3-pole, fixed-mounted, for line protection, 63 A to 1600 A, Electronic Trip Units LI

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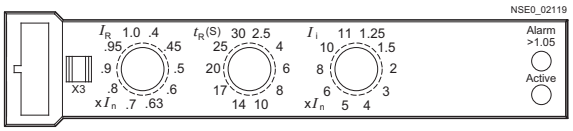

ETU10, LI function

With adjustable overcurrent releases, adjustable short-circuit releases

VL160/3VL2	63	25 ... 63	1.25 ... 11 × I_n	3VL2706-1□□3□-□□□□	1	1 unit	1CC	2.400
	100	40 ... 100	1.25 ... 11 × I_n	3VL2710-1□□3□-□□□□	1	1 unit	1CC	2.400
	160	64 ... 160	1.25 ... 11 × I_n	3VL2716-1□□3□-□□□□	1	1 unit	1CC	2.400
VL250/3VL3	200	80 ... 200	1.25 ... 11 × I_n	3VL3720-1□□3□-□□□□	1	1 unit	1CC	2.500
	250	100 ... 250	1.25 ... 11 × I_n	3VL3725-1□□3□-□□□□	1	1 unit	1CC	2.500

Connection type can be selected by assignment of the 12th position of the Article No.

• Connection with box terminal	**3**
• Connection with flat screw terminal[1)]	**6**

VL400/3VL4	315	128 ... 315	1.25 ... 11 × I_n	3VL4731-1□□36-□□□□	1	1 unit	1CC	5.900
	400	160 ... 400	1.25 ... 11 × I_n	3VL4740-1□□36-□□□□	1	1 unit	1CC	5.900
VL630/3VL5	630	252 ... 630	1.25 ... 10 × I_n	3VL5763-1□□36-□□□□	1	1 unit	1CC	9.300
VL800/3VL6	800	320 ... 800	1.25 ... 8 × I_n	3VL6780-1□□36-□□□□	1	1 unit	1CC	16.000
VL1250/3VL7	1000	400 ... 1000	1.25 ... 11 × I_n	3VL7710-1□□36-□□□□	1	1 unit	1CC	25.000
	1250	500 ... 1250	1.25 ... 11 × I_n	3VL7712-1□□36-□□□□	1	1 unit	1CC	25.000
VL1600/3VL8[2)]	1600	640 ... 1600	1.25 ... 9 × I_n	3VL8716-1□□30-□□□□	1	1 unit	1CC	31.300

• Without communication preparation	**SB**
• With communication preparation	**MB**
• Marine engineering-certified LRS, DNV, GL and BV (not communication-ready)	**LB**

[1)] **When the circuit breaker with flat screw terminal is ordered, the basic price is reduced.**

[2)] Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

Communication:
- For accessories, see page 2/207.
- For more information, see chapter "Measuring Devices and Power Monitoring" and see chapter "Software".

* You can order this quantity or a multiple thereof.

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DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2705-2DC3□-□□□□		1	1 unit	1CC	2.200		**3VL2705-3DC3□-□□□□**		1	1 unit	1CC	2.200
	3VL2706-2DC3□-□□□□		1	1 unit	1CC	2.200		**3VL2706-3DC3□-□□□□**		1	1 unit	1CC	2.200
	3VL2708-2DC3□-□□□□		1	1 unit	1CC	2.200		**3VL2708-3DC3□-□□□□**		1	1 unit	1CC	2.200
	3VL2710-2DC3□-□□□□		1	1 unit	1CC	2.200		**3VL2710-3DC3□-□□□□**		1	1 unit	1CC	2.200
	3VL2712-2DC3□-□□□□		1	1 unit	1CC	2.200		**3VL2712-3DC3□-□□□□**		1	1 unit	1CC	2.200
	3VL2716-2DC3□-□□□□		1	1 unit	1CC	2.200		**3VL2716-3DC3□-□□□□**		1	1 unit	1CC	2.200
	3VL3720-2DC3□-□□□□		1	1 unit	1CC	2.300		**3VL3720-3DC3□-□□□□**		1	1 unit	1CC	2.300
	3VL3725-2DC3□-□□□□		1	1 unit	1CC	2.300		**3VL3725-3DC3□-□□□□**		1	1 unit	1CC	2.300
	3 6							**3 6**					
	3VL4720-2DC36-□□□□		1	1 unit	1CC	5.700		**3VL4720-3DC36-□□□□**		1	1 unit	1CC	5.700
	3VL4725-2DC36-□□□□		1	1 unit	1CC	5.700		**3VL4725-3DC36-□□□□**		1	1 unit	1CC	5.700
	3VL4731-2DC36-□□□□		1	1 unit	1CC	5.700		**3VL4731-3DC36-□□□□**		1	1 unit	1CC	5.700
	3VL4740-2DC36-□□□□		1	1 unit	1CC	5.700		**3VL4740-3DC36-□□□□**		1	1 unit	1CC	5.700
	3VL5731-2DC36-□□□□		1	1 unit	1CC	9.000		**3VL5731-3DC36-□□□□**		1	1 unit	1CC	9.000
	3VL5740-2DC36-□□□□		1	1 unit	1CC	9.000		**3VL5740-3DC36-□□□□**		1	1 unit	1CC	9.000
	3VL5750-2DC36-□□□□		1	1 unit	1CC	9.000		**3VL5750-3DC36-□□□□**		1	1 unit	1CC	9.000
	3VL5763-2DC36-□□□□		1	1 unit	1CC	9.000		**3VL5763-3DC36-□□□□**		1	1 unit	1CC	9.000
	3VL2706-2□□3□-□□□□		1	1 unit	1CC	2.400		**3VL2706-3□□3□-□□□□**		1	1 unit	1CC	2.400
	3VL2710-2□□3□-□□□□		1	1 unit	1CC	2.400		**3VL2710-3□□3□-□□□□**		1	1 unit	1CC	2.400
	3VL2716-2□□3□-□□□□		1	1 unit	1CC	2.400		**3VL2716-3□□3□-□□□□**		1	1 unit	1CC	2.400
	3VL3720-2□□3□-□□□□		1	1 unit	1CC	2.500		**3VL3720-3□□3□-□□□□**		1	1 unit	1CC	2.500
	3VL3725-2□□3□-□□□□		1	1 unit	1CC	2.500		**3VL3725-3□□3□-□□□□**		1	1 unit	1CC	2.500
	3 6							**3 6**					
	3VL4731-2□□36-□□□□		1	1 unit	1CC	5.900		**3VL4731-3□□36-□□□□**		1	1 unit	1CC	5.900
	3VL4740-2□□36-□□□□		1	1 unit	1CC	5.900		**3VL4740-3□□36-□□□□**		1	1 unit	1CC	5.900
	3VL5763-2□□36-□□□□		1	1 unit	1CC	9.300		**3VL5763-3□□36-□□□□**		1	1 unit	1CC	9.300
	3VL6780-2□□36-□□□□		1	1 unit	1CC	16.000		**3VL6780-3□□36-□□□□**		1	1 unit	1CC	16.000
	3VL7710-2□□36-□□□□		1	1 unit	1CC	25.000		**3VL7710-3□□36-□□□□**		1	1 unit	1CC	25.000
	3VL7712-2□□36-□□□□		1	1 unit	1CC	25.000		**3VL7712-3□□36-□□□□**		1	1 unit	1CC	25.000
	3VL8716-2□□30-□□□□		1	1 unit	1CC	31.300		**3VL8716-3□□30-□□□□**		1	1 unit	1CC	31.300
	SB MB LB							**SB MB LB**					

*** You can order this quantity or a multiple thereof.**

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3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent protection "L" I_R	Operating current of the instantaneous short-circuit protection "I" I_i	Ground-fault protection "G" I_g	DT	I_{cu} up to 55 kA at 415 V, standard breaking capacity N (N) See "Overview". Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	A	A							kg

3-pole, fixed-mounted, for line protection, 63 A to 1600 A, Electronic Trip Units LIG

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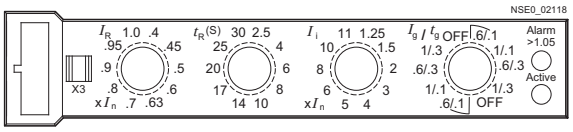

ETU12, LIG function for 3-wire three-phase systems

With adjustable overcurrent releases, adjustable short-circuit releases,
vectorial summation current formation, ground fault delay t_g = 0.1 ... 0.3 s, ground fault function (G) can be switched off.

VL160/3VL2	63	25 ... 63	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	3VL2706-1□□3□-□□□□	1	1 unit	1CC	2.400
	100	40 ... 100	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	3VL2710-1□□3□-□□□□	1	1 unit	1CC	2.400
	160	64 ... 160	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	3VL2716-1□□3□-□□□□	1	1 unit	1CC	2.400
VL250/3VL3	200	80 ... 200	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	3VL3720-1□□3□-□□□□	1	1 unit	1CC	2.500
	250	100 ... 250	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	3VL3725-1□□3□-□□□□	1	1 unit	1CC	2.500

Connection type can be selected by assignment of the 12th position of the Article No.

VL400/3VL4	315	128 ... 315	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	3VL4731-1□□36-□□□□	1	1 unit	1CC	5.900
	400	160 ... 400	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	3VL4740-1□□36-□□□□	1	1 unit	1CC	5.900
VL630/3VL5	630	252 ... 630	1.25 ... 10 × I_n	0.6 ... 1 × I_n, OFF	3VL5763-1□□36-□□□□	1	1 unit	1CC	9.300
VL800/3VL6	800	320 ... 800	1.25 ... 8 × I_n	0.6 ... 1 × I_n, OFF	3VL6780-1□□36-□□□□	1	1 unit	1CC	16.000
VL1250/3VL7	1000	400 ... 1000	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	3VL7710-1□□36-□□□□	1	1 unit	1CC	25.000
	1250	500 ... 1250	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	3VL7712-1□□36-□□□□	1	1 unit	1CC	25.000
VL1600/3VL8[2]	1600	640 ... 1600	1.25 ... 9 × I_n	0.6 ... 1 × I_n, OFF	3VL8716-1□□30-□□□□	1	1 unit	1CC	31.300

• Without communication preparation	SL
• With communication preparation	ML

3-pole, fixed-mounted, for line protection, 63 A to 1600 A, Electronic Trip Units LIG

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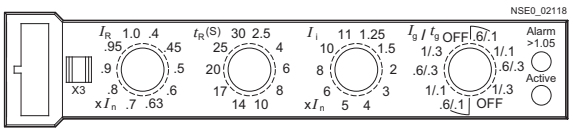

ETU12, LIG function for 4-wire three-phase systems

With adjustable overcurrent releases, adjustable short-circuit releases,
vectorial summation current formation, external current transformers required in addition, see page 2/206.
Ground fault delay t_g = 0.1 ...0.3 s, ground fault function (G) can be switched off.

VL160/3VL2	63	25 ... 63	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	3VL2706-1□□3□-□□□□	1	1 unit	1CC	2.400
	100	40 ... 100	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	3VL2710-1□□3□-□□□□	1	1 unit	1CC	2.400
	160	64 ... 160	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	3VL2716-1□□3□-□□□□	1	1 unit	1CC	2.400
VL250/3VL3	200	80 ... 200	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	3VL3720-1□□3□-□□□□	1	1 unit	1CC	2.500
	250	100 ... 250	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	3VL3725-1□□3□-□□□□	1	1 unit	1CC	2.500

Connection type can be selected by assignment of the 12th position of the Article No.

VL400/3VL4	315	128 ... 315	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	3VL4731-1□□36-□□□□	1	1 unit	1CC	5.900
	400	160 ... 400	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	3VL4740-1□□36-□□□□	1	1 unit	1CC	5.900
VL630/3VL5	630	252 ... 630	1.25 ... 10 × I_n	0.6 ... 1 × I_n, OFF	3VL5763-1□□36-□□□□	1	1 unit	1CC	9.300
VL800/3VL6	800	320 ... 800	1.25 ... 8 × I_n	0.6 ... 1 × I_n, OFF	3VL6780-1□□36-□□□□	1	1 unit	1CC	16.000
VL1250/3VL7	1000	400 ... 1000	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	3VL7710-1□□36-□□□□	1	1 unit	1CC	25.000
	1250	500 ... 1250	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	3VL7712-1□□36-□□□□	1	1 unit	1CC	25.000
VL1600/3VL8[2]	1600	640 ... 1600	1.25 ... 9 × I_n	0.6 ... 1 × I_n, OFF	3VL8716-1□□30-□□□□	1	1 unit	1CC	31.300

• Without communication preparation	SF
• With communication preparation	MF

[1] When the circuit breaker with flat screw terminal is ordered, the basic price is reduced.

[2] Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

*** You can order this quantity or a multiple thereof.**

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DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2706-2□□3□-□□□□		1	1 unit	1CC	2.400		**3VL2706-3□□3□-□□□□**		1	1 unit	1CC	2.400
	3VL2710-2□□3□-□□□□		1	1 unit	1CC	2.400		**3VL2710-3□□3□-□□□□**		1	1 unit	1CC	2.400
	3VL2716-2□□3□-□□□□		1	1 unit	1CC	2.400		**3VL2716-3□□3□-□□□□**		1	1 unit	1CC	2.400
	3VL3720-2□□3□-□□□□		1	1 unit	1CC	2.500		**3VL3720-3□□3□-□□□□**		1	1 unit	1CC	2.500
	3VL3725-2□□3□-□□□□		1	1 unit	1CC	2.500		**3VL3725-3□□3□-□□□□**		1	1 unit	1CC	2.500
	3 6							**3 6**					
	3VL4731-2□□36-□□□□		1	1 unit	1CC	5.900		**3VL4731-3□□36-□□□□**		1	1 unit	1CC	5.900
	3VL4740-2□□36-□□□□		1	1 unit	1CC	5.900		**3VL4740-3□□36-□□□□**		1	1 unit	1CC	5.900
	3VL5763-2□□36-□□□□		1	1 unit	1CC	9.300		**3VL5763-3□□36-□□□□**		1	1 unit	1CC	9.300
	3VL6780-2□□36-□□□□		1	1 unit	1CC	16.000		**3VL6780-3□□36-□□□□**		1	1 unit	1CC	16.000
	3VL7710-2□□36-□□□□		1	1 unit	1CC	25.000		**3VL7710-3□□36-□□□□**		1	1 unit	1CC	25.000
	3VL7712-2□□36-□□□□		1	1 unit	1CC	25.000		**3VL7712-3□□36-□□□□**		1	1 unit	1CC	25.000
	3VL8716-2□□30-□□□□		1	1 unit	1CC	31.300		**3VL8716-3□□30-□□□□**		1	1 unit	1CC	31.300
	SL ML							**SL ML**					

DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2706-2□□3□-□□□□		1	1 unit	1CC	2.400		**3VL2706-3□□3□-□□□□**		1	1 unit	1CC	2.400
	3VL2710-2□□3□-□□□□		1	1 unit	1CC	2.400		**3VL2710-3□□3□-□□□□**		1	1 unit	1CC	2.400
	3VL2716-2□□3□-□□□□		1	1 unit	1CC	2.400		**3VL2716-3□□3□-□□□□**		1	1 unit	1CC	2.400
	3VL3720-2□□3□-□□□□		1	1 unit	1CC	2.500		**3VL3720-3□□3□-□□□□**		1	1 unit	1CC	2.500
	3VL3725-2□□3□-□□□□		1	1 unit	1CC	2.500		**3VL3725-3□□3□-□□□□**		1	1 unit	1CC	2.500
	3 6							**3 6**					
	3VL4731-2□□36-□□□□		1	1 unit	1CC	5.900		**3VL4731-3□□36-□□□□**		1	1 unit	1CC	5.900
	3VL4740-2□□36-□□□□		1	1 unit	1CC	5.900		**3VL4740-3□□36-□□□□**		1	1 unit	1CC	5.900
	3VL5763-2□□36-□□□□		1	1 unit	1CC	9.300		**3VL5763-3□□36-□□□□**		1	1 unit	1CC	9.300
	3VL6780-2□□36-□□□□		1	1 unit	1CC	16.000		**3VL6780-3□□36-□□□□**		1	1 unit	1CC	16.000
	3VL7710-2□□36-□□□□		1	1 unit	1CC	25.000		**3VL7710-3□□36-□□□□**		1	1 unit	1CC	25.000
	3VL7712-2□□36-□□□□		1	1 unit	1CC	25.000		**3VL7712-3□□36-□□□□**		1	1 unit	1CC	25.000
	3VL8716-2□□30-□□□□		1	1 unit	1CC	31.300		**3VL8716-3□□30-□□□□**		1	1 unit	1CC	31.300
	SF MF							**SF MF**					

Communication:

- For accessories, see page 2/207.

- For more information, see chapter "Measuring Devices and Power Monitoring"and see chapter "Software".

*** You can order this quantity or a multiple thereof.**

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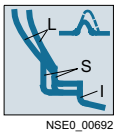
3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent protection "**L**" I_R	Operating current of the instantaneous short-circuit protection "**I**" I_i	S function short-circuit protection (short-time delayed) **S**	DT	I_{cu} **up to 55 kA at 415 V, standard breaking capacity N** See "Overview".		PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
						Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price				
	A	A	A	A							kg

3-pole, fixed-mounted, for line protection – generator protection, 63 A to 1600 A, Electronic Trip Units LSI



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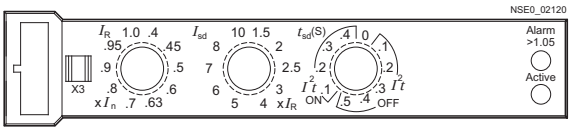

ETU20, LSI function for time-based discrimination

With adjustable overcurrent releases, non-adjustable short-circuit releases, short-circuit delay (t_{sd} = 0 to 0.5 s)

VL160/3VL2	63	0.4 ... 1,0 × I_n	11 × I_n	1.5 ... 10 × I_R	**3VL2706-1□□3□-□□□□**	1	1 unit	1CC	2.400
	100	0.4 ... 1,0 × I_n	11 × I_n	1.5 ... 10 × I_R	**3VL2710-1□□3□-□□□□**	1	1 unit	1CC	2.400
	160	0.4 ... 1,0 × I_n	11 × I_n	1.5 ... 10 × I_R	**3VL2716-1□□3□-□□□□**	1	1 unit	1CC	2.400
VL250/3VL3	200	0.4 ... 1,0 × I_n	11 × I_n	1.5 ... 10 × I_R	**3VL3720-1□□3□-□□□□**	1	1 unit	1CC	2.500
	250	0.4 ... 1,0 × I_n	11 × I_n	1.5 ... 10 × I_R	**3VL3725-1□□3□-□□□□**	1	1 unit	1CC	2.500

Connection type can be selected by assignment of the 12th position of the Article No.

• Connection with box terminal	**3**
• Connection with screw terminal[1)]	**6**

VL400/3VL4	315	0.4 ... 1,0 × I_n	11 × I_n	1.5 ... 10 × I_R	**3VL4731-1□□36-□□□□**	1	1 unit	1CC	5.900
	400	0.4 ... 1,0 × I_n	11 × I_n	1.5 ... 10 × I_R	**3VL4740-1□□36-□□□□**	1	1 unit	1CC	5.900
VL630/3VL5	630	0.4 ... 1,0 × I_n	10 × I_n	1.5 ... 9 × I_R	**3VL5763-1□□36-□□□□**	1	1 unit	1CC	9.300
VL800/3VL6	800	0.4 ... 1,0 × I_n	8 × I_n	1.5 ... 7 × I_R	**3VL6780-1□□36-□□□□**	1	1 unit	1CC	16.000
VL1250/3VL7	1000	0.4 ... 1,0 × I_n	11 × I_n	1.5 ... 10 × I_R	**3VL7710-1□□36-□□□□**	1	1 unit	1CC	25.000
	1250	0.4 ... 1,0 × I_n	11 × I_n	1.5 ... 10 × I_R	**3VL7712-1□□36-□□□□**	1	1 unit	1CC	25.000
VL1600/3VL8[2)]	1600	0.4 ... 1,0 × I_n	9 × I_n	1.5 ... 8 × I_R	**3VL8716-1□□30-□□□□**	1	1 unit	1CC	31.300

• Without communication preparation	**SE**
• With communication preparation	**ME**
• Marine engineering-certified LRS, DNV, GL and BV (not communication-ready)	**LE**

1) When the circuit breaker with flat screw terminal is ordered, the basic price is reduced.

2) Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

Communication:

- For accessories, see page 2/207.
- For more information, see chapter "Measuring Devices and Power Monitoring" and see chapter "Software".

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DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2706-2□□3□-□□□□		1	1 unit	1CC	2.400		3VL2706-3□□3□-□□□□		1	1 unit	1CC	2.400
	3VL2710-2□□3□-□□□□		1	1 unit	1CC	2.400		3VL2710-3□□3□-□□□□		1	1 unit	1CC	2.400
	3VL2716-2□□3□-□□□□		1	1 unit	1CC	2.400		3VL2716-3□□3□-□□□□		1	1 unit	1CC	2.400
	3VL3720-2□□3□-□□□□		1	1 unit	1CC	2.500		3VL3720-3□□3□-□□□□		1	1 unit	1CC	2.500
	3VL3725-2□□3□-□□□□		1	1 unit	1CC	2.500		3VL3725-3□□3□-□□□□		1	1 unit	1CC	2.500
	3 6							**3 6**					
	3VL4731-2□□36-□□□□		1	1 unit	1CC	5.900		3VL4731-3□□36-□□□□		1	1 unit	1CC	5.900
	3VL4740-2□□36-□□□□		1	1 unit	1CC	5.900		3VL4740-3□□36-□□□□		1	1 unit	1CC	5.900
	3VL5763-2□□36-□□□□		1	1 unit	1CC	9.300		3VL5763-3□□36-□□□□		1	1 unit	1CC	9.300
	3VL6780-2□□36-□□□□		1	1 unit	1CC	16.000		3VL6780-3□□36-□□□□		1	1 unit	1CC	16.000
	3VL7710-2□□36-□□□□		1	1 unit	1CC	25.000		3VL7710-3□□36-□□□□		1	1 unit	1CC	25.000
	3VL7712-2□□36-□□□□		1	1 unit	1CC	25.000		3VL7712-3□□36-□□□□		1	1 unit	1CC	25.000
	3VL8716-2□□30-□□□□		1	1 unit	1CC	31.300		3VL8716-3□□30-□□□□		1	1 unit	1CC	31.300
	SE ME LE							**SE ME LE**					

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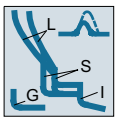
3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent protection "**L**" I_R	Operating current of the instantaneous short-circuit protection "**I**" I_i	S function short-circuit protection (short-time delayed) **S**	Ground-fault protection "**G**" I_g	DT	**I_{cu} up to 55 kA at 415 V, standard breaking capacity N** See "Overview".	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	A	A	A		Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.					kg

3-pole, fixed-mounted, for line protection – generator protection, 63 A to 1600 A, Electronic Trip Units LSIG



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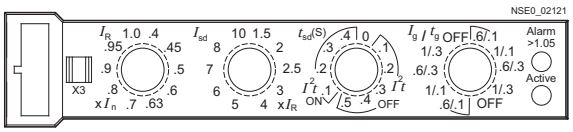

ETU22, LSIG function for 3-wire three-phase systems and time-based discrimination

With adjustable overcurrent releases, non-adjustable short-circuit releases,
ground fault delay t_g = 0.1 ... 0.3 s, short-circuit delay t_{sd} = 0 ... 0.5 s, ground-fault protection (G) can be switched off

VL160/3VL2	63	25 ... 63	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL2706-1□□3□-□□□□**		1	1 unit	1CC	2.400
	100	40 ... 100	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL2710-1□□3□-□□□□**		1	1 unit	1CC	2.400
	160	64 ... 160	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL2716-1□□3□-□□□□**		1	1 unit	1CC	2.400
VL250/3VL3	200	80 ... 200	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL3720-1□□3□-□□□□**		1	1 unit	1CC	2.500
	250	100 ... 250	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL3725-1□□3□-□□□□**		1	1 unit	1CC	2.500

Connection type can be selected by assignment of the 12th position of the Article No.

• Connection with box terminal	**3**
• Connection with screw terminal[1)]	**6**

VL400/3VL4	315	128 ... 315	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL4731-1□□36-□□□□**		1	1 unit	1CC	5.900
	400	160 ... 400	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL4740-1□□36-□□□□**		1	1 unit	1CC	5.900
VL630/3VL5	630	252 ... 630	10 × I_n	1.5 ... 9 × I_R	0.6 ... 1 × I_n, OFF	**3VL5763-1□□36-□□□□**		1	1 unit	1CC	9.300
VL800/3VL6	800	320 ... 800	8 × I_n	1.5 ... 7 × I_R	0.6 ... 1 × I_n, OFF	**3VL6780-1□□36-□□□□**		1	1 unit	1CC	16.000
VL1250/3VL7	1000	400 ... 1000	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL7710-1□□36-□□□□**		1	1 unit	1CC	25.000
	1250	500 ... 1250	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL7712-1□□36-□□□□**		1	1 unit	1CC	25.000
VL1600/3VL8[2)]	1600	640 ... 1600	9 × I_n	1.5 ... 8 × I_R	0.6 ... 1 × I_n, OFF	**3VL8716-1□□30-□□□□**		1	1 unit	1CC	31.300

• Without communication preparation	**SG**
• With communication preparation	**MG**

1) When the circuit breaker with flat screw terminal is ordered, the basic price is reduced.

2) Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

Communication:

- For accessories, see page 2/207.
- For more information, see chapter "Measuring Devices and Power Monitoring" and see chapter "Software".

*** You can order this quantity or a multiple thereof.**

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DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2706-2□□3□-□□□□		1	1 unit	1CC	2.400		**3VL2706-3□□3□-□□□□**		1	1 unit	1CC	2.400
	3VL2710-2□□3□-□□□□		1	1 unit	1CC	2.400		**3VL2710-3□□3□-□□□□**		1	1 unit	1CC	2.400
	3VL2716-2□□3□-□□□□		1	1 unit	1CC	2.400		**3VL2716-3□□3□-□□□□**		1	1 unit	1CC	2.400
	3VL3720-2□□3□-□□□□		1	1 unit	1CC	2.500		**3VL3720-3□□3□-□□□□**		1	1 unit	1CC	2.500
	3VL3725-2□□3□-□□□□		1	1 unit	1CC	2.500		**3VL3725-3□□3□-□□□□**		1	1 unit	1CC	2.500
	3 6							**3 6**					
	3VL4731-2□□36-□□□□		1	1 unit	1CC	5.900		**3VL4731-3□□36-□□□□**		1	1 unit	1CC	5.900
	3VL4740-2□□36-□□□□		1	1 unit	1CC	5.900		**3VL4740-3□□36-□□□□**		1	1 unit	1CC	5.900
	3VL5763-2□□36-□□□□		1	1 unit	1CC	9.300		**3VL5763-3□□36-□□□□**		1	1 unit	1CC	9.300
	3VL6780-2□□36-□□□□		1	1 unit	1CC	16.000		**3VL6780-3□□36-□□□□**		1	1 unit	1CC	16.000
	3VL7710-2□□36-□□□□		1	1 unit	1CC	25.000		**3VL7710-3□□36-□□□□**		1	1 unit	1CC	25.000
	3VL7712-2□□36-□□□□		1	1 unit	1CC	25.000		**3VL7712-3□□36-□□□□**		1	1 unit	1CC	25.000
	3VL8716-2□□30-□□□□		1	1 unit	1CC	31.300		**3VL8716-3□□30-□□□□**		1	1 unit	1CC	31.300
	SG MG							**SG MG**					

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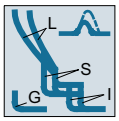
3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent protection "**L**" I_R	Operating current of the instantaneous short-circuit protection "**I**" I_i	S function short-circuit protection (short-time delayed) **S**	Ground-fault protection "**G**" I_g	DT	**I_{cu} up to 55 kA at 415 V, standard breaking capacity N** See "Overview". Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	A	A	A							kg

3-pole, fixed-mounted, for line protection – generator protection, 63 A to 1600 A, Electronic Trip Units LSIG



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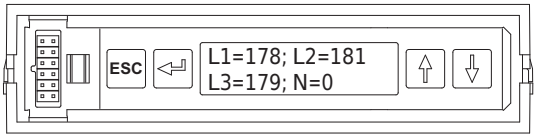

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LCD-ETU42, LSIG function for 3-wire three-phase systems and time-based discrimination

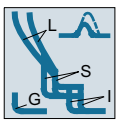
With adjustable overcurrent releases, adjustable short-circuit releases
Vectorial summation current formation, ground fault delay t_g = 0.1 ... 0.5 s, short-circuit delay t_{sd} = 0 ... 0.5 s

VL160/3VL2	63	25 ... 63	11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL2706-1UL3□-□□□□**	1	1 unit	1CC	2.400
	100	40 ... 100	11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL2710-1UL3□-□□□□**	1	1 unit	1CC	2.400
	160	64 ... 160	11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL2716-1UL3□-□□□□**	1	1 unit	1CC	2.400
VL250/3VL3	200	80 ... 200	11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL3720-1UL3□-□□□□**	1	1 unit	1CC	2.500
	250	100 ... 250	11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL3725-1UL3□-□□□□**	1	1 unit	1CC	2.500

Connection type can be selected by assignment of the 12th position of the Article No.

• Connection with box terminal	**3**
• Connection with screw terminal[1)]	**6**

VL400/3VL4	315	128 ... 315	11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL4731-1UL36-□□□□**	1	1 unit	1CC	5.900
	400	160 ... 400	11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL4740-1UL36-□□□□**	1	1 unit	1CC	5.900
VL630/3VL5	630	252 ... 630	10 × I_n	1.5 ... 9 × I_R	0.4 ... 1 × I_n	**3VL5763-1UL36-□□□□**	1	1 unit	1CC	9.300
VL800/3VL6	800	320 ... 800	8 × I_n	1.5 ... 7 × I_R	0.4 ... 1 × I_n	**3VL6780-1UL36-□□□□**	1	1 unit	1CC	16.000
VL1250/3VL7	1000	400 ... 1000	11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL7710-1UL36-□□□□**	1	1 unit	1CC	25.000
	1250	500 ... 1250	11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL7712-1UL36-□□□□**	1	1 unit	1CC	25.000
VL1600/3VL8[2)]	1600	640 ... 1600	9 × I_n	1.5 ... 8 × I_R	0.4 ... 1 × I_n	**3VL8716-1UL30-□□□□**	1	1 unit	1CC	31.300



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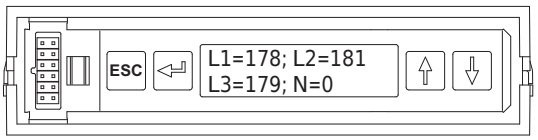

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LCD-ETU42, LSIG function for 4-wire three-phase systems and time-based discrimination

With adjustable overcurrent releases, adjustable short-circuit releases. External current transformer required in addition, see page 2/206.
Vectorial summation current formation, ground fault delay t_g = 0.1 ... 0.5 s, short-circuit delay t_{sd} = 0 ... 0.5 s

VL160/3VL2	63	25 ... 63	11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL2706-1UM3□-□□□□**	1	1 unit	1CC	2.400
	100	40 ... 100	11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL2710-1UM3□-□□□□**	1	1 unit	1CC	2.400
	160	64 ... 160	11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL2716-1UM3□-□□□□**	1	1 unit	1CC	2.400
VL250/3VL3	200	80 ... 200	11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL3720-1UM3□-□□□□**	1	1 unit	1CC	2.500
	250	100 ... 250	11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL3725-1UM3□-□□□□**	1	1 unit	1CC	2.500

Connection type can be selected by assignment of the 12th position of the Article No.

• Connection with box terminal	**3**
• Connection with screw terminal[1)]	**6**

VL400/3VL4	315	128 ... 315	11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL4731-1UM36-□□□□**	1	1 unit	1CC	5.900
	400	160 ... 400	11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL4740-1UM36-□□□□**	1	1 unit	1CC	5.900
VL630/3VL5	630	252 ... 630	10 × I_n	1.5 ... 9 × I_R	0.4 ... 1 × I_n	**3VL5763-1UM36-□□□□**	1	1 unit	1CC	9.300
VL800/3VL6	800	320 ... 800	8 × I_n	1.5 ... 7 × I_R	0.4 ... 1 × I_n	**3VL6780-1UM36-□□□□**	1	1 unit	1CC	16.000
VL1250/3VL7	1000	400 ... 1000	11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL7710-1UM36-□□□□**	1	1 unit	1CC	25.000
	1250	500 ... 1250	11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL7712-1UM36-□□□□**	1	1 unit	1CC	25.000
VL1600/3VL8[2)]	1600	640 ... 1600	9 × I_n	1.5 ... 8 × I_R	0.4 ... 1 × I_n	**3VL8716-1UM30-□□□□**	1	1 unit	1CC	31.300

1) When the circuit breaker with flat screw terminal is ordered, the basic price is reduced.

2) Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

*** You can order this quantity or a multiple thereof.**

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DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2706-2UL3□-□□□□		1	1 unit	1CC	2.400		3VL2706-3UL3□-□□□□		1	1 unit	1CC	2.400
	3VL2710-2UL3□-□□□□		1	1 unit	1CC	2.400		3VL2710-3UL3□-□□□□		1	1 unit	1CC	2.400
	3VL2716-2UL3□-□□□□		1	1 unit	1CC	2.400		3VL2716-3UL3□-□□□□		1	1 unit	1CC	2.400
	3VL3720-2UL3□-□□□□		1	1 unit	1CC	2.500		3VL3720-3UL3□-□□□□		1	1 unit	1CC	2.500
	3VL3725-2UL3□-□□□□		1	1 unit	1CC	2.500		3VL3725-3UL3□-□□□□		1	1 unit	1CC	2.500
	3 6							**3 6**					
	3VL4731-2UL36-□□□□		1	1 unit	1CC	5.900		3VL4731-3UL36-□□□□		1	1 unit	1CC	5.900
	3VL4740-2UL36-□□□□		1	1 unit	1CC	5.900		3VL4740-3UL36-□□□□		1	1 unit	1CC	5.900
	3VL5763-2UL36-□□□□		1	1 unit	1CC	9.300		3VL5763-3UL36-□□□□		1	1 unit	1CC	9.300
	3VL6780-2UL36-□□□□		1	1 unit	1CC	16.000		3VL6780-3UL36-□□□□		1	1 unit	1CC	16.000
	3VL7710-2UL36-□□□□		1	1 unit	1CC	25.000		3VL7710-3UL36-□□□□		1	1 unit	1CC	25.000
	3VL7712-2UL36-□□□□		1	1 unit	1CC	25.000		3VL7712-3UL36-□□□□		1	1 unit	1CC	25.000
	3VL8716-2UL30-□□□□		1	1 unit	1CC	31.300		3VL8716-3UL30-□□□□		1	1 unit	1CC	31.300
	3VL2706-2UM3□-□□□□		1	1 unit	1CC	2.400		3VL2706-3UM3□-□□□□		1	1 unit	1CC	2.400
	3VL2710-2UM3□-□□□□		1	1 unit	1CC	2.400		3VL2710-3UM3□-□□□□		1	1 unit	1CC	2.400
	3VL2716-2UM3□-□□□□		1	1 unit	1CC	2.400		3VL2716-3UM3□-□□□□		1	1 unit	1CC	2.400
	3VL3720-2UM3□-□□□□		1	1 unit	1CC	2.500		3VL3720-3UM3□-□□□□		1	1 unit	1CC	2.500
	3VL3725-2UM3□-□□□□		1	1 unit	1CC	2.500		3VL3725-3UM3□-□□□□		1	1 unit	1CC	2.500
	3 6							**3 6**					
	3VL4731-2UM36-□□□□		1	1 unit	1CC	5.900		3VL4731-3UM36-□□□□		1	1 unit	1CC	5.900
	3VL4740-2UM36-□□□□		1	1 unit	1CC	5.900		3VL4740-3UM36-□□□□		1	1 unit	1CC	5.900
	3VL5763-2UM36-□□□□		1	1 unit	1CC	9.300		3VL5763-3UM36-□□□□		1	1 unit	1CC	9.300
	3VL6780-2UM36-□□□□		1	1 unit	1CC	16.000		3VL6780-3UM36-□□□□		1	1 unit	1CC	16.000
	3VL7710-2UM36-□□□□		1	1 unit	1CC	25.000		3VL7710-3UM36-□□□□		1	1 unit	1CC	25.000
	3VL7712-2UM36-□□□□		1	1 unit	1CC	25.000		3VL7712-3UM36-□□□□		1	1 unit	1CC	25.000
	3VL8716-2UM30-□□□□		1	1 unit	1CC	31.300		3VL8716-3UM30-□□□□		1	1 unit	1CC	31.300

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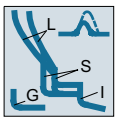
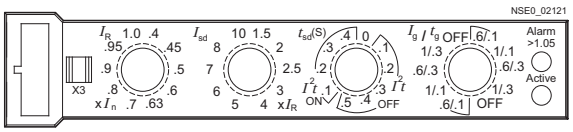
3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent protection "**L**" I_R	Operating current of the instantaneous short-circuit protection "**I**" I_i	S function short-circuit protection (short-time delayed) **S**	Ground-fault protection "**G**" I_g	DT	I_{cu} up to 55 kA at 415 V, standard breaking capacity N (N) See "Overview". Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	A	A	A							kg

3-pole, fixed-mounted, for line protection – generator protection, 63 A to 1600 A, Electronic Trip Units LSIG





ETU22, LSIG function for 4-wire three-phase systems and time-based discrimination

With adjustable overcurrent releases, non-adjustable short-circuit releases, external current transformers required in addition, see page 2/206.
Ground fault delay t_g = 0.1 ... 0.3 s, short-circuit delay t_{sd} = 0 ... 0.5 s, ground-fault protection (G) can be switched off

VL160/3VL2	63	25 ... 63	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL2706-1□□3□-□□□□**	1	1 unit	1CC	2.400
	100	40 ... 100	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL2710-1□□3□-□□□□**	1	1 unit	1CC	2.400
	160	64 ... 160	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL2716-1□□3□-□□□□**	1	1 unit	1CC	2.400
VL250/3VL3	200	80 ... 200	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL3720-1□□3□-□□□□**	1	1 unit	1CC	2.500
	250	100 ... 250	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL3725-1□□3□-□□□□**	1	1 unit	1CC	2.500

Connection type can be selected by assignment of the 12th position of the Article No.

• Connection with box terminal	**3**
• Connection with screw terminal[1)]	**6**

VL400/3VL4	315	128 ... 315	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL4731-1□□36-□□□□**	1	1 unit	1CC	5.900
	400	160 ... 400	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL4740-1□□36-□□□□**	1	1 unit	1CC	5.900
VL630/3VL5	630	252 ... 630	10 × I_n	1.5 ... 9 × I_R	0.6 ... 1 × I_n, OFF	**3VL5763-1□□36-□□□□**	1	1 unit	1CC	9.300
VL800/3VL6	800	320 ... 800	8 × I_n	1.5 ... 7 × I_R	0.6 ... 1 × I_n, OFF	**3VL6780-1□□36-□□□□**	1	1 unit	1CC	16.000
VL1250/3VL7	1000	400 ... 1000	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL7710-1□□36-□□□□**	1	1 unit	1CC	25.000
	1250	500 ... 1250	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL7712-1□□36-□□□□**	1	1 unit	1CC	25.000
VL1600/3VL8[2)]	1600	640 ... 1600	9 × I_n	1.5 ... 8 × I_R	0.6 ... 1 × I_n, OFF	**3VL8716-1□□30-□□□□**	1	1 unit	1CC	31.300

• Without communication preparation	**SH**
• With communication preparation	**MH**

1) When the circuit breaker with flat screw terminal is ordered, the basic price is reduced.

2) Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

Communication:

- For accessories, see page 2/207.
- For more information, see chapter "Measuring Devices and Power Monitoring" and see chapter "Software".

*** You can order this quantity or a multiple thereof.**

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DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
B	3VL2706-2□□3□-□□□□		1	1 unit	1CC	2.400	B	3VL2706-3□□3□-□□□□		1	1 unit	1CC	2.400
B	3VL2710-2□□3□-□□□□		1	1 unit	1CC	2.400	B	3VL2710-3□□3□-□□□□		1	1 unit	1CC	2.400
B	3VL2716-2□□3□-□□□□		1	1 unit	1CC	2.400	B	3VL2716-3□□3□-□□□□		1	1 unit	1CC	2.400
B	3VL3720-2□□3□-□□□□		1	1 unit	1CC	2.500	B	3VL3720-3□□3□-□□□□		1	1 unit	1CC	2.500
B	3VL3725-2□□3□-□□□□		1	1 unit	1CC	2.500	B	3VL3725-3□□3□-□□□□		1	1 unit	1CC	2.500
	3 6							**3 6**					
B	3VL4731-2□□36-□□□□		1	1 unit	1CC	5.900	B	3VL4731-3□□36-□□□□		1	1 unit	1CC	5.900
B	3VL4740-2□□36-□□□□		1	1 unit	1CC	5.900	B	3VL4740-3□□36-□□□□		1	1 unit	1CC	5.900
B	3VL5763-2□□36-□□□□		1	1 unit	1CC	9.300	B	3VL5763-3□□36-□□□□		1	1 unit	1CC	9.300
B	3VL6780-2□□36-□□□□		1	1 unit	1CC	16.000	B	3VL6780-3□□36-□□□□		1	1 unit	1CC	16.000
B	3VL7710-2□□36-□□□□		1	1 unit	1CC	25.000	B	3VL7710-3□□36-□□□□		1	1 unit	1CC	25.000
B	3VL7712-2□□36-□□□□		1	1 unit	1CC	25.000	B	3VL7712-3□□36-□□□□		1	1 unit	1CC	25.000
B	3VL8716-2□□30-□□□□		1	1 unit	1CC	31.300	B	3VL8716-3□□30-□□□□		1	1 unit	1CC	31.300
	SH MH							**SH MH**					

*** You can order this quantity or a multiple thereof.**

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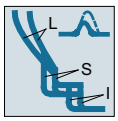
3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent protection "**L**" I_R	Operating current of the instantaneous short-circuit protection "**I**" I_i	S function short-circuit protection (short-time delayed) **S**	DT	I_{cu} **up to 55 kA at 415 V, standard breaking capacity N** See "Overview".		PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
						Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU				
	A	A	A	A							kg

3-pole, fixed-mounted, for line protection – generator protection, 63 A to 1600 A, Electronic Trip Units LI, LS, LSI



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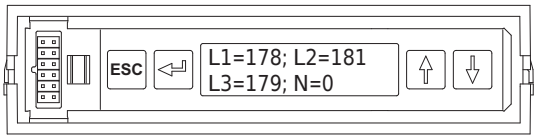

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LCD-ETU40, LI/LS/LSI function selectable

With adjustable overcurrent releases, adjustable short-circuit releases, short-circuit delay (t_{sd} = 0 to 0.5 s)

VL160/3VL2	63	25 ... 63	1.25 ... 11 × I_n	1.5 ... 10 × I_R	**3VL2706-1UH3□-□□□□**	1	1 unit	1CC	2.400
	100	40 ... 100	1.25 ... 11 × I_n	1.5 ... 10 × I_R	**3VL2710-1UH3□-□□□□**	1	1 unit	1CC	2.400
	160	64 ... 160	1.25 ... 11 × I_n	1.5 ... 10 × I_R	**3VL2716-1UH3□-□□□□**	1	1 unit	1CC	2.400
VL250/3VL3	200	80 ... 200	1.25 ... 11 × I_n	1.5 ... 10 × I_R	**3VL3720-1UH3□-□□□□**	1	1 unit	1CC	2.500
	250	100 ... 250	1.25 ... 11 × I_n	1.5 ... 10 × I_R	**3VL3725-1UH3□-□□□□**	1	1 unit	1CC	2.500
		Connection type can be selected by assignment of the 12th position of the Article							
		• Connection with box terminal			**3**				
		• Connection with screw terminal[1)]			**6**				
VL400/3VL4	315	128 ... 315	1.25 ... 11 × I_n	1.5 ... 10 × I_R	**3VL4731-1UH36-□□□□**	1	1 unit	1CC	5.900
	400	160 ... 400	1.25 ... 11 × I_n	1.5 ... 10 × I_R	**3VL4740-1UH36-□□□□**	1	1 unit	1CC	5.900
VL630/3VL5	630	252 ... 630	1.25 ... 10 × I_n	1.5 ... 9 × I_R	**3VL5763-1UH36-□□□□**	1	1 unit	1CC	9.300
VL800/3VL6	800	320 ... 800	1.25 ... 8 × I_n	1.5 ... 7 × I_R	**3VL6780-1UH36-□□□□**	1	1 unit	1CC	16.000
VL1250/3VL7	1000	400 ... 1000	1.25 ... 11 × I_n	1.5 ... 10 × I_R	**3VL7710-1UH36-□□□□**	1	1 unit	1CC	25.000
	1250	500 ... 1250	1.25 ... 11 × I_n	1.5 ... 10 × I_R	**3VL7712-1UH36-□□□□**	1	1 unit	1CC	25.000
VL1600/3VL8[2)]	1600	640 ... 1600	1.25 ... 9 × I_n	1.5 ... 8 × I_R	**3VL8716-1UH30-□□□□**	1	1 unit	1CC	31.300

1) When the circuit breaker with flat screw terminal is ordered, the basic price is reduced.

2) Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

*** You can order this quantity or a multiple thereof.**

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DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2706-2UH3□-□□□□		1	1 unit	1CC	2.400		**3VL2706-3UH3□-□□□□**		1	1 unit	1CC	2.400
	3VL2710-2UH3□-□□□□		1	1 unit	1CC	2.400		**3VL2710-3UH3□-□□□□**		1	1 unit	1CC	2.400
	3VL2716-2UH3□-□□□□		1	1 unit	1CC	2.400		**3VL2716-3UH3□-□□□□**		1	1 unit	1CC	2.400
	3VL3720-2UH3□-□□□□		1	1 unit	1CC	2.500		**3VL3720-3UH3□-□□□□**		1	1 unit	1CC	2.500
	3VL3725-2UH3□-□□□□		1	1 unit	1CC	2.500		**3VL3725-3UH3□-□□□□**		1	1 unit	1CC	2.500
	3 6							**3 6**					
	3VL4731-2UH36-□□□□		1	1 unit	1CC	5.900		**3VL4731-3UH36-□□□□**		1	1 unit	1CC	5.900
	3VL4740-2UH36-□□□□		1	1 unit	1CC	5.900		**3VL4740-3UH36-□□□□**		1	1 unit	1CC	5.900
	3VL5763-2UH36-□□□□		1	1 unit	1CC	9.300		**3VL5763-3UH36-□□□□**		1	1 unit	1CC	9.300
	3VL6780-2UH36-□□□□		1	1 unit	1CC	16.000		**3VL6780-3UH36-□□□□**		1	1 unit	1CC	16.000
	3VL7710-2UH36-□□□□		1	1 unit	1CC	25.000		**3VL7710-3UH36-□□□□**		1	1 unit	1CC	25.000
	3VL7712-2UH36-□□□□		1	1 unit	1CC	25.000		**3VL7712-3UH36-□□□□**		1	1 unit	1CC	25.000
	3VL8716-2UH30-□□□□		1	1 unit	1CC	31.300		**3VL8716-3UH30-□□□□**		1	1 unit	1CC	31.300

*** You can order this quantity or a multiple thereof.**

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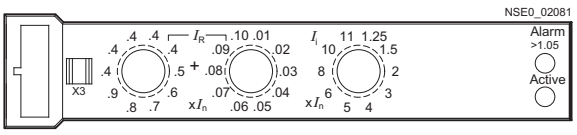
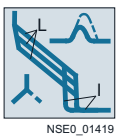
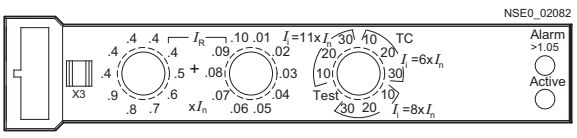
Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent releases "**L**" I_R	Operating current of the instantaneous short-circuit protection "**I**" I_i	DT	**I_{cu} up to 55 kA at 415 V, standard breaking capacity N** See "Overview". Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	A							kg
3-pole, fixed-mounted, for motor protection, 63 A to 500 A, Electronic Trip Units LI										
NSE0_00943	 NSE0_02081									
ETU10M, LI function[1] With thermal image, with non-adjustable trip class t_C = 10, with phase failure sensitivity 40 % I_R										
VL160/3VL2	63	25 ... 63	1.25 ... 11 × I_n		**3VL2706-1□□3□-□□□□**		1	1 unit	1CC	2.400
	100	40 ... 100	1.25 ... 11 × I_n		**3VL2710-1□□3□-□□□□**		1	1 unit	1CC	2.400
	160	64 ... 160	1.25 ... 11 × I_n		**3VL2716-1□□3□-□□□□**		1	1 unit	1CC	2.400
VL250/3VL3	200	80 ... 200	1.25 ... 11 × I_n		**3VL3720-1□□3□-□□□□**		1	1 unit	1CC	2.500
	250	100 ... 250	1.25 ... 11 × I_n		**3VL3725-1□□3□-□□□□**		1	1 unit	1CC	2.500
Connection type can be selected by assignment of the 12th position of the Article No.										
• Connection with box terminal					**3**					
• Connection with screw terminal[2]					**6**					
VL400/3VL4	315	125 ... 315	1.25 ... 11 × I_n		**3VL4731-1□□36-□□□□**		1	1 unit	1CC	5.900
VL630/3VL5	500	200 ... 500	1.25 ... 12.5 × I_n		**3VL5750-1□□36-□□□□**		1	1 unit	1CC	9.300
• Without communication preparation					**SP**					
• With communication preparation					**MP**					
 NSE0_01419	 NSE0_02082									
ETU30M, LI function[1] With thermal image, with adjustable trip class t_C = 10, 20, 30, with phase failure sensitivity 40 % I_R										
VL160/3VL2	63	25 ... 63	6/8/11 × I_n		**3VL2706-1□□3□-□□□□**		1	1 unit	1CC	2.400
	100	40 ... 100	6/8/11 × I_n		**3VL2710-1□□3□-□□□□**		1	1 unit	1CC	2.400
	160	64 ... 160	6/8/11 × I_n		**3VL2716-1□□3□-□□□□**		1	1 unit	1CC	2.400
VL250/3VL3	200	80 ... 200	6/8/11 × I_n		**3VL3720-1□□3□-□□□□**		1	1 unit	1CC	2.500
	250	100 ... 250	6/8/11 × I_n		**3VL3725-1□□3□-□□□□**		1	1 unit	1CC	2.500
Connection type can be selected by assignment of the 12th position of the Article No.										
• Connection with box terminal					**3**					
• Connection with screw terminal[2]					**6**					
VL400/3VL4	315	125 ... 315	6/8/11 × I_n		**3VL4731-1□□36-□□□□**		1	1 unit	1CC	5.900
VL630/3VL5	500	200 ... 500	6/8/12.5 × I_n		**3VL5750-1□□36-□□□□**		1	1 unit	1CC	9.300
• Without communication preparation					**SS**					
• With communication preparation					**MS**					
• Marine engineering-certified LRS, DNV, GL and BV (not communication-ready)					**LS**					

Communication:

- For accessories, see page 2/207.
- For more information, ssee chapter "Measuring Devices and Power Monitoring" and see chapter "Software".

[1] For use of 3VL molded case circuit breakers with an energy-efficient IE3 motor, you are advised to use a contactor for operational switching of the motor; see also page 2/13.

[2] **When the circuit breaker with flat screw terminal is ordered, the basic price is reduced.**

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DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2706-2□□3□-□□□□		1	1 unit	1CC	2.400		3VL2706-3□□3□-□□□□		1	1 unit	1CC	2.400
	3VL2710-2□□3□-□□□□		1	1 unit	1CC	2.400		3VL2710-3□□3□-□□□□		1	1 unit	1CC	2.400
	3VL2716-2□□3□-□□□□		1	1 unit	1CC	2.400		3VL2716-3□□3□-□□□□		1	1 unit	1CC	2.400
	3VL3720-2□□3□-□□□□		1	1 unit	1CC	2.500		3VL3720-3□□3□-□□□□		1	1 unit	1CC	2.500
	3VL3725-2□□3□-□□□□		1	1 unit	1CC	2.500		3VL3725-3□□3□-□□□□		1	1 unit	1CC	2.500
	3 **6**							**3** **6**					
	3VL4731-2□□36-□□□□		1	1 unit	1CC	5.900		3VL4731-3□□36-□□□□		1	1 unit	1CC	5.900
	3VL5750-2□□36-□□□□		1	1 unit	1CC	9.300		3VL5750-3□□36-□□□□		1	1 unit	1CC	9.300
	SP **MP**							**SP** **MP**					

DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2706-2□□3□-□□□□		1	1 unit	1CC	2.400		3VL2706-3□□3□-□□□□		1	1 unit	1CC	2.400
	3VL2710-2□□3□-□□□□		1	1 unit	1CC	2.400		3VL2710-3□□3□-□□□□		1	1 unit	1CC	2.400
	3VL2716-2□□3□-□□□□		1	1 unit	1CC	2.400		3VL2716-3□□3□-□□□□		1	1 unit	1CC	2.400
	3VL3720-2□□3□-□□□□		1	1 unit	1CC	2.500		3VL3720-3□□3□-□□□□		1	1 unit	1CC	2.500
	3VL3725-2□□3□-□□□□		1	1 unit	1CC	2.500		3VL3725-3□□3□-□□□□		1	1 unit	1CC	2.500
	3 **6**							**3** **6**					
	3VL4731-2□□36-□□□□		1	1 unit	1CC	5.900		3VL4731-3□□36-□□□□		1	1 unit	1CC	5.900
	3VL5750-2□□36-□□□□		1	1 unit	1CC	9.300		3VL5750-3□□36-□□□□		1	1 unit	1CC	9.300
	SS **MS** **LS**							**SS** **MS** **LS**					

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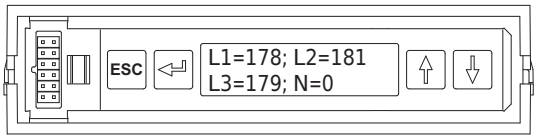
3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent protection "**L**" I_R	Operating current of the instantaneous short-circuit protection "**I**" I_i	DT	I_{cu} **up to 55 kA at 415 V, standard breaking capacity N** See "Overview". Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	A							kg
3-pole, fixed-mounted, for motor protection, 63 A to 500 A, Electronic Trip Units LI										
NSE0_01419										
 NSE0_02129										
LCD-ETU40M, LI function[1] With thermal image, with adjustable trip class t_C = 5, 10, 15, 20, 30, phase failure sensitivity adjustable in steps 5 ... 50 % I_R										
VL160/3VL2	63	25 ... 63	1.25 ... 11 × I_n		**3VL2706-1UP3□-□□□□**		1	1 unit	1CC	2.400
	100	40 ... 100	1.25 ... 11 × I_n		**3VL2710-1UP3□-□□□□**		1	1 unit	1CC	2.400
	160	64 ... 160	1.25 ... 11 × I_n		**3VL2716-1UP3□-□□□□**		1	1 unit	1CC	2.400
VL250/3VL3	200	80 ... 200	1.25 ... 11 × I_n		**3VL3720-1UP3□-□□□□**		1	1 unit	1CC	2.500
	250	100 ... 250	1.25 ... 11 × I_n		**3VL3725-1UP3□-□□□□**		1	1 unit	1CC	2.500
Connection type can be selected by assignment of the 12th position of the Article No.										
• Connection with box terminal					**3**					
• Connection with screw terminal[2]					**6**					
VL400/3VL4	315	128 ... 315	1.25 ... 11 × I_n		**3VL4731-1UP36-□□□□**		1	1 unit	1CC	5.900
VL630/3VL5	500	250 ... 500	1.25 ... 12.5 × I_n		**3VL5750-1UP36-□□□□**		1	1 unit	1CC	9.300

[1] For use of 3VL molded case circuit breakers with an energy-efficient IE3 motor, you are advised to use a contactor for operational switching of the motor; see also page 2/13.

[2] **When the circuit breaker with flat screw terminal is ordered, the basic price is reduced.**

* You can order this quantity or a multiple thereof.

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DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2706-2UP3□-□□□□		1	1 unit	1CC	2.400		**3VL2706-3UP3□-□□□□**		1	1 unit	1CC	2.400
	3VL2710-2UP3□-□□□□		1	1 unit	1CC	2.400		**3VL2710-3UP3□-□□□□**		1	1 unit	1CC	2.400
	3VL2716-2UP3□-□□□□		1	1 unit	1CC	2.400		**3VL2716-3UP3□-□□□□**		1	1 unit	1CC	2.400
	3VL3720-2UP3□-□□□□		1	1 unit	1CC	2.500		**3VL3720-3UP3□-□□□□**		1	1 unit	1CC	2.500
	3VL3725-2UP3□-□□□□		1	1 unit	1CC	2.500		**3VL3725-3UP3□-□□□□**		1	1 unit	1CC	2.500
	3 6							**3 6**					
	3VL4731-2UP36-□□□□		1	1 unit	1CC	5.900		**3VL4731-3UP36-□□□□**		1	1 unit	1CC	5.900
	3VL5750-2UP36-□□□□		1	1 unit	1CC	9.300		**3VL5750-3UP36-□□□□**		1	1 unit	1CC	9.300

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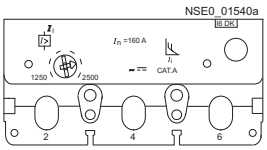
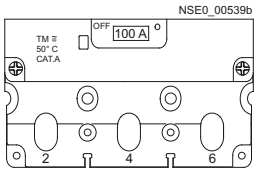
3-pole

Type	Rated current I_n	Operating current of the instantaneous short-circuit releases "I" I_i	DT	I_{cu} up to 55 kA at 415 V, standard breaking capacity N (N) See "Overview". Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A								kg
3-pole, fixed-mounted, for starter protection, 63 A to 500 A, magnetic trip unit I									
NSE0_00707	 NSE0_01540a								
Starter protection, M, I function[1] Without thermal overcurrent release, with adjustable short-circuit release									
VL160/3VL2	63	450 ... 900		3VL2706-1DK3□-□□□□		1	1 unit	1CC	2.200
	100	750 ... 1500		3VL2710-1DK3□-□□□□		1	1 unit	1CC	2.200
	160	1250 ... 2500		3VL2716-1DK3□-□□□□		1	1 unit	1CC	2.200
VL250/3VL3	250	1750 ... 3500		3VL3725-1DK3□-□□□□		1	1 unit	1CC	2.300
Connection type can be selected by assignment of the 12th position of the Article No.									
• Connection with box terminal				3					
• Connection with screw terminal[2]				6					
VL400/3VL4	200	1250 ... 2500		3VL4720-1DK36-□□□□		1	1 unit	1CC	5.700
	250	2000 ... 4000		3VL4725-1DK36-□□□□		1	1 unit	1CC	5.700
	315	2000 ... 4000		3VL4731-1DK36-□□□□		1	1 unit	1CC	5.700
VL630/3VL5	315	2000 ... 4000		3VL5731-1DK36-□□□□		1	1 unit	1CC	9.000
	500	3250 ... 6300		3VL5750-1DK36-□□□□		1	1 unit	1CC	9.000
3-pole, fixed-mounted, for safe disconnection, 100 A to 1600 A, magnetic trip unit I									
NSE0_00708	 NSE0_00539b								
Non-automatic molded case circuit breakers[3]***, I function*** Without thermal overcurrent release, with non-adjustable short-circuit release (for intrinsic protection only)									
VL160X/3VL1	100	1800		3VL1710-1DE3□-□□□□		1	1 unit	1CC	2.000
	160	1800		3VL1716-1DE3□-□□□□		1	1 unit	1CC	2.000
VL160/3VL2	100	2500		3VL2710-1DE3□-□□□□		1	1 unit	1CC	2.200
	160	2500		3VL2716-1DE3□-□□□□		1	1 unit	1CC	2.200
VL250/3VL3	250	3500		3VL3725-1DE3□-□□□□		1	1 unit	1CC	2.300
Connection type can be selected by assignment of the 12th position of the Article No.									
• Connection with box terminal				3					
• Connection with screw terminal not in conjunction with RCD module at 3VL1[2]				6					
VL400/3VL4	400	4000		3VL4740-1DE36-□□□□		1	1 unit	1CC	5.700
VL630/3VL5	630	6300		3VL5763-1DE36-□□□□		1	1 unit	1CC	9.000
VL800/3VL6	800	6500		3VL6780-1DE36-□□□□		1	1 unit	1CC	15.700
VL1250/3VL7	1250	12000		3VL7712-1DE36-□□□□		1	1 unit	1CC	23.500
VL1600/3VL8[4]	1600	14400		3VL8716-1DE30-□□□□		1	1 unit	1CC	29.800

For further versions, including for short-circuit and ground fault protection, see pages 2/128 to 2/144.

1) For use of 3VL molded case circuit breakers with an energy-efficient IE3 motor, you are advised to use a contactor for operational switching of the motor; see also page 2/122.

2) When the circuit breaker with flat screw terminal is ordered, the basic price is reduced.

3) See chapter "Switch Disconnectors". 3K. switch disconnectors are also available with rear-mounting operating mechanism and leading contacts.

4) Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

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DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2706-2DK3□-□□□□		1	1 unit	1CC	2.200		**3VL2706-3DK3□-□□□□**		1	1 unit	1CC	2.200
	3VL2710-2DK3□-□□□□		1	1 unit	1CC	2.200		**3VL2710-3DK3□-□□□□**		1	1 unit	1CC	2.200
	3VL2716-2DK3□-□□□□		1	1 unit	1CC	2.200		**3VL2716-3DK3□-□□□□**		1	1 unit	1CC	2.200
	3VL3725-2DK3□-□□□□		1	1 unit	1CC	2.300		**3VL3725-3DK3□-□□□□**		1	1 unit	1CC	2.300
	3 6							**3 6**					
	3VL4720-2DK36-□□□□		1	1 unit	1CC	5.700		**3VL4720-3DK36-□□□□**		1	1 unit	1CC	5.700
	3VL4725-2DK36-□□□□		1	1 unit	1CC	5.700		**3VL4725-3DK36-□□□□**		1	1 unit	1CC	5.700
	3VL4731-2DK36-□□□□		1	1 unit	1CC	5.700		**3VL4731-3DK36-□□□□**		1	1 unit	1CC	5.700
	3VL5731-2DK36-□□□□		1	1 unit	1CC	9.000		**3VL5731-3DK36-□□□□**		1	1 unit	1CC	9.000
	3VL5750-2DK36-□□□□		1	1 unit	1CC	9.000		**3VL5750-3DK36-□□□□**		1	1 unit	1CC	9.000
	3VL1710-2DE3□-□□□□		1	1 unit	1CC	2.000		--					
	3VL1716-2DE3□-□□□□		1	1 unit	1CC	2.000		--					
	3VL2710-2DE3□-□□□□		1	1 unit	1CC	2.200		**3VL2710-3DE3□-□□□□**		1	1 unit	1CC	2.200
	3VL2716-2DE3□-□□□□		1	1 unit	1CC	2.200		**3VL2716-3DE3□-□□□□**		1	1 unit	1CC	2.200
	3VL3725-2DE3□-□□□□		1	1 unit	1CC	2.300		**3VL3725-3DE3□-□□□□**		1	1 unit	1CC	2.300
	3 6							**3 6**					
	3VL4740-2DE36-□□□□		1	1 unit	1CC	5.700		**3VL4740-3DE36-□□□□**		1	1 unit	1CC	5.700
	3VL5763-2DE36-□□□□		1	1 unit	1CC	9.000		**3VL5763-3DE36-□□□□**		1	1 unit	1CC	9.000
	3VL6780-2DE36-□□□□		1	1 unit	1CC	15.700		**3VL6780-3DE36-□□□□**		1	1 unit	1CC	15.700
	3VL7712-2DE36-□□□□		1	1 unit	1CC	23.500		**3VL7712-3DE36-□□□□**		1	1 unit	1CC	23.500
	3VL8716-2DE30-□□□□		1	1 unit	1CC	29.800		**3VL8716-3DE30-□□□□**		1	1 unit	1CC	29.800

*** You can order this quantity or a multiple thereof.**

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Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A, IEC

3-pole

Article No. supplement (for complete Article No., see pages 2/128 to 2/144) **3VL.7 ..-. □□3.-...** Trip unit		Breaking capacity	Type **VL160**[1] 3VL2			**VL250**[1] 3VL3		**VL400** 3VL4		**VL630** 3VL5		**VL800** 3VL6	**VL1250** 3VL7		**VL1600** 3VL8
			Rated current I_n												
			63 A	100 A	160 A	200 A	250 A	315 A	400 A	500 A	630 A	800 A	1000 A	1250 A	1600 A
			Price												
ETU10	**SB**	N	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
ETU10	**MB**	N	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
ETU10	**LB**	N	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
ETU12	**SL**	N	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
ETU12	**ML**	N	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
ETU12	**SF**	N	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
ETU12	**MF**	N	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
ETU20	**SE**	N	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
ETU20	**ME**	N	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
ETU20	**LE**	N	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
ETU22	**SG**	N	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
ETU22	**MG**	N	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
ETU42	**UL**	N	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
ETU42	**UM**	N	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
ETU22	**SH**	N	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
ETU22	**MH**	N	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
ETU40	**UH**	N	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓

✓ Available

-- Not available

[1] **The basic price is reduced when the molded case circuit breaker is ordered with a flat screw terminal ".36-".**

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Article No. supplement (for complete Article No. see pages 2/128 to 2/144) **3VL.7 .. - .□□3.-....** Trip unit		Breaking capacity	Type **VL160**[1] 3VL2			**VL250**[1] 3VL3		**VL400** 3VL4		**VL630** 3VL5		**VL800** 3VL6	**VL1250** 3VL7		**VL1600** 3VL8
			Rated current I_n												
			63 A	100 A	160 A	200 A	250 A	315 A	400 A	500 A	630 A	800 A	1000 A	1250 A	1600 A
			Price												
ETU10M	**SP**	N	✓	✓	✓	✓	✓	✓	--	✓	--	--	--	--	--
		H	✓	✓	✓	✓	✓	✓	--	✓	--	--	--	--	--
		L	✓	✓	✓	✓	✓	✓	--	✓	--	--	--	--	--
ETU10M	**MP**	N	✓	✓	✓	✓	✓	✓	--	✓	--	--	--	--	--
		H	✓	✓	✓	✓	✓	✓	--	✓	--	--	--	--	--
		L	✓	✓	✓	✓	✓	✓	--	✓	--	--	--	--	--
ETU30M	**SS**	N	✓	✓	✓	✓	✓	✓	--	✓	--	--	--	--	--
		H	✓	✓	✓	✓	✓	✓	--	✓	--	--	--	--	--
		L	✓	✓	✓	✓	✓	✓	--	✓	--	--	--	--	--
ETU30M	**MS**	N	✓	✓	✓	✓	✓	✓	--	✓	--	--	--	--	--
		H	✓	✓	✓	✓	✓	✓	--	✓	--	--	--	--	--
		L	✓	✓	✓	✓	✓	✓	--	✓	--	--	--	--	--
ETU30M	**LS**	N	✓	✓	✓	✓	✓	✓	--	✓	--	--	--	--	--
		H	✓	✓	✓	✓	✓	✓	--	✓	--	--	--	--	--
		L	✓	✓	✓	✓	✓	✓	--	✓	--	--	--	--	--
ETU40M	**UP**	N	✓	✓	✓	✓	✓	✓	--	✓	--	--	--	--	--
		H	✓	✓	✓	✓	✓	✓	--	✓	--	--	--	--	--
		L	✓	✓	✓	✓	✓	✓	--	✓	--	--	--	--	--

✓ Available

-- Not available

[1] **The basic price is reduced when the molded case circuit breaker is ordered with a flat screw terminal ".36-".**

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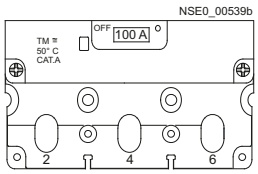
Selection and ordering data

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent protection "**L**" I_R	Operating current of the instantaneous short-circuit protection "**I**" I_i	DT	I_{cu} up to 55 kA at 415 V, standard breaking capacity N See "Overview". (N) Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	A							kg

4-pole, fixed-mounted, for line protection, 16 A to 630 A, thermal-magnetic overcurrent releases LI

NSE0_00695



Line protection, TM, LI function

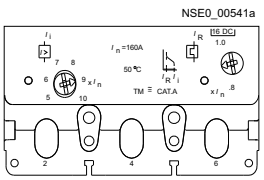
With non-adjustable thermal overcurrent releases, non-adjustable short-circuit releases, without overcurrent and short-circuit release in the 4th pole (N)

VL160X/3VL1	16	16	300	3VL1796-1EH4□-□□□□	1	1 unit	1CC	2.300
	20	20	300	3VL1702-1EH4□-□□□□	1	1 unit	1CC	2.300
	25	25	300	3VL1725-1EH4□-□□□□	1	1 unit	1CC	2.500
	32	32	300	3VL1703-1EH4□-□□□□	1	1 unit	1CC	2.500
	40	40	600	3VL1704-1EH4□-□□□□	1	1 unit	1CC	2.500
	50	50	600	3VL1705-1EH4□-□□□□	1	1 unit	1CC	2.500
	63	63	600	3VL1706-1EH4□-□□□□	1	1 unit	1CC	2.500
	80	80	1000	3VL1708-1EH4□-□□□□	1	1 unit	1CC	2.500
	100	100	1000	3VL1710-1EH4□-□□□□	1	1 unit	1CC	2.500
	125	125	1000	3VL1712-1EH4□-□□□□	1	1 unit	1CC	2.500
	160	160	1500	3VL1716-1EH4□-□□□□	1	1 unit	1CC	2.500

Connection type can be selected by assignment of the 12th position of the Article No.

• Connection with box terminal	3
• Connection with screw terminal not in conjunction with RCD module[1)]	6

NSE0_00704



Line protection, TM, LI function

With adjustable thermal overcurrent releases, adjustable short-circuit releases, without overcurrent and short-circuit release in the 4th pole (N)

VL160/3VL2	50	40 ... 50	300 ... 600	3VL2705-1EJ4□-□□□□	1	1 unit	1CC	3.000
	63	50 ... 63	300 ... 600	3VL2706-1EJ4□-□□□□	1	1 unit	1CC	3.000
	80	63 ... 80	400 ... 800	3VL2708-1EJ4□-□□□□	1	1 unit	1CC	3.000
	100	80 ... 100	500 ... 1000	3VL2710-1EJ4□-□□□□	1	1 unit	1CC	3.000
	125	100 ... 125	625 ... 1250	3VL2712-1EJ4□-□□□□	1	1 unit	1CC	3.000
	160	125 ... 160	800 ... 1600	3VL2716-1EJ4□-□□□□	1	1 unit	1CC	3.000
VL250/3VL3	200	160 ... 200	1000 ... 2000	3VL3720-1EJ4□-□□□□	1	1 unit	1CC	3.200
	250	200 ... 250	1250 ... 2500	3VL3725-1EJ4□-□□□□	1	1 unit	1CC	3.200

Connection type can be selected by assignment of the 12th position of the Article No.

• Connection with box terminal	3
• Connection with flat screw terminal[1)]	6

VL400/3VL4	200	160 ... 200	1000 ... 2000	3VL4720-1EJ46-□□□□	1	1 unit	1CC	7.400
	250	200 ... 250	1250 ... 2500	3VL4725-1EJ46-□□□□	1	1 unit	1CC	7.400
	315	250 ... 315	1575 ... 3150	3VL4731-1EJ46-□□□□	1	1 unit	1CC	7.400
	400	320 ... 400	2000 ... 4000	3VL4740-1EJ46-□□□□	1	1 unit	1CC	7.400
VL630/3VL5	315	250 ... 315	1575 ... 3150	3VL5731-1EJ46-□□□□	1	1 unit	1CC	11.200
	400	320 ... 400	2000 ... 4000	3VL5740-1EJ46-□□□□	1	1 unit	1CC	11.200
	500	400 ... 500	2500 ... 5000	3VL5750-1EJ46-□□□□	1	1 unit	1CC	11.200
	630	500 ... 630	3150 ... 6300	3VL5763-1EJ46-□□□□	1	1 unit	1CC	11.200

[1)] **When the circuit breaker with flat screw terminal is ordered, the basic price is reduced.**

*** You can order this quantity or a multiple thereof.**

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DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL1796-2EH4□-□□□□		1	1 unit	1CC	2.300		--					
	3VL1702-2EH4□-□□□□		1	1 unit	1CC	2.300		--					
	3VL1725-2EH4□-□□□□		1	1 unit	1CC	2.500		--					
	3VL1703-2EH4□-□□□□		1	1 unit	1CC	2.500		--					
	3VL1704-2EH4□-□□□□		1	1 unit	1CC	2.500		--					
	3VL1705-2EH4□-□□□□		1	1 unit	1CC	2.500		--					
	3VL1706-2EH4□-□□□□		1	1 unit	1CC	2.500		--					
	3VL1708-2EH4□-□□□□		1	1 unit	1CC	2.500		--					
	3VL1710-2EH4□-□□□□		1	1 unit	1CC	2.500		--					
	3VL1712-2EH4□-□□□□		1	1 unit	1CC	2.500		--					
	3VL1716-2EH4□-□□□□		1	1 unit	1CC	2.500		--					
	3VL2705-2EJ4□-□□□□		1	1 unit	1CC	3.000		**3VL2705-3EJ4□-□□□□**		1	1 unit	1CC	3.000
	3VL2706-2EJ4□-□□□□		1	1 unit	1CC	3.000		**3VL2706-3EJ4□-□□□□**		1	1 unit	1CC	3.000
	3VL2708-2EJ4□-□□□□		1	1 unit	1CC	3.000		**3VL2708-3EJ4□-□□□□**		1	1 unit	1CC	3.000
	3VL2710-2EJ4□-□□□□		1	1 unit	1CC	3.000		**3VL2710-3EJ4□-□□□□**		1	1 unit	1CC	3.000
	3VL2712-2EJ4□-□□□□		1	1 unit	1CC	3.000		**3VL2712-3EJ4□-□□□□**		1	1 unit	1CC	3.000
	3VL2716-2EJ4□-□□□□		1	1 unit	1CC	3.000		**3VL2716-3EJ4□-□□□□**		1	1 unit	1CC	3.000
	3VL3720-2EJ4□-□□□□		1	1 unit	1CC	3.200		**3VL3720-3EJ4□-□□□□**		1	1 unit	1CC	3.200
	3VL3725-2EJ4□-□□□□		1	1 unit	1CC	3.200		**3VL3725-3EJ4□-□□□□**		1	1 unit	1CC	3.200
	3VL4720-2EJ46-□□□□		1	1 unit	1CC	7.400		**3VL4720-3EJ46-□□□□**		1	1 unit	1CC	7.400
	3VL4725-2EJ46-□□□□		1	1 unit	1CC	7.400		**3VL4725-3EJ46-□□□□**		1	1 unit	1CC	7.400
	3VL4731-2EJ46-□□□□		1	1 unit	1CC	7.400		**3VL4731-3EJ46-□□□□**		1	1 unit	1CC	7.400
	3VL4740-2EJ46-□□□□		1	1 unit	1CC	7.400		**3VL4740-3EJ46-□□□□**		1	1 unit	1CC	7.400
	3VL5731-2EJ46-□□□□		1	1 unit	1CC	11.200		**3VL5731-3EJ46-□□□□**		1	1 unit	1CC	11.200
	3VL5740-2EJ46-□□□□		1	1 unit	1CC	11.200		**3VL5740-3EJ46-□□□□**		1	1 unit	1CC	11.200
	3VL5750-2EJ46-□□□□		1	1 unit	1CC	11.200		**3VL5750-3EJ46-□□□□**		1	1 unit	1CC	11.200
	3VL5763-2EJ46-□□□□		1	1 unit	1CC	11.200		**3VL5763-3EJ46-□□□□**		1	1 unit	1CC	11.200

3 6

3 6

3 6

*** You can order this quantity or a multiple thereof.**

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4-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent protection "**L**" I_R	Operating current of the instantaneous short-circuit protection "**I**" I_i	DT	I_{cu} up to 55 kA at 415 V, standard breaking capacity N See "Overview".					
					Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	A							kg

4-pole, fixed-mounted, for line protection, 16 A to 160 A, thermal-magnetic overcurrent releases LIN

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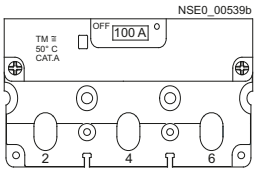

Line protection, TM, LIN function

With non-adjustable thermal overcurrent releases, non-adjustable short-circuit releases, with "N" overcurrent and short-circuit release
N protection = 100 %

VL160X/3VL1	16	16	300	**3VL1796-1EA4□-□□□□**	1	1 unit	1CC	2.300
	20	20	300	**3VL1702-1EA4□-□□□□**	1	1 unit	1CC	2.300
	25	25	300	**3VL1725-1EA4□-□□□□**	1	1 unit	1CC	2.500
	32	32	300	**3VL1703-1EA4□-□□□□**	1	1 unit	1CC	2.500
	40	40	600	**3VL1704-1EA4□-□□□□**	1	1 unit	1CC	2.500
	50	50	600	**3VL1705-1EA4□-□□□□**	1	1 unit	1CC	2.500
	63	63	600	**3VL1706-1EA4□-□□□□**	1	1 unit	1CC	2.500
	80	80	1000	**3VL1708-1EA4□-□□□□**	1	1 unit	1CC	2.500
	100	100	1000	**3VL1710-1EA4□-□□□□**	1	1 unit	1CC	2.500
	125	125	1000	**3VL1712-1EL4□-□□□□**	1	1 unit	1CC	2.500
	160	160	1500	**3VL1716-1EL4□-□□□□**	1	1 unit	1CC	2.500

Connection type can be selected by assignment of the 12th position of the Article No.

• Connection with box terminal	**3**
• Connection with screw terminal not in conjunction with RCD module[1)]	**6**

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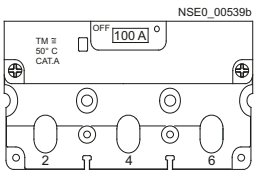

Line protection, TM, LIN function

With non-adjustable thermal overcurrent releases, non-adjustable short-circuit releases, with "N" overcurrent and short-circuit release
N protection = 60 %

VL160X/3VL1	125	125	1000	**3VL1712-1EA4□-□□□□**	1	1 unit	1CC	2.500
	160	160	1500	**3VL1716-1EA4□-□□□□**	1	1 unit	1CC	2.500

Connection type can be selected by assignment of the 12th position of the Article No.

• Connection with box terminal	**3**
• Connection with screw terminal not in conjunction with RCD module[1)]	**6**

1) When the circuit breaker with flat screw terminal is ordered, the basic price is reduced.

*** You can order this quantity or a multiple thereof.**

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DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL1796-2EA4□-□□□□		1	1 unit	1CC	2.300		--					
	3VL1702-2EA4□-□□□□		1	1 unit	1CC	2.300		--					
	3VL1725-2EA4□-□□□□		1	1 unit	1CC	2.500		--					
	3VL1703-2EA4□-□□□□		1	1 unit	1CC	2.500		--					
	3VL1704-2EA4□-□□□□		1	1 unit	1CC	2.500		--					
	3VL1705-2EA4□-□□□□		1	1 unit	1CC	2.500		--					
	3VL1706-2EA4□-□□□□		1	1 unit	1CC	2.500		--					
	3VL1708-2EA4□-□□□□		1	1 unit	1CC	2.500		--					
	3VL1710-2EA4□-□□□□		1	1 unit	1CC	2.500		--					
	3VL1712-2EL4□-□□□□		1	1 unit	1CC	2.500		--					
	3VL1716-2EL4□-□□□□		1	1 unit	1CC	2.500		--					
	3 **6**												
	3VL1712-2EA4□-□□□□		1	1 unit	1CC	2.500		--					
	3VL1716-2EA4□-□□□□		1	1 unit	1CC	2.500		--					
	3 **6**												

*** You can order this quantity or a multiple thereof.**

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Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent protection "**L**" I_R	Operating current of the instantaneous short-circuit protection "**I**" I_i	DT	I_{cu} up to 55 kA at 415 V, standard breaking capacity N See "Overview".					
					Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	A							kg
4-pole, fixed-mounted, for line protection, 16 A to 630 A, thermal-magnetic overcurrent releases LIN										

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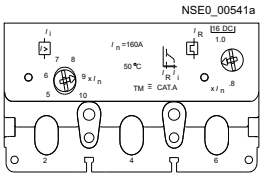

Line protection, TM, LIN function

With adjustable thermal overcurrent releases, adjustable short-circuit releases, with "N" overcurrent and short-circuit release
N protection = 100 %

VL160/3VL2	50	40 ... 50	300 ... 600	3VL2705-1EM4□-□□□□	1	1 unit	1CC	3.000
	63	50 ... 63	300 ... 600	3VL2706-1EM4□-□□□□	1	1 unit	1CC	3.000
	80	63 ... 80	400 ... 800	3VL2708-1EM4□-□□□□	1	1 unit	1CC	3.000
	100	80 ... 100	500 ... 1000	3VL2710-1EM4□-□□□□	1	1 unit	1CC	3.000
	125	100 ... 125	625 ... 1250	3VL2712-1EM4□-□□□□	1	1 unit	1CC	3.000
	160	125 ... 160	800 ... 1600	3VL2716-1EM4□-□□□□	1	1 unit	1CC	3.000
VL250/3VL3	200	160 ... 200	1000 ... 2000	3VL3720-1EM4□-□□□□	1	1 unit	1CC	3.200
	250	200 ... 250	1250 ... 2500	3VL3725-1EM4□-□□□□	1	1 unit	1CC	3.200
		Connection type can be selected by assignment of the 12th position of the Article No.						
		• Connection with box terminal		3				
		• Connection with flat screw terminal[1]		6				
VL400/3VL4	200	160 ... 200	1000 ... 2000	3VL4720-1EM46-□□□□	1	1 unit	1CC	7.400
	250	200 ... 250	1250 ... 2500	3VL4725-1EM46-□□□□	1	1 unit	1CC	7.400
	315	250 ... 315	1575 ... 3150	3VL4731-1EM46-□□□□	1	1 unit	1CC	7.400
	400	320 ... 400	2000 ... 4000	3VL4740-1EM46-□□□□	1	1 unit	1CC	7.400
VL630/3VL5	315	250 ... 315	1575 ... 3150	3VL5731-1EM46-□□□□	1	1 unit	1CC	11.200
	400	320 ... 400	2000 ... 4000	3VL5740-1EM46-□□□□	1	1 unit	1CC	11.200
	500	400 ... 500	2500 ... 5000	3VL5750-1EM46-□□□□	1	1 unit	1CC	11.200
	630	500 ... 630	3150 ... 6300	3VL5763-1EM46-□□□□	1	1 unit	1CC	11.200

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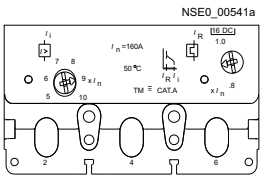

Line protection, TM, LIN function

With adjustable thermal overcurrent releases, adjustable short-circuit releases, with "N" overcurrent and short-circuit release
N protection = 60 %

VL160/3VL2	125	100 ... 125	625 ... 1250	3VL2712-1EC4□-□□□□	1	1 unit	1CC	3.000
	160	125 ... 160	800 ... 1600	3VL2716-1EC4□-□□□□	1	1 unit	1CC	3.000
VL250/3VL3	200	160 ... 200	1000 ... 2000	3VL3720-1EC4□-□□□□	1	1 unit	1CC	3.200
	250	200 ... 250	1250 ... 2500	3VL3725-1EC4□-□□□□	1	1 unit	1CC	3.200
		Connection type can be selected by assignment of the 12th position of the Article No.						
		• Connection with box terminal		3				
		• Connection with flat screw terminal[1]		6				
VL400/3VL4	200	160 ... 200	1000 ... 2000	3VL4720-1EC46-□□□□	1	1 unit	1CC	7.400
	250	200 ... 250	1250 ... 2500	3VL4725-1EC46-□□□□	1	1 unit	1CC	7.400
	315	250 ... 315	1575 ... 3150	3VL4731-1EC46-□□□□	1	1 unit	1CC	7.400
	400	320 ... 400	2000 ... 4000	3VL4740-1EC46-□□□□	1	1 unit	1CC	7.400
VL630/3VL5	315	250 ... 315	1575 ... 3150	3VL5731-1EC46-□□□□	1	1 unit	1CC	11.200
	400	320 ... 400	2000 ... 4000	3VL5740-1EC46-□□□□	1	1 unit	1CC	11.200
	500	400 ... 500	2500 ... 5000	3VL5750-1EC46-□□□□	1	1 unit	1CC	11.200
	630	500 ... 630	3150 ... 6300	3VL5763-1EC46-□□□□	1	1 unit	1CC	11.200

[1] **When the circuit breaker with flat screw terminal is ordered, the basic price is reduced.**

* **You can order this quantity or a multiple thereof.**

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DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2705-2EM4□-□□□□		1	1 unit	1CC	3.000		**3VL2705-3EM4□-□□□□**		1	1 unit	1CC	3.000
	3VL2706-2EM4□-□□□□		1	1 unit	1CC	3.000		**3VL2706-3EM4□-□□□□**		1	1 unit	1CC	3.000
	3VL2708-2EM4□-□□□□		1	1 unit	1CC	3.000		**3VL2708-3EM4□-□□□□**		1	1 unit	1CC	3.000
	3VL2710-2EM4□-□□□□		1	1 unit	1CC	3.000		**3VL2710-3EM4□-□□□□**		1	1 unit	1CC	3.000
	3VL2712-2EM4□-□□□□		1	1 unit	1CC	3.000		**3VL2712-3EM4□-□□□□**		1	1 unit	1CC	3.000
	3VL2716-2EM4□-□□□□		1	1 unit	1CC	3.000		**3VL2716-3EM4□-□□□□**		1	1 unit	1CC	3.000
	3VL3720-2EM4□-□□□□		1	1 unit	1CC	3.200		**3VL3720-3EM4□-□□□□**		1	1 unit	1CC	3.200
	3VL3725-2EM4□-□□□□		1	1 unit	1CC	3.200		**3VL3725-3EM4□-□□□□**		1	1 unit	1CC	3.200
	3 6							**3 6**					
	3VL4720-2EM46-□□□□		1	1 unit	1CC	7.400		**3VL4720-3EM46-□□□□**		1	1 unit	1CC	7.400
	3VL4725-2EM46-□□□□		1	1 unit	1CC	7.400		**3VL4725-3EM46-□□□□**		1	1 unit	1CC	7.400
	3VL4731-2EM46-□□□□		1	1 unit	1CC	7.400		**3VL4731-3EM46-□□□□**		1	1 unit	1CC	7.400
	3VL4740-2EM46-□□□□		1	1 unit	1CC	7.400		**3VL4740-3EM46-□□□□**		1	1 unit	1CC	7.400
	3VL5731-2EM46-□□□□		1	1 unit	1CC	11.200		**3VL5731-3EM46-□□□□**		1	1 unit	1CC	11.200
	3VL5740-2EM46-□□□□		1	1 unit	1CC	11.200		**3VL5740-3EM46-□□□□**		1	1 unit	1CC	11.200
	3VL5750-2EM46-□□□□		1	1 unit	1CC	11.200		**3VL5750-3EM46-□□□□**		1	1 unit	1CC	11.200
	3VL5763-2EM46-□□□□		1	1 unit	1CC	11.200		**3VL5763-3EM46-□□□□**		1	1 unit	1CC	11.200
	3VL2712-2EC4□-□□□□		1	1 unit	1CC	3.000		**3VL2712-3EC4□-□□□□**		1	1 unit	1CC	3.000
	3VL2716-2EC4□-□□□□		1	1 unit	1CC	3.000		**3VL2716-3EC4□-□□□□**		1	1 unit	1CC	3.000
	3VL3720-2EC4□-□□□□		1	1 unit	1CC	3.200		**3VL3720-3EC4□-□□□□**		1	1 unit	1CC	3.200
	3VL3725-2EC4□-□□□□		1	1 unit	1CC	3.200		**3VL3725-3EC4□-□□□□**		1	1 unit	1CC	3.200
	3 6							**3 6**					
	3VL4720-2EC46-□□□□		1	1 unit	1CC	7.400		**3VL4720-3EC46-□□□□**		1	1 unit	1CC	7.400
	3VL4725-2EC46-□□□□		1	1 unit	1CC	7.400		**3VL4725-3EC46-□□□□**		1	1 unit	1CC	7.400
	3VL4731-2EC46-□□□□		1	1 unit	1CC	7.400		**3VL4731-3EC46-□□□□**		1	1 unit	1CC	7.400
	3VL4740-2EC46-□□□□		1	1 unit	1CC	7.400		**3VL4740-3EC46-□□□□**		1	1 unit	1CC	7.400
	3VL5731-2EC46-□□□□		1	1 unit	1CC	11.200		**3VL5731-3EC46-□□□□**		1	1 unit	1CC	11.200
	3VL5740-2EC46-□□□□		1	1 unit	1CC	11.200		**3VL5740-3EC46-□□□□**		1	1 unit	1CC	11.200
	3VL5750-2EC46-□□□□		1	1 unit	1CC	11.200		**3VL5750-3EC46-□□□□**		1	1 unit	1CC	11.200
	3VL5763-2EC46-□□□□		1	1 unit	1CC	11.200		**3VL5763-3EC46-□□□□**		1	1 unit	1CC	11.200

*** You can order this quantity or a multiple thereof.**

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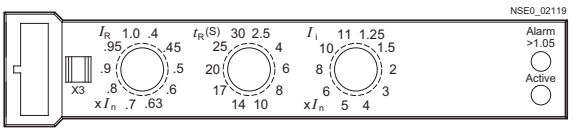
4-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent protection "L" I_R	Operating current of the instantaneous short-circuit protection "I" I_i	DT	I_{cu} up to 55 kA at 415 V, standard breaking capacity N (N) See "Overview". Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	A							kg

4-pole, fixed-mounted, for line protection, 63 A to 1600 A, Electronic Trip Units LI



ETU10, LI function

With adjustable overcurrent releases, adjustable short-circuit releases, without overcurrent and short-circuit release in the 4th pole (N)

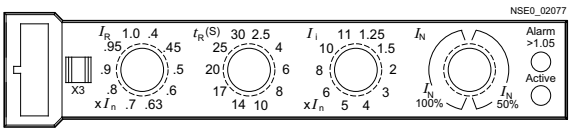
VL160/3VL2	63	25 ... 63	1.25 ... 11 × I_n	3VL2706-1□□4□-□□□□	1	1 unit	1CC	3.100
	100	40 ... 100	1.25 ... 11 × I_n	3VL2710-1□□4□-□□□□	1	1 unit	1CC	3.100
	160	64 ... 160	1.25 ... 11 × I_n	3VL2716-1□□4□-□□□□	1	1 unit	1CC	3.100
VL250/3VL3	200	80 ... 200	1.25 ... 11 × I_n	3VL3720-1□□4□-□□□□	1	1 unit	1CC	3.300
	250	100 ... 250	1.25 ... 11 × I_n	3VL3725-1□□4□-□□□□	1	1 unit	1CC	3.300

Connection type can be selected by assignment of the 12th position of the Article No.

• Connection with box terminal	3	
• Connection with flat screw terminal[1]	6	
VL400/3VL4	315	128 ... 315	1.25 ... 11 × I_n	3VL4731-1□□46-□□□□	1	1 unit	1CC	7.600
	400	160 ... 400	1.25 ... 11 × I_n	3VL4740-1□□46-□□□□	1	1 unit	1CC	7.600
VL630/3VL5	630	252 ... 630	1.25 ... 10 × I_n	3VL5763-1□□46-□□□□	1	1 unit	1CC	11.700
VL800/3VL6	800	320 ... 800	1.25 ... 8 × I_n	3VL6780-1□□46-□□□□	1	1 unit	1CC	20.500
VL1250/3VL7	1000	400 ... 1000	1.25 ... 11 × I_n	3VL7710-1□□46-□□□□	1	1 unit	1CC	33.500
	1250	500 ... 1250	1.25 ... 11 × I_n	3VL7712-1□□46-□□□□	1	1 unit	1CC	33.500
VL1600/3VL8[2]	1600	640 ... 1600	1.25 ... 9 × I_n	3VL8716-1□□40-□□□□	1	1 unit	1CC	40.800

• Without communication preparation	TB
• With communication preparation	NB

4-pole, fixed-mounted, for line protection, 63 A to 1600 A, Electronic Trip Units LIN



ETU10, LIN function

With adjustable overcurrent releases, adjustable short-circuit releases with overcurrent and short-circuit release in the 4th pole (N)
N protection = 50/100 %

VL160/3VL2	63	25 ... 63	1.25 ... 11 × I_n	3VL2706-1□□4□-□□□□	1	1 unit	1CC	3.100
	100	40 ... 100	1.25 ... 11 × I_n	3VL2710-1□□4□-□□□□	1	1 unit	1CC	3.100
	160	64 ... 160	1.25 ... 11 × I_n	3VL2716-1□□4□-□□□□	1	1 unit	1CC	3.100
VL250/3VL3	200	80 ... 200	1.25 ... 11 × I_n	3VL3720-1□□4□-□□□□	1	1 unit	1CC	3.300
	250	100 ... 250	1.25 ... 11 × I_n	3VL3725-1□□4□-□□□□	1	1 unit	1CC	3.300

Connection type can be selected by assignment of the 12th position of the Article No.

• Connection with box terminal	3	
• Connection with flat screw terminal[1]	6	
VL400/3VL4	315	128 ... 315	1.25 ... 11 × I_n	3VL4731-1□□46-□□□□	1	1 unit	1CC	7.600
	400	160 ... 400	1.25 ... 11 × I_n	3VL4740-1□□46-□□□□	1	1 unit	1CC	7.600
VL630/3VL5	630	252 ... 630	1.25 ... 10 × I_n	3VL5763-1□□46-□□□□	1	1 unit	1CC	11.700
VL800/3VL6	800	320 ... 800	1.25 ... 8 × I_n	3VL6780-1□□46-□□□□	1	1 unit	1CC	20.500
VL1250/3VL7	1000	400 ... 1000	1.25 ... 11 × I_n	3VL7710-1□□46-□□□□	1	1 unit	1CC	33.500
	1250	500 ... 1250	1.25 ... 11 × I_n	3VL7712-1□□46-□□□□	1	1 unit	1CC	33.500
VL1600/3VL8[2]	1600	640 ... 1600	1.25 ... 9 × I_n	3VL8716-1□□40-□□□□	1	1 unit	1CC	40.800

• Without communication preparation	TA
• With communication preparation	NA
• Marine engineering-certified LRS, DNV, GL and BV (not communication-ready)	LA

[1] **When the circuit breaker with flat screw terminal is ordered, the basic price is reduced.**

[2] Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

* You can order this quantity or a multiple thereof.

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DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2706-2□□4□-□□□□		1	1 unit	1CC	3.100		**3VL2706-3□□4□-□□□□**		1	1 unit	1CC	3.100
	3VL2710-2□□4□-□□□□		1	1 unit	1CC	3.100		**3VL2710-3□□4□-□□□□**		1	1 unit	1CC	3.100
	3VL2716-2□□4□-□□□□		1	1 unit	1CC	3.100		**3VL2716-3□□4□-□□□□**		1	1 unit	1CC	3.100
	3VL3720-2□□4□-□□□□		1	1 unit	1CC	3.300		**3VL3720-3□□4□-□□□□**		1	1 unit	1CC	3.300
	3VL3725-2□□4□-□□□□		1	1 unit	1CC	3.300		**3VL3725-3□□4□-□□□□**		1	1 unit	1CC	3.300
	3 6							**3 6**					
	3VL4731-2□□46-□□□□		1	1 unit	1CC	7.600		**3VL4731-3□□46-□□□□**		1	1 unit	1CC	7.600
	3VL4740-2□□46-□□□□		1	1 unit	1CC	7.600		**3VL4740-3□□46-□□□□**		1	1 unit	1CC	7.600
	3VL5763-2□□46-□□□□		1	1 unit	1CC	11.700		**3VL5763-3□□46-□□□□**		1	1 unit	1CC	11.700
	3VL6780-2□□46-□□□□		1	1 unit	1CC	20.500		**3VL6780-3□□46-□□□□**		1	1 unit	1CC	20.500
	3VL7710-2□□46-□□□□		1	1 unit	1CC	33.500		**3VL7710-3□□46-□□□□**		1	1 unit	1CC	33.500
	3VL7712-2□□46-□□□□		1	1 unit	1CC	33.500		**3VL7712-3□□46-□□□□**		1	1 unit	1CC	33.500
	3VL8716-2□□40-□□□□		1	1 unit	1CC	40.800		**3VL8716-3□□40-□□□□**		1	1 unit	1CC	40.800
	TB NB							**TB NB**					

DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2706-2□□4□-□□□□		1	1 unit	1CC	3.100		**3VL2706-3□□4□-□□□□**		1	1 unit	1CC	3.100
	3VL2710-2□□4□-□□□□		1	1 unit	1CC	3.100		**3VL2710-3□□4□-□□□□**		1	1 unit	1CC	3.100
	3VL2716-2□□4□-□□□□		1	1 unit	1CC	3.100		**3VL2716-3□□4□-□□□□**		1	1 unit	1CC	3.100
	3VL3720-2□□4□-□□□□		1	1 unit	1CC	3.300		**3VL3720-3□□4□-□□□□**		1	1 unit	1CC	3.300
	3VL3725-2□□4□-□□□□		1	1 unit	1CC	3.300		**3VL3725-3□□4□-□□□□**		1	1 unit	1CC	3.300
	3 6							**3 6**					
	3VL4731-2□□46-□□□□		1	1 unit	1CC	7.600		**3VL4731-3□□46-□□□□**		1	1 unit	1CC	7.600
	3VL4740-2□□46-□□□□		1	1 unit	1CC	7.600		**3VL4740-3□□46-□□□□**		1	1 unit	1CC	7.600
	3VL5763-2□□46-□□□□		1	1 unit	1CC	11.700		**3VL5763-3□□46-□□□□**		1	1 unit	1CC	11.700
	3VL6780-2□□46-□□□□		1	1 unit	1CC	20.500		**3VL6780-3□□46-□□□□**		1	1 unit	1CC	20.500
	3VL7710-2□□46-□□□□		1	1 unit	1CC	33.500		**3VL7710-3□□46-□□□□**		1	1 unit	1CC	33.500
	3VL7712-2□□46-□□□□		1	1 unit	1CC	33.500		**3VL7712-3□□46-□□□□**		1	1 unit	1CC	33.500
	3VL8716-2□□40-□□□□		1	1 unit	1CC	40.800		**3VL8716-3□□40-□□□□**		1	1 unit	1CC	40.800
	TA NA LA							**TA NA LA**					

Communication:
- For accessories, see page 2/207.

- For more information, see chapter "Measuring Devices and Power Monitoring" and see chapter "Software".

*** You can order this quantity or a multiple thereof.**

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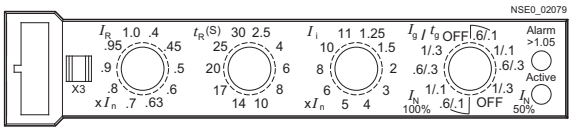
2

4-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent protection "**L**" I_R	Operating current of the instantaneous short-circuit protection "**I**" I_i	Ground-fault protection "**G**" I_g	DT	I_{cu} up to 55 kA at 415 V, standard breaking capacity N (N) See "Overview". Article No. / Price / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	A	A						kg

4-pole, fixed-mounted, for line protection, 63 A to 1600 A, Electronic Trip Units LING

NSE0_00693



ETU12, LING function for 4-wire three-phase systems

With adjustable overcurrent releases, adjustable short-circuit releases, vectorial summation current formation, ground-fault delay t_g = 0.1 ... 0.3 s, ground-fault protection (G) can be switched off with overcurrent and short-circuit release in the 4th pole (N), N protection = 50/100 %

VL160/3VL2	63	25 ... 63	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	**3VL2706-1□□4□-□□□□**	1	1 unit	1CC	3.100
	100	40 ... 100	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	**3VL2710-1□□4□-□□□□**	1	1 unit	1CC	3.100
	160	64 ... 160	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	**3VL2716-1□□4□-□□□□**	1	1 unit	1CC	3.100
VL250/3VL3	200	80 ... 200	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	**3VL3720-1□□4□-□□□□**	1	1 unit	1CC	3.300
	250	100 ... 250	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	**3VL3725-1□□4□-□□□□**	1	1 unit	1CC	3.300

Connection type can be selected by assignment of the 12th position of the Article No.

• Connection with box terminal	**3**
• Connection with flat screw terminal[1)]	**6**

VL400/3VL4	315	128 ... 315	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	**3VL4731-1□□46-□□□□**	1	1 unit	1CC	7.600
	400	160 ... 400	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	**3VL4740-1□□46-□□□□**	1	1 unit	1CC	7.600
VL630/3VL5	630	252 ... 630	1.25 ... 10 × I_n	0.6 ... 1 × I_n, OFF	**3VL5763-1□□46-□□□□**	1	1 unit	1CC	11.700
VL800/3VL6	800	320 ... 800	1.25 ... 8 × I_n	0.6 ... 1 × I_n, OFF	**3VL6780-1□□46-□□□□**	1	1 unit	1CC	20.500
VL1250/3VL7	1000	400 ... 1000	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	**3VL7710-1□□46-□□□□**	1	1 unit	1CC	33.500
	1250	500 ... 1250	1.25 ... 11 × I_n	0.6 ... 1 × I_n, OFF	**3VL7712-1□□46-□□□□**	1	1 unit	1CC	33.500
VL1600/3VL8[2)]	1600	640 ... 1600	1.25 ... 9 × I_n	0.6 ... 1 × I_n, OFF	**3VL8716-1□□40-□□□□**	1	1 unit	1CC	40.800

• Without communication preparation	**TN**
• With communication preparation	**NN**

1) **When the circuit breaker with flat screw terminal is ordered, the basic price is reduced.**

2) Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

Communication:

- For accessories, see page 2/207.
- For more information, see chapter "Measuring Devices and Power Monitoring" and see chapter "Software".

*** You can order this quantity or a multiple thereof.**

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DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L					
	Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2706-2□□4□-□□□□		1	1 unit	1CC	3.100		3VL2706-3□□4□-□□□□		1	1 unit	1CC	3.100
	3VL2710-2□□4□-□□□□		1	1 unit	1CC	3.100		3VL2710-3□□4□-□□□□		1	1 unit	1CC	3.100
	3VL2716-2□□4□-□□□□		1	1 unit	1CC	3.100		3VL2716-3□□4□-□□□□		1	1 unit	1CC	3.100
	3VL3720-2□□4□-□□□□		1	1 unit	1CC	3.300		3VL3720-3□□4□-□□□□		1	1 unit	1CC	3.300
	3VL3725-2□□4□-□□□□		1	1 unit	1CC	3.300		3VL3725-3□□4□-□□□□		1	1 unit	1CC	3.300
	3 6							**3 6**					
	3VL4731-2□□46-□□□□		1	1 unit	1CC	7.600		3VL4731-3□□46-□□□□		1	1 unit	1CC	7.600
	3VL4740-2□□46-□□□□		1	1 unit	1CC	7.600		3VL4740-3□□46-□□□□		1	1 unit	1CC	7.600
	3VL5763-2□□46-□□□□		1	1 unit	1CC	11.700		3VL5763-3□□46-□□□□		1	1 unit	1CC	11.700
	3VL6780-2□□46-□□□□		1	1 unit	1CC	20.500		3VL6780-3□□46-□□□□		1	1 unit	1CC	20.500
	3VL7710-2□□46-□□□□		1	1 unit	1CC	33.500		3VL7710-3□□46-□□□□		1	1 unit	1CC	33.500
	3VL7712-2□□46-□□□□		1	1 unit	1CC	33.500		3VL7712-3□□46-□□□□		1	1 unit	1CC	33.500
	3VL8716-2□□40-□□□□		1	1 unit	1CC	40.800		3VL8716-3□□40-□□□□		1	1 unit	1CC	40.800
	TN NN							**TN NN**					

* You can order this quantity or a multiple thereof.

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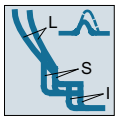
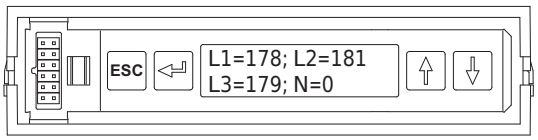
4-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent protection "**L**" I_R	Operating current of the instantaneous short-circuit protection "**I**" I_i	S function short-circuit protection (short-time delayed) **S**	DT	I_{cu} **up to 55 kA at 415 V, standard breaking capacity N** See "Overview". Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	A	A							kg
4-pole, fixed-mounted, for line protection – generator protection, 63 A to 1600 A, Electronic Trip Units LI, LSI, LIN, LSIN											
 NSE0_00696	 NSE0_02129										
LCD-ETU40, LI/LSI/LIN/LSIN function selectable											
With adjustable overcurrent releases, adjustable short-circuit releases, short-circuit delay t_{sd} = 0 ... 0.5 s with overcurrent and short-circuit release in the 4th pole (N), N protection = 50 ... 100 %, OFF											
VL160/3VL2	63[1]	25 ... 63	1.25 ... 11 × I_n	1.5 ... 10 × I_R		**3VL2706-1UJ4□-□□□□**		1	1 unit	1CC	3.100
	100[1]	40 ... 100	1.25 ... 11 × I_n	1.5 ... 10 × I_R		**3VL2710-1UJ4□-□□□□**		1	1 unit	1CC	3.100
	160	64 ... 160	1.25 ... 11 × I_n	1.5 ... 10 × I_R		**3VL2716-1UJ4□-□□□□**		1	1 unit	1CC	3.100
VL250/3VL3	200	80 ... 200	1.25 ... 11 × I_n	1.5 ... 10 × I_R		**3VL3720-1UJ4□-□□□□**		1	1 unit	1CC	3.300
	250	100 ... 250	1.25 ... 11 × I_n	1.5 ... 10 × I_R		**3VL3725-1UJ4□-□□□□**		1	1 unit	1CC	3.300
	Connection type can be selected by assignment of the 12th position of the Article No.										
	• Connection with box terminal					**3**					
	• Connection with flat screw terminal[2]					**6**					
VL400/3VL4	315	128 ... 315	1.25 ... 11 × I_n	1.5 ... 10 × I_R		**3VL4731-1UJ46-□□□□**		1	1 unit	1CC	7.600
	400	160 ... 400	1.25 ... 11 × I_n	1.5 ... 10 × I_R		**3VL4740-1UJ46-□□□□**		1	1 unit	1CC	7.600
VL630/3VL5	630	252 ... 630	1.25 ... 10 × I_n	1.5 ... 9 × I_R		**3VL5763-1UJ46-□□□□**		1	1 unit	1CC	11.700
VL800/3VL6	800	320 ... 800	1.25 ... 8 × I_n	1.5 ... 7 × I_R		**3VL6780-1UJ46-□□□□**		1	1 unit	1CC	20.500
VL1250/3VL7	1000	400 ... 1000	1.25 ... 11 × I_n	1.5 ... 10 × I_R		**3VL7710-1UJ46-□□□□**		1	1 unit	1CC	33.500
	1250	500 ... 1250	1.25 ... 11 × I_n	1.5 ... 10 × I_R		**3VL7712-1UJ46-□□□□**		1	1 unit	1CC	33.500
VL1600/3VL8[3]	1600	640 ... 1600	1.25 ... 9 × I_n	1.5 ... 8 × I_R		**3VL8716-1UJ40-□□□□**		1	1 unit	1CC	40.800

[1] N = 100 % protection for $I_n \leq 100$ A.

[2] When the circuit breaker with flat screw terminal is ordered, the basic price is reduced.

[3] Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

*** You can order this quantity or a multiple thereof.**

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DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2706-2UJ4□-□□□□		1	1 unit	1CC	3.100		**3VL2706-3UJ4□-□□□□**		1	1 unit	1CC	3.100
	3VL2710-2UJ4□-□□□□		1	1 unit	1CC	3.100		**3VL2710-3UJ4□-□□□□**		1	1 unit	1CC	3.100
	3VL2716-2UJ4□-□□□□		1	1 unit	1CC	3.100		**3VL2716-3UJ4□-□□□□**		1	1 unit	1CC	3.100
	3VL3720-2UJ4□-□□□□		1	1 unit	1CC	3.300		**3VL3720-3UJ4□-□□□□**		1	1 unit	1CC	3.300
	3VL3725-2UJ4□-□□□□		1	1 unit	1CC	3.300		**3VL3725-3UJ4□-□□□□**		1	1 unit	1CC	3.300
	3 6							**3 6**					
	3VL4731-2UJ46-□□□□		1	1 unit	1CC	7.600		**3VL4731-3UJ46-□□□□**		1	1 unit	1CC	7.600
	3VL4740-2UJ46-□□□□		1	1 unit	1CC	7.600		**3VL4740-3UJ46-□□□□**		1	1 unit	1CC	7.600
	3VL5763-2UJ46-□□□□		1	1 unit	1CC	11.700		**3VL5763-3UJ46-□□□□**		1	1 unit	1CC	11.700
	3VL6780-2UJ46-□□□□		1	1 unit	1CC	20.500		**3VL6780-3UJ46-□□□□**		1	1 unit	1CC	20.500
	3VL7710-2UJ46-□□□□		1	1 unit	1CC	33.500		**3VL7710-3UJ46-□□□□**		1	1 unit	1CC	33.500
	3VL7712-2UJ46-□□□□		1	1 unit	1CC	33.500		**3VL7712-3UJ46-□□□□**		1	1 unit	1CC	33.500
	3VL8716-2UJ40-□□□□		1	1 unit	1CC	40.800		**3VL8716-3UJ40-□□□□**		1	1 unit	1CC	40.800

*** You can order this quantity or a multiple thereof.**

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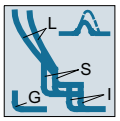
4-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent protection "**L**" I_R	Operating current of the instantaneous short-circuit protection "**I**" I_i	S function short-circuit protection (short-time delayed) **S**	Ground-fault protection "**G**" I_g	DT	**I_{cu} up to 55 kA at 415 V, standard breaking capacity N** See "Overview". Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	A	A	A							kg

4-pole, fixed-mounted, for line protection – generator protection, 63 A to 1600 A, Electronic Trip Units LSIG, LSING



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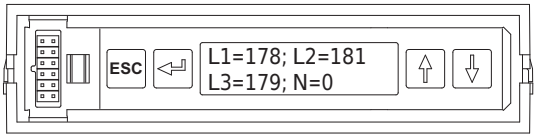

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LCD-ETU42, LSIG/LSING function for 4-wire three-phase systems and time-based discrimination

With adjustable overcurrent releases, adjustable short-circuit releases
Ground fault delay t_g = 0.1 ... 0.5 s, short-circuit delay t_{sd} = 0 ... 0.5 s
with overcurrent and short-circuit release in the 4th pole (N), N protection = 50 ... 100 %, OFF

VL160/3VL2	63	25 ... 63	1.25 ... 11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL2706-1UN4□-□□□□**	1	1 unit	1CC	3.100
	100	40 ... 100	1.25 ... 11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL2710-1UN4□-□□□□**	1	1 unit	1CC	3.100
	160	64 ... 160	1.25 ... 11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL2716-1UN4□-□□□□**	1	1 unit	1CC	3.100
VL250/3VL3	200	80 ... 200	1.25 ... 11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL3720-1UN4□-□□□□**	1	1 unit	1CC	3.300
	250	100 ... 250	1.25 ... 11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL3725-1UN4□-□□□□**	1	1 unit	1CC	3.300

Connection type can be selected by assignment of the 12th position of the Article No.

• Connection with box terminal	**3**
• Connection with flat screw terminal[1)]	**6**

VL400/3VL4	315	128 ... 315	1.25 ... 11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL4731-1UN46-□□□□**	1	1 unit	1CC	7.600
	400	160 ... 400	1.25 ... 11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL4740-1UN46-□□□□**	1	1 unit	1CC	7.600
VL630/3VL5	630	252 ... 630	1.25 ... 10 × I_n	1.5 ... 9 × I_R	0.4 ... 1 × I_n	**3VL5763-1UN46-□□□□**	1	1 unit	1CC	11.700
VL800/3VL6	800	320 ... 800	1.25 ... 8 × I_n	1.5 ... 7 × I_R	0.4 ... 1 × I_n	**3VL6780-1UN46-□□□□**	1	1 unit	1CC	20.500
VL1250/3VL7	1000	400 ... 1000	1.25 ... 11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL7710-1UN46-□□□□**	1	1 unit	1CC	33.500
	1250	500 ... 1250	1.25 ... 11 × I_n	1.5 ... 10 × I_R	0.4 ... 1 × I_n	**3VL7712-1UN46-□□□□**	1	1 unit	1CC	33.500
VL1600/3VL8[2)]	1600	640 ... 1600	1.25 ... 9 × I_n	1.5 ... 8 × I_R	0.4 ... 1 I_n	**3VL8716-1UN40-□□□□**	1	1 unit	1CC	40.800

1) When the circuit breaker with flat screw terminal is ordered, the basic price is reduced.

2) Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

*** You can order this quantity or a multiple thereof.**

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DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2706-2UN4□-□□□□		1	1 unit	1CC	3.100		**3VL2706-3UN4□-□□□□**		1	1 unit	1CC	3.100
	3VL2710-2UN4□-□□□□		1	1 unit	1CC	3.100		**3VL2710-3UN4□-□□□□**		1	1 unit	1CC	3.100
	3VL2716-2UN4□-□□□□		1	1 unit	1CC	3.100		**3VL2716-3UN4□-□□□□**		1	1 unit	1CC	3.100
	3VL3720-2UN4□-□□□□		1	1 unit	1CC	3.300		**3VL3720-3UN4□-□□□□**		1	1 unit	1CC	3.300
	3VL3725-2UN4□-□□□□		1	1 unit	1CC	3.300		**3VL3725-3UN4□-□□□□**		1	1 unit	1CC	3.300
	3 6							**3 6**					
	3VL4731-2UN46-□□□□		1	1 unit	1CC	7.600		**3VL4731-3UN46-□□□□**		1	1 unit	1CC	7.600
	3VL4740-2UN46-□□□□		1	1 unit	1CC	7.600		**3VL4740-3UN46-□□□□**		1	1 unit	1CC	7.600
	3VL5763-2UN46-□□□□		1	1 unit	1CC	11.700		**3VL5763-3UN46-□□□□**		1	1 unit	1CC	11.700
	3VL6780-2UN46-□□□□		1	1 unit	1CC	20.500		**3VL6780-3UN46-□□□□**		1	1 unit	1CC	20.500
	3VL7710-2UN46-□□□□		1	1 unit	1CC	33.500		**3VL7710-3UN46-□□□□**		1	1 unit	1CC	33.500
	3VL7712-2UN46-□□□□		1	1 unit	1CC	33.500		**3VL7712-3UN46-□□□□**		1	1 unit	1CC	33.500
	3VL8716-2UN40-□□□□		1	1 unit	1CC	40.800		**3VL8716-3UN40-□□□□**		1	1 unit	1CC	40.800

*** You can order this quantity or a multiple thereof.**

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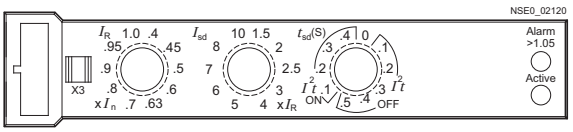
4-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent protection "**L**" I_R	Operating current of the instantaneous short-circuit protection "**I**" I_i	S function short-circuit protection (short-time delayed) **S**	DT	I_{cu} up to 55 kA at 415 V, standard breaking capacity N (N) See "Overview". Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	A	A							kg

4-pole, fixed-mounted, for line protection – generator protection, 63 A to 1600 A, Electronic Trip Units LSI



ETU20, LSI function for time-based discrimination

With adjustable overcurrent releases, non-adjustable short-circuit releases, short-circuit delay (t_{sd} = 0 ... 0.5 s)
Without overcurrent and short-circuit release in the 4th pole (N)

VL160/3VL2	63	25 ... 63	11 × I_n	1.5 ... 10 × I_R	3VL2706-1□□4□-□□□□	1	1 unit	1CC	3.100
	100	40 ... 100	11 × I_n	1.5 ... 10 × I_R	3VL2710-1□□4□-□□□□	1	1 unit	1CC	3.100
	160	64 ... 160	11 × I_n	1.5 ... 10 × I_R	3VL2716-1□□4□-□□□□	1	1 unit	1CC	3.100
VL250/3VL3	200	80 ... 200	11 × I_n	1.5 ... 10 × I_R	3VL3720-1□□4□-□□□□	1	1 unit	1CC	3.300
	250	100 ... 250	11 × I_n	1.5 ... 10 × I_R	3VL3725-1□□4□-□□□□	1	1 unit	1CC	3.300

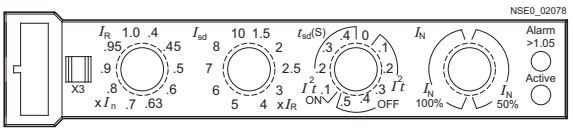
Connection type can be selected by assignment of the 12th position of the Article No.

• Connection with box terminal	**3**
• Connection with flat screw terminal[1)]	**6**

VL400/3VL4	315	128 ... 315	11 × I_n	1.5 ... 10 × I_R	3VL4731-1□□46-□□□□	1	1 unit	1CC	7.600
	400	160 ... 400	11 × I_n	1.5 ... 10 × I_R	3VL4740-1□□46-□□□□	1	1 unit	1CC	7.600
VL630/3VL5	630	252 ... 630	10 × I_n	1.5 ... 9 × I_R	3VL5763-1□□46-□□□□	1	1 unit	1CC	11.700
VL800/3VL6	800	320 ... 800	8 × I_n	1.5 ... 7 × I_R	3VL6780-1□□46-□□□□	1	1 unit	1CC	20.500
VL1250/3VL7	1000	400 ... 1000	11 × I_n	1.5 ... 10 × I_R	3VL7710-1□□46-□□□□	1	1 unit	1CC	33.500
	1250	500 ... 1250	11 × I_n	1.5 ... 10 × I_R	3VL7712-1□□46-□□□□	1	1 unit	1CC	33.500
VL1600/3VL8[1)]	1600	640 ... 1600	9 × I_n	1.5 ... 8 × I_R	3VL8716-1□□40-□□□□	1	1 unit	1CC	40.800

• Without communication preparation	**TE**
• With communication preparation	**NE**

4-pole, fixed-mounted, for line protection – generator protection, 63 A to 1600 A, Electronic Trip Units LSIN



ETU20, LSIN function for time-based discrimination

With adjustable overcurrent releases, non-adjustable short-circuit releases, short-circuit delay (t_{sd} = 0 ... 0.5 s)
with overcurrent and short-circuit release in the 4th pole (N), N protection = 50/100 %

VL160/3VL2	63	0.4 ...1.0 × I_n	11 × I_n	1.5 ... 10 × I_R	3VL2706-1□□4□-□□□□	1	1 unit	1CC	3.100
	100	0.4 ...1.0 × I_n	11 × I_n	1.5 ... 10 × I_R	3VL2710-1□□4□-□□□□	1	1 unit	1CC	3.100
	160	0.4 ...1.0 × I_n	11 × I_n	1.5 ... 10 × I_R	3VL2716-1□□4□-□□□□	1	1 unit	1CC	3.100
VL250/3VL3	200	0.4 ...1.0 × I_n	11 × I_n	1.5 ... 10 × I_R	3VL3720-1□□4□-□□□□	1	1 unit	1CC	3.300
	250	0.4 ...1.0 × I_n	11 × I_n	1.5 ... 10 × I_R	3VL3725-1□□4□-□□□□	1	1 unit	1CC	3.300

Connection type can be selected by assignment of the 12th position of the Article No.

• Connection with box terminal	**3**
• Connection with flat screw terminal[1)]	**6**

VL400/3VL4	315	0.4 ...1.0 × I_n	11 × I_n	1.5 ... 10 × I_R	3VL4731-1□□46-□□□□	1	1 unit	1CC	7.600
	400	0.4 ...1.0 × I_n	11 × I_n	1.5 ... 10 × I_R	3VL4740-1□□46-□□□□	1	1 unit	1CC	7.600
VL630/3VL5	630	0.4 ...1.0 × I_n	10 × I_n	1.5 ... 9 × I_R	3VL5763-1□□46-□□□□	1	1 unit	1CC	11.700
VL800/3VL6	800	0.4 ...1.0 × I_n	8 × I_n	1.5 ... 7 × I_R	3VL6780-1□□46-□□□□	1	1 unit	1CC	20.500
VL1250/3VL7	1000	0.4 ...1.0 × I_n	11 × I_n	1.5 ... 10 × I_R	3VL7710-1□□46-□□□□	1	1 unit	1CC	33.500
	1250	0.4 ...1.0 × I_n	11 × I_n	1.5 ... 10 × I_R	3VL7712-1□□46-□□□□	1	1 unit	1CC	33.500
VL1600/3VL8[2)]	1600	0.4 ...1.0 × I_n	9 × I_n	1.5 ... 8 × I_R	3VL8716-1□□40-□□□□	1	1 unit	1CC	40.800

• Without communication preparation	**TF**
• With communication preparation	**NF**
• Marine engineering-certified LRS, DNV, GL and BV (not communication-ready)	**LF**

1) When the circuit breaker with flat screw terminal is ordered, the basic price is reduced.

2) Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

Communication:
- For accessories, see page 2/207.
- For more information, see chapter "Measuring Devices and Power Monitoring" and see chapter "Software".

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DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2706-2□□4□-□□□□		1	1 unit	1CC	3.100		3VL2706-3□□4□-□□□□		1	1 unit	1CC	3.100
	3VL2710-2□□4□-□□□□		1	1 unit	1CC	3.100		3VL2710-3□□4□-□□□□		1	1 unit	1CC	3.100
	3VL2716-2□□4□-□□□□		1	1 unit	1CC	3.100		3VL2716-3□□4□-□□□□		1	1 unit	1CC	3.100
	3VL3720-2□□4□-□□□□		1	1 unit	1CC	3.300		3VL3720-3□□4□-□□□□		1	1 unit	1CC	3.300
	3VL3725-2□□4□-□□□□		1	1 unit	1CC	3.300		3VL3725-3□□4□-□□□□		1	1 unit	1CC	3.300
	3 **6**							**3** **6**					
	3VL4731-2□□46-□□□□		1	1 unit	1CC	7.600		3VL4731-3□□46-□□□□		1	1 unit	1CC	7.600
	3VL4740-2□□46-□□□□		1	1 unit	1CC	7.600		3VL4740-3□□46-□□□□		1	1 unit	1CC	7.600
	3VL5763-2□□46-□□□□		1	1 unit	1CC	11.700		3VL5763-3□□46-□□□□		1	1 unit	1CC	11.700
	3VL6780-2□□46-□□□□		1	1 unit	1CC	20.500		3VL6780-3□□46-□□□□		1	1 unit	1CC	20.500
	3VL7710-2□□46-□□□□		1	1 unit	1CC	33.500		3VL7710-3□□46-□□□□		1	1 unit	1CC	33.500
	3VL7712-2□□46-□□□□		1	1 unit	1CC	33.500		3VL7712-3□□46-□□□□		1	1 unit	1CC	33.500
	3VL8716-2□□40-□□□□		1	1 unit	1CC	40.800		3VL8716-3□□40-□□□□		1	1 unit	1CC	40.800
	TE **NE**							**TE** **NE**					

DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)					
	Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2706-2□□4□-□□□□		1	1 unit	1CC	3.100		3VL2706-3□□4□-□□□□		1	1 unit	1CC	3.100
	3VL2710-2□□4□-□□□□		1	1 unit	1CC	3.100		3VL2710-3□□4□-□□□□		1	1 unit	1CC	3.100
	3VL2716-2□□4□-□□□□		1	1 unit	1CC	3.100		3VL2716-3□□4□-□□□□		1	1 unit	1CC	3.100
	3VL3720-2□□4□-□□□□		1	1 unit	1CC	3.300		3VL3720-3□□4□-□□□□		1	1 unit	1CC	3.300
	3VL3725-2□□4□-□□□□		1	1 unit	1CC	3.300		3VL3725-3□□4□-□□□□		1	1 unit	1CC	3.300
	3 **6**							**3** **6**					
	3VL4731-2□□46-□□□□		1	1 unit	1CC	7.600		3VL4731-3□□46-□□□□		1	1 unit	1CC	7.600
	3VL4740-2□□46-□□□□		1	1 unit	1CC	7.600		3VL4740-3□□46-□□□□		1	1 unit	1CC	7.600
	3VL5763-2□□46-□□□□		1	1 unit	1CC	11.700		3VL5763-3□□46-□□□□		1	1 unit	1CC	11.700
	3VL6780-2□□46-□□□□		1	1 unit	1CC	20.500		3VL6780-3□□46-□□□□		1	1 unit	1CC	20.500
	3VL7710-2□□46-□□□□		1	1 unit	1CC	33.500		3VL7710-3□□46-□□□□		1	1 unit	1CC	33.500
	3VL7712-2□□46-□□□□		1	1 unit	1CC	33.500		3VL7712-3□□46-□□□□		1	1 unit	1CC	33.500
	3VL8716-2□□40-□□□□		1	1 unit	1CC	40.800		3VL8716-3□□40-□□□□		1	1 unit	1CC	40.800
	TF **NF** **LF**							**TF** **NF** **LF**					

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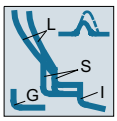
Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent protection "**L**" I_R	Operating current of the instantaneous short-circuit protection "**I**" I_i	S function short-circuit protection (short-time delayed) **S**	Ground-fault protection "**G**" I_g	DT	I_{cu} **up to 55 kA at 415 V, standard breaking capacity N** See "Overview".					
							Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
							Article No. supplement, see page 2/172; www.siemens.com/product?Article No.					
	A	A	A	A	A							kg

4-pole, fixed-mounted, for line protection – generator protection, 63 A to 1600 A, Electronic Trip Units LSING



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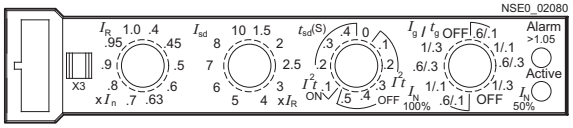

ETU22, LSING function for 4-wire three-phase systems and time-based discrimination

With adjustable overcurrent releases, adjustable short-circuit releases, ground fault delay t_g = 0.1 ... 0.3 s, ground-fault protection (G) can be switched off, short-circuit delay t_{sd} = 0 ... 0.5 s with overcurrent and short-circuit release in the 4th pole (N), N protection = 50/100 %

VL160/3VL2	63	25 ... 63	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL2706-1□□4□-□□□□**	1	1 unit	1CC	3.100
	100	40 ... 100	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL2710-1□□4□-□□□□**	1	1 unit	1CC	3.100
	160	64 ... 160	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL2716-1□□4□-□□□□**	1	1 unit	1CC	3.100
VL250/3VL3	200	80 ... 200	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL3720-1□□4□-□□□□**	1	1 unit	1CC	3.300
	250	100 ... 250	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL3725-1□□4□-□□□□**	1	1 unit	1CC	3.300

Connection type can be selected by assignment of the 12th position of the Article No.

• Connection with box terminal	**3**
• Connection with flat screw terminal[1)]	**6**

VL400/3VL4	315	128 ... 315	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL4731-1□□46-□□□□**	1	1 unit	1CC	7.600
	400	160 ... 400	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL4740-1□□46-□□□□**	1	1 unit	1CC	7.600
VL630/3VL5	630	252 ... 630	10 × I_n	1.5 ... 9 × I_R	0.6 ... 1 × I_n, OFF	**3VL5763-1□□46-□□□□**	1	1 unit	1CC	11.700
VL800/3VL6	800	320 ... 800	8 × I_n	1.5 ... 7 × I_R	0.6 ... 1 × I_n, OFF	**3VL6780-1□□46-□□□□**	1	1 unit	1CC	20.500
VL1250/3VL7	1000	400 ... 1000	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL7710-1□□46-□□□□**	1	1 unit	1CC	33.500
	1250	500 ... 1250	11 × I_n	1.5 ... 10 × I_R	0.6 ... 1 × I_n, OFF	**3VL7712-1□□46-□□□□**	1	1 unit	1CC	33.500
VL1600/3VL8[2)]	1600	640 ... 1600	9 × I_n	1.5 ... 8 × I_R	0.6 ... 1 × I_n, OFF	**3VL8716-1□□40-□□□□**	1	1 unit	1CC	40.800

• Without communication preparation	**TH**
• With communication preparation	**NH**

1) When the circuit breaker with flat screw terminal is ordered, the basic price is reduced.

2) Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

Communication:

- For accessories, see page 2/207.
- For more information, see chapter "Measuring Devices and Power Monitoring" and see chapter "Software".

*** You can order this quantity or a multiple thereof.**

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DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)					DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)				
	Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Price	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2706-2□□4□-□□□□		1	1 unit	1CC	3.100		**3VL2706-3□□4□-□□□□**		1	1 unit	1CC	3.100
	3VL2710-2□□4□-□□□□		1	1 unit	1CC	3.100		**3VL2710-3□□4□-□□□□**		1	1 unit	1CC	3.100
	3VL2716-2□□4□-□□□□		1	1 unit	1CC	3.100		**3VL2716-3□□4□-□□□□**		1	1 unit	1CC	3.100
	3VL3720-2□□4□-□□□□		1	1 unit	1CC	3.300		**3VL3720-3□□4□-□□□□**		1	1 unit	1CC	3.300
	3VL3725-2□□4□-□□□□		1	1 unit	1CC	3.300		**3VL3725-3□□4□-□□□□**		1	1 unit	1CC	3.300
	3 6							**3 6**					
	3VL4731-2□□46-□□□□		1	1 unit	1CC	7.600		**3VL4731-3□□46-□□□□**		1	1 unit	1CC	7.600
	3VL4740-2□□46-□□□□		1	1 unit	1CC	7.600		**3VL4740-3□□46-□□□□**		1	1 unit	1CC	7.600
	3VL5763-2□□46-□□□□		1	1 unit	1CC	11.700		**3VL5763-3□□46-□□□□**		1	1 unit	1CC	11.700
	3VL6780-2□□46-□□□□		1	1 unit	1CC	20.500		**3VL6780-3□□46-□□□□**		1	1 unit	1CC	20.500
	3VL7710-2□□46-□□□□		1	1 unit	1CC	33.500		**3VL7710-3□□46-□□□□**		1	1 unit	1CC	33.500
	3VL7712-2□□46-□□□□		1	1 unit	1CC	33.500		**3VL7712-3□□46-□□□□**		1	1 unit	1CC	33.500
	3VL8716-2□□40-□□□□		1	1 unit	1CC	40.800		**3VL8716-3□□40-□□□□**		1	1 unit	1CC	40.800
	TH NH							**TH NH**					

*** You can order this quantity or a multiple thereof.**

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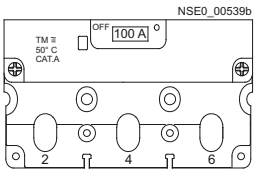
4-pole

Type	Rated current I_n	Operating current of the instantaneous short-circuit releases "I" I_i	DT	I_{cu} up to 55 kA at 415 V, standard breaking capacity N (N) See "Overview". Article No. / Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A							kg
4-pole, fixed-mounted, for safe disconnection, 100 A to 1600 A, magnetic trip units I									
NSE0_00708									
 NSE0_00539b									
Non-automatic molded case circuit breakers[1], I function Without overcurrent releases, with non-adjustable short-circuit releases (for intrinsic protection only), without overcurrent and short-circuit release in the 4th pole (N)									
VL160X/3VL1	100	1800		3VL1710-1EE4□-□□□□		1	1 unit	1CC	2.500
	160	1800		3VL1716-1EE4□-□□□□		1	1 unit	1CC	2.500
VL160/3VL2	100	2500		3VL2710-1EE4□-□□□□		1	1 unit	1CC	3.000
	160	2500		3VL2716-1EE4□-□□□□		1	1 unit	1CC	3.000
VL250/3VL3	250	3500		3VL3725-1EE4□-□□□□		1	1 unit	1CC	3.200
Connection type can be selected by assignment of the 12th position of the Article No.									
• Connection with box terminal				3					
• Connection with screw terminal not in conjunction with RCD module at 3VL1[2]				6					
VL400/3VL4	400	4000		3VL4740-1EE46-□□□□		1	1 unit	1CC	7.400
VL630/3VL5	630	6300		3VL5763-1EE46-□□□□		1	1 unit	1CC	11.200
VL800/3VL6	800	6500		3VL6780-1EE46-□□□□		1	1 unit	1CC	19.900
VL1250/3VL7	1250	12000		3VL7712-1EE46-□□□□		1	1 unit	1CC	31.000
VL1600/3VL8[3]	1600	14400		3VL8716-1EE40-□□□□		1	1 unit	1CC	38.300

1) See chapter "Switch Disconnectors" 3K. switch disconnectors are also available with rear-mounting operating mechanism and leading contacts.

2) When the circuit breaker with flat screw terminal is ordered, the basic price is reduced.

3) Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

*** You can order this quantity or a multiple thereof.**

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DT	I_{cu} up to 70 kA at 415 V, high breaking capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high breaking capacity L (L)						
	Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. Article No. supplement, see page 2/172; www.siemens.com/product?Article No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	
	3VL1710-2EE4□-□□□□		1	1 unit	1CC	2.500		**--**						
	3VL1716-2EE4□-□□□□		1	1 unit	1CC	2.500		**--**						
	3VL2710-2EE4□-□□□□		1	1 unit	1CC	3.000		**3VL2710-3EE4□-□□□□**		1	1 unit	1CC	3.000	
	3VL2716-2EE4□-□□□□		1	1 unit	1CC	3.000		**3VL2716-3EE4□-□□□□**		1	1 unit	1CC	3.000	
	3VL3725-2EE4□-□□□□		1	1 unit	1CC	3.200		**3VL3725-3EE4□-□□□□**		1	1 unit	1CC	3.200	
	3 6							**3 6**						
	3VL4740-2EE46-□□□□		1	1 unit	1CC	7.400		**3VL4740-3EE46-□□□□**		1	1 unit	1CC	7.400	
	3VL5763-2EE46-□□□□		1	1 unit	1CC	11.200		**3VL5763-3EE46-□□□□**		1	1 unit	1CC	11.200	
	3VL6780-2EE46-□□□□		1	1 unit	1CC	19.900		**3VL6780-3EE46-□□□□**		1	1 unit	1CC	19.900	
	3VL7712-2EE46-□□□□		1	1 unit	1CC	31.000		**3VL7712-3EE46-□□□□**		1	1 unit	1CC	31.000	
	3VL8716-2EE40-□□□□		1	1 unit	1CC	38.300		**3VL8716-3EE40-□□□□**		1	1 unit	1CC	38.300	

*** You can order this quantity or a multiple thereof.**

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4-pole

Article No. supplement (for complete Article No., see pages 2/156 to 2/144) **3VL.7.. - .□□4.-....**		Breaking capacity	Type											
			VL160[1] 3VL2			**VL250**[1] 3VL3		**VL400** 3VL4		**VL630** 3VL5	**VL800** 3VL6	**VL1250** 3VL7		**VL1600** 3VL8
			Rated current I_n											
Trip unit			63 A	100 A	160 A	200 A	250 A	315 A	400 A	630 A	800 A	1000 A	1250 A	1600 A
			Price											
ETU10	**TB**	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU10	**NB**	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU10	**TA**	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU10	**NA**	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU10	**LA**	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU12	**TN**	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU12	**NN**	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU40	**UJ**	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU42	**UN**	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU20	**TE**	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU20	**NE**	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU20	**TF**	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU20	**NF**	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU20	**LF**	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU22	**TH**	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU22	**NH**	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		H	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		L	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ Available

1) **The basic price is reduced when the molded case circuit breaker is ordered with a flat screw terminal ".36-".**

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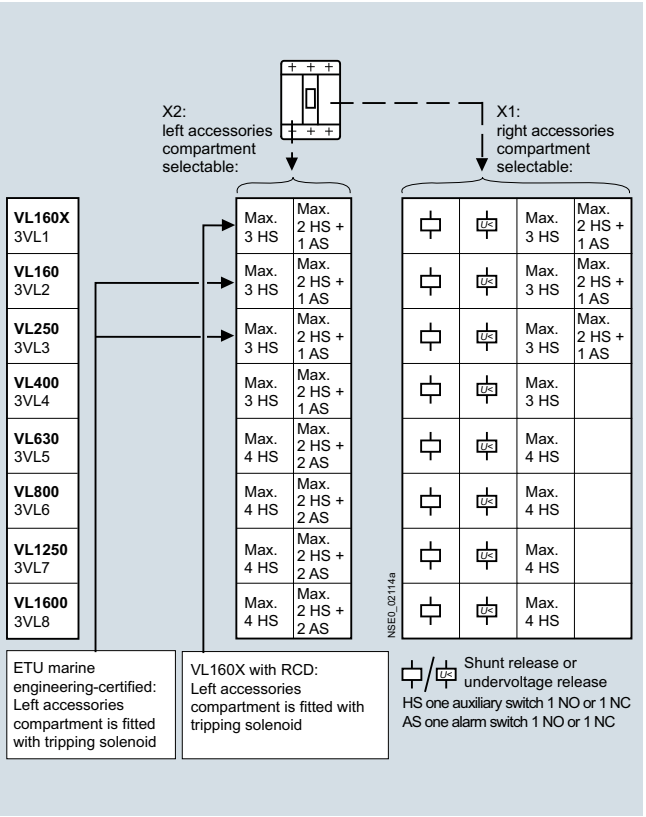
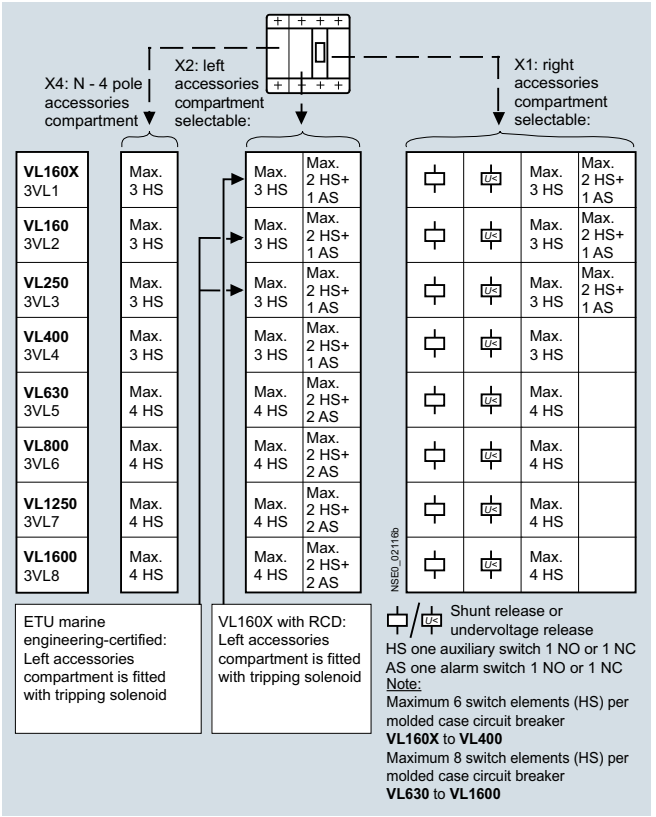
Equipment options for the insulated accessory compartments in the 3VL molded case circuit breakers

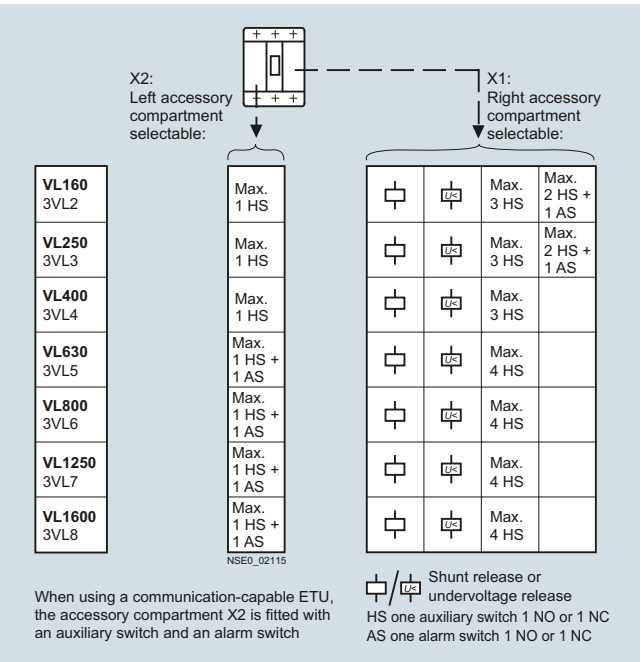
3-pole circuit breakers without communication preparation



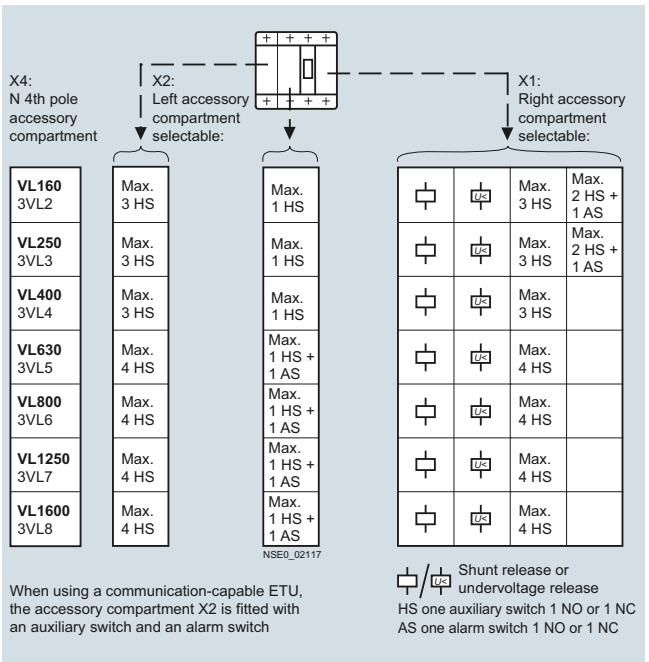
4-pole circuit breakers without communication preparation



3-pole circuit breakers with communication preparation



4-pole circuit breakers with communication preparation



Note:

Before ordering, use the tables above to check whether the required combination of shunt releases, undervoltage releases and auxiliary/alarm switches is feasible.

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Options

1st Article No. supplement:
Undervoltage or shunt release,
wiring directly to accessories

Rated control supply voltage U_s/frequency		Article No. supplement		Circuit breakers Type	
50/60 Hz AC DC		**3VL. . . .-. . . . .- ☐☐ ..**		**VL160X to VL400/ 3VL1 to 3VL4** Additional price	**VL630 to VL1600/ 3VL5 to 3VL8** Additional price
3- or 4-pole					
Without auxiliary release		**0**	**A**	**None**	**None**
With undervoltage release Only right pole					
V AC	V DC				
--	12	**2**	**N**	✓	✓
--	24	**2**	**P**	✓	✓
--	48	**2**	**U**	✓	✓
--	60	**2**	**V**	✓	✓
--	110 ... 127	**2**	**R**	✓	✓
--	220 ... 250	**2**	**S**	✓	✓
24	--	**2**	**D**	✓	✓
110 ... 127	--	**2**	**G**	✓	✓
220 ... 250	--	**2**	**H**	✓	✓
208	--	**2**	**M**	✓	✓
277	--	**2**	**Q**	✓	✓
380 ... 415	--	**2**	**J**	✓	✓
440 ... 480	--	**2**	**K**	✓	✓
500 ... 525	--	**2**	**L**	✓	✓
With shunt release Only right pole					
V AC	V DC				
24	24	**8**	**C**	✓	✓
--	48 ... 60	**8**	**J**	✓	✓
--	110 ... 127	**8**	**K**	✓	✓
--	220 ... 250	**8**	**Q**	✓	✓
48 ... 60	--	**8**	**M**	✓	✓
110 ... 127	--	**8**	**R**	✓	✓
208 ... 277	--	**8**	**T**	✓	✓
380 ... 600	--	**8**	**V**	✓	✓

2nd Article No. supplement:
Auxiliary switches (HS) and alarm switches (AS),
left/right pole,
directly wired to accessories

Equipment	Article No. supplement		Circuit breakers Type	
HS = 1 NO or 1 NC contact block AS = 1 NO contact block	**3VL. . . .-. . . . .- .. ☐☐**		**VL160X to VL400[1])/ 3VL1 to 3VL4** Additional price	**VL630 to VL1600/ 3VL5 to 3VL8** Additional price
Without auxiliary/alarm switches	**A**	**0**	**None**	**None**
2 HS (1 NO/1 NC)[2]	**B**	**1**	✓ [1)4)]	--
4 HS (2 NO/2 NC)	**C**	**1**	--	✓
2 HS (1 NO/1 NC) + 1 AS (1 NO)	**D**	**1**	✓ [1)4)]	--
2 HS (1 NO/1 NC) + 1 AS (1 NO)[3]	**E**	**1**	--	✓ [5)]

✓ Additional price

-- Not available

1) Except for installation in the left accessory compartment of the VL160X molded case circuit breakers with RCD module.

2) With mounting adapter up to 3 HS.

3) With mounting adapter up to 2 HS + 2 AS.

4) Not feasible for use of marine engineering ETU and additional use of shunt and undervoltage releases.
When using a communication-capable ETU, the accessory compartment X2 is fitted with an auxiliary switch and an alarm switch. The combination of 1st and 2nd Article No. supplement is only possible with restrictions. It is recommended to use the configurator in the Mall for selection purposes.

5) Not possible when using a communication-capable ETU.

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Selection and ordering data

When ordering, add **"-Z"** to the complete Article No. and add the relevant order code(s).

Article No. with **"-Z"**
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
3VL . . . . - . . . . . - . . . . **-Z**
and additional order code(s)
□□□ + . . . + . . .
Code for further versions **-Z**

Additional price

For fixed-mounted circuit breakers (wired in factory)			
3- or 4-pole			
Prewired internal accessories Connecting cables (3 m long) brought out at the rear This option "L02" can be selected only in combination with internal accessories (page 2/172).	For VL160X to VL1600 (3VL1 to 3VL8)	**L 0 2**	✓
Prewired connecting cables for motorized operating mechanisms with stored energy mechanisms (SEO) Connecting cables on the circuit breaker for motorized operating mechanisms (3 m long). On VL160X to VL400 brought out at the top. On VL630 and VL800 brought out on the right. Option "L12" can only be selected in combination with motorized operating mechanisms (order codes "M24", "M42", "M60", "M11" and "M22").	For VL160X to VL800 (3VL1 to 3VL6)	**L 1 2**	✓
Motorized operating mechanisms with stored energy mechanisms for synchronization tasks (24 V DC) Motorized operating mechanisms not prewired; if wiring for the motorized operating mechanism is wanted, please specify "L12" in addition. If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must not be specified in addition.	Available with VL160X, VL160, VL250 (3VL1, 3VL2, 3VL3)	**M 2 4**	✓
	VL400 (3VL4)		✓
	VL630, VL800 (3VL5, 3VL6)		✓
	VL1250, VL1600 (3VL7, 3VL8)[1]		✓
Motorized operating mechanisms with stored energy mechanisms for synchronization tasks (42 ... 48 V AC/DC) Motorized operating mechanisms not prewired; if wiring for the motorized operating mechanism is wanted, please specify "L12" in addition. If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must not be specified in addition.	Available with VL160X, VL160, VL250 (3VL1, 3VL2, 3VL3)	**M 4 2**	✓
	VL400 (3VL4)		✓
	VL630, VL800 (3VL5, 3VL6)		✓
	VL1250, VL1600 (3VL7, 3VL8)[1]		✓
Motorized operating mechanisms with stored energy mechanisms for synchronization tasks (60 V AC/DC) Motorized operating mechanisms not prewired; if wiring for the motorized operating mechanism is wanted, please specify "L12" in addition. If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must not be specified in addition.	Available with VL160X, VL160, VL250 (3VL1, 3VL2, 3VL3)	**M 6 0**	✓
	VL400 (3VL4)		✓
	VL630, VL800 (3VL5, 3VL6)		✓
	VL1250, VL1600 (3VL7, 3VL8)[1]		✓
Motorized operating mechanisms with stored energy mechanisms for synchronization tasks (110 ... 127 V AC/DC) Motorized operating mechanisms not prewired; if wiring for the motorized operating mechanism is wanted, please specify "L12" in addition. If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must not be specified in addition.	Available with VL160X, VL160, VL250 (3VL1, 3VL2, 3VL3)	**M 1 1**	✓
	VL400 (3VL4)		✓
	VL630, VL800 (3VL5, 3VL6)		✓
	VL1250, VL1600 (3VL7, 3VL8)[1]		✓
Motorized operating mechanisms with stored energy mechanisms for synchronization tasks (220 ... 250 V AC/DC) Motorized operating mechanisms not prewired; if wiring for the motorized operating mechanism is wanted, please specify "L12" in addition. If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must not be specified in addition.	Available with VL160X, VL160, VL250 (3VL1, 3VL2, 3VL3)	**M 2 2**	✓
	VL400 (3VL4)		✓
	VL630, VL800 (3VL5, 3VL6)		✓
	VL1250, VL1600 (3VL7, 3VL8)[1]		✓

✓ Additional price

[1] The motorized operating mechanism for VL1250 and VL1600 (3VL7 and 3VL8) has no stored energy mechanism and is also unsuitable for synchronization tasks.

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Options

2

When ordering, add **"-Z"** to the complete Article No. and add the relevant order code(s).

Article No. with **"-Z"**
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
3VL . . . . - . . . . . - . . . . -Z
and additional order code(s)
□□□ + . . . + . . .

Code for further versions **-Z**

Additional price

For fixed-mounted circuit breakers (wired in factory)

3- or 4-pole

Pre-mounted motorized operating mechanisms (24 V DC) on circuit breaker, not synchronizable If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must not be specified in addition.	Available with VL160X (3VL1)	**M 2 5**	✓
	VL160, VL250 (3VL2, 3VL3)		✓
	VL400 (3VL4)		✓
	VL630, VL800 (3VL5, 3VL6)		✓
Pre-mounted motorized operating mechanisms (42 ... 60 V AC/DC) on circuit breaker, not synchronizable If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must not be specified in addition.	Available with VL160X (3VL1)	**M 4 3**	✓
	VL160, VL250 (3VL2, 3VL3)		✓
	VL400 (3VL4)		✓
	VL630, VL800 (3VL5, 3VL6)		✓
Pre-mounted motorized operating mechanisms (110 ... 127 V AC/DC) on circuit breaker, not synchronizable If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must not be specified in addition.	Available with VL160X (3VL1)	**M 1 2**	✓
	VL160, VL250 (3VL2, 3VL3)		✓
	VL400 (3VL4)		✓
	VL630, VL800 (3VL5, 3VL6)		✓
Pre-mounted motorized operating mechanisms (220 ... 250 V AC/DC) on circuit breaker, not synchronizable If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must not be specified in addition.	Available with VL160X (3VL1)	**M 2 3**	✓
	VL160, VL250 (3VL2, 3VL3)		✓
	VL400 (3VL4)		✓
	VL630, VL800 (3VL5, 3VL6)		✓

✓ Additional price

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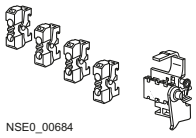
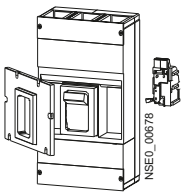
Selection and ordering data

	Wiring directly to accessories	DT	For VL160X to VL400 (3VL1 to 3VL4) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Auxiliary switches and auxiliary releases								
	3- or 4-pole							
	For retrofitting (for equipment options, see Technical Information at www.siemens.com/lowvoltage/product-support.)							
 NSE0_00684 3VL9400-2A.00	**Auxiliary switches (HS) and alarm switches (AS)** For retrofitting							
	Assembly kits / Mounting side							
	2 HS (1 NO + 1 NC) / N, left[1], right		**3VL9400-2AB00**		1	1 unit	1CC	0.056
	4 HS (2 NO + 2 NC) / N, left[1], right		--					
	2 HS (1 NC + 1 NO) / left[1], right[3]		**3VL9400-2AD00**		1	1 unit	1CC	0.089
	+ 1 AS (1 NO) (assembly kit) / left[1]		--					
	Additional auxiliary switch/alarm switch combinations		See page 2/177.					
 NSE0_00678 3VL9400-1S.00, 3VL9400-1U.00	**Shunt releases[2])** For retrofitting							
	V AC / V DC / Mounting side							
	24 / 24 / Right pole only		**3VL9400-1SC00**		1	1 unit	1CC	0.100
	-- / 48 ... 60 / Right pole only		**3VL9400-1SJ00**		1	1 unit	1CC	0.103
	-- / 110 ... 127 / Right pole only		**3VL9400-1SK00**		1	1 unit	1CC	0.099
	-- / 220 ... 250 / Right pole only		**3VL9400-1SQ00**		1	1 unit	1CC	0.098
	48 ... 60 / -- / Right pole only		**3VL9400-1SM00**		1	1 unit	1CC	0.103
	110 ... 127 / -- / Right pole only		**3VL9400-1SR00**		1	1 unit	1CC	0.101
	208 ... 277 / -- / Right pole only		**3VL9400-1ST00**		1	1 unit	1CC	0.097
	380 ... 600 / -- / Right pole only		**3VL9400-1SV00**		1	1 unit	1CC	0.106
	Undervoltage releases For retrofitting							
	V AC / V DC / Mounting side							
	-- / 12 / Right pole only		**3VL9400-1UN00**		1	1 unit	1CC	0.100
	-- / 24 / Right pole only		**3VL9400-1UP00**		1	1 unit	1CC	0.099
	-- / 48 / Right pole only		**3VL9400-1UU00**		1	1 unit	1CC	0.100
	-- / 60 / Right pole only		**3VL9400-1UV00**		1	1 unit	1CC	0.098
	24 / -- / Right pole only		**3VL9400-1UD00**		1	1 unit	1CC	0.104
	110 ... 127 / -- / Right pole only		**3VL9400-1UG00**		1	1 unit	1CC	0.104
	-- / 110 ... 127 / Right pole only		**3VL9400-1UR00**		1	1 unit	1CC	0.099
	208 / -- / Right pole only		**3VL9400-1UM00**		1	1 unit	1CC	0.103
	220 ... 250 / -- / Right pole only		**3VL9400-1UH00**		1	1 unit	1CC	0.105
	-- / 220 ... 250 / Right pole only		**3VL9400-1US00**		1	1 unit	1CC	0.102
	277 / -- / Right pole only		**3VL9400-1UQ00**		1	1 unit	1CC	0.100
	380 ... 415 / -- / Right pole only		**3VL9400-1UJ00**		1	1 unit	1CC	0.103
	440 ... 480 / -- / Right pole only		**3VL9400-1UK00**		1	1 unit	1CC	0.103
	500 ... 525 / -- / Right pole only		**3VL9400-1UL00**		1	1 unit	1CC	0.103
	Time-delay devices for undervoltage releases (220 ... 250 V DC) Rated control supply voltage U_s 220 ... 250 V AC							
	Delay time > 200 ms		**3TX4701-0AN1**		1	1 unit	41B	0.168
	Storage devices for shunt releases (208 ... 277 V AC/220 ... 250 V DC) Rated control supply voltage U_s 220 V ... 240 V AC/220 V ... 250 V DC							
	Storage time 5 min		**3WL9111-0BA14-0AA0**		1	1 unit	1CA	0.520

1) Except for installation in the left accessory compartment of the VL160X (3VL1) molded case circuit breakers with RCD module.

2) Shunt releases with disconnection contact (3SB3 for ON/OFF position) not floating (see Technical Information at www.siemens.com/lowvoltage/product-support).

3) In the case of VL400 (3VL4):
Unsuitable for mounting in the right-hand accessory compartment.
The 3VL9400-2AB00 assembly kit with auxiliary switches only is recommended.

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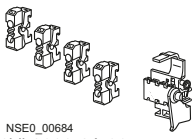
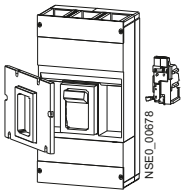
Accessories and spare parts

	Wiring directly to accessories	DT	For VL630 up to VL1600 (3VL5 to 3VL8) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Auxiliary switches and auxiliary releases								
	3- or 4-pole							
	For retrofitting (for equipment options, see Technical Information at www.siemens.com/lowvoltage/product-support.)							
 NSE0_00684 3VL9800-2A.00	**Auxiliary switches (HS) and alarm switches (AS)** For retrofitting							
	Assembly kits: 2 HS (1 NO + 1 NC) — Mounting side: N, left, right		--					
	4 HS (2 NO + 2 NC) — N, left, right		3VL9800-2AC00		1	1 unit	1CC	0.089
	2 HS (1 NC + 1 NO) — Left, right		--					
	+ 1 AS (1 NO) (assembly kit) — Left		3VL9800-2AE00		1	1 unit	1CC	0.080
	Additional auxiliary switch/alarm switch combinations		See page 2/177.					
 NSE0_00678 3VL9800-1S.00, 3VL9800-1U.00	**Shunt releases**[1] For retrofitting							
	V AC: 24 — V DC: 24 — Mounting side: Right pole only		3VL9800-1SC00		1	1 unit	1CC	0.151
	V AC: -- — V DC: 48 ... 60 — Right pole only		3VL9800-1SJ00		1	1 unit	1CC	0.150
	V AC: -- — V DC: 110 ... 127 — Right pole only		3VL9800-1SK00		1	1 unit	1CC	0.153
	V AC: -- — V DC: 220 ... 250 — Right pole only		3VL9800-1SQ00		1	1 unit	1CC	0.150
	V AC: 48 ... 60 — V DC: -- — Right pole only		3VL9800-1SM00		1	1 unit	1CC	0.150
	V AC: 110 ... 127 — V DC: -- — Right pole only		3VL9800-1SR00		1	1 unit	1CC	0.155
	V AC: 208 ... 277 — V DC: -- — Right pole only		3VL9800-1ST00		1	1 unit	1CC	0.147
	V AC: 380 ... 600 — V DC: -- — Right pole only		3VL9800-1SV00		1	1 unit	1CC	0.150
	Undervoltage releases For retrofitting							
	V AC: -- — V DC: 12 — Mounting side: Right pole only		3VL9800-1UN00		1	1 unit	1CC	0.123
	V AC: -- — V DC: 24 — Right pole only		3VL9800-1UP00		1	1 unit	1CC	0.119
	V AC: -- — V DC: 48 — Right pole only		3VL9800-1UU00		1	1 unit	1CC	0.114
	V AC: -- — V DC: 60 — Right pole only		3VL9800-1UV00		1	1 unit	1CC	0.115
	V AC: 24 — V DC: -- — Right pole only		3VL9800-1UD00		1	1 unit	1CC	0.118
	V AC: 110 ... 127 — V DC: -- — Right pole only		3VL9800-1UG00		1	1 unit	1CC	0.114
	V AC: -- — V DC: 110 ... 127 — Right pole only		3VL9800-1UR00		1	1 unit	1CC	0.115
	V AC: 208 — V DC: -- — Right pole only		3VL9800-1UM00		1	1 unit	1CC	0.114
	V AC: 220 ... 250 — V DC: -- — Right pole only		3VL9800-1UH00		1	1 unit	1CC	0.114
	V AC: -- — V DC: 220 ... 250 — Right pole only		3VL9800-1US00		1	1 unit	1CC	0.114
	V AC: 277 — V DC: -- — Right pole only		3VL9800-1UQ00		1	1 unit	1CC	0.121
	V AC: 380 ... 415 — V DC: -- — Right pole only		3VL9800-1UJ00		1	1 unit	1CC	0.112
	V AC: 440 ... 480 — V DC: -- — Right pole only		3VL9800-1UK00		1	1 unit	1CC	0.115
	V AC: 500 ... 525 — V DC: -- — Right pole only		3VL9800-1UL00		1	1 unit	1CC	0.116
	Time-delay devices for undervoltage releases (220 ... 250 V DC) Rated control supply voltage U_s 220 ... 250 V AC							
	Delay time > 200 ms		3TX4701-0AN1		1	1 unit	41B	0.168
	Storage devices for shunt releases (208 ... 277 V AC/220 ... 250 V DC) Rated control supply voltage U_s 220 V ... 240 V AC/220 V ... 250 V DC							
	Storage time 5 min		3WL9111-0BA14-0AA0		1	1 unit	1CA	0.520

[1] Shunt releases with disconnection contact (3SB3 for ON/OFF position) not floating (see Technical Information at www.siemens.com/lowvoltage/product-support).

* You can order this quantity or a multiple thereof.

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For circuit breakers Type	Maximum combination of auxiliary switches (HS) and alarm switches (AS)	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
3SB adapters and 3SB contact blocks								
Mounting adapters for auxiliary and alarm switch combinations								
For installation in the N pole of the circuit breaker								
VL160X, VL160, VL250, VL400 (3VL1 to 3VL4)	Up to 3 HS[1]		**3VL9400-2AH00**		1	1 unit	1CC	0.038
	2 HS + 1 AS[1)2)]		--					
VL630, VL800, VL1250, VL1600 (3VL5 to 3VL8)	Up to 4 HS		**3VL9816-2AL00**		1	1 unit	1CC	0.055
	2 HS + 2 AS		--					
For installation in the left pole of the circuit breaker								
VL160X, VL160, VL250, VL400 (3VL1 to 3VL4)	Up to 3 HS[1]		**3VL9400-2AH00**		1	1 unit	1CC	0.038
	2 HS + 1 AS[1)2)]		**3VL9400-2AJ10**		1	1 unit	1CC	0.040
VL630, VL800, VL1250, VL1600 (3VL5 to 3VL8)	Up to 4 HS		**3VL9816-2AL00**		1	1 unit	1CC	0.055
	2 HS + 2 AS		**3VL9816-2AN10**		1	1 unit	1CC	0.058
For installation in the right pole of the circuit breaker								
VL160X, VL160, VL250, VL400 (3VL1 to 3VL4)[2)]	Up to 3 HS[1]		**3VL9400-2AH00**		1	1 unit	1CC	0.038
	2 HS + 1 AS[1)2)]		**3VL9400-2AJ20**		1	1 unit	1CC	0.039
VL630, VL800, VL1250, VL1600 (3VL5 to 3VL8)	Up to 4 HS		**3VL9816-2AL00**		1	1 unit	1CC	0.055
	2 HS + 2 AS		--					

1) Except for installing in the left pole for VL160X (3VL1) molded case circuit breakers with RCD module.

2) In the case of VL400: 3VL9400-2AJ20 unsuitable for mounting in the right-hand accessory compartment.

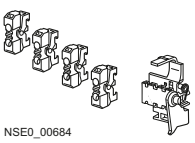
For auxiliary switches (HS) and alarm switches (AS)	DT	Circuit breakers Type **VL160X to VL1600 (3VL1 to 3VL8)** Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Contact blocks for auxiliary switch (HS) and alarm switch (AS) combinations							
1 NO		**3SB3400-0J**		1	1 unit	41J	0.009
1 NC		**3SB3400-0K**		1	1 unit	41J	0.009

For auxiliary switch or alarm switch combinations not included in the kits provided as standard, the mounting adapters specified can be ordered separately together with the required contact blocks:
1 HS or 1 AS with NO contact 3SB3400-0J
1 HS or 1 AS with NC contact 3SB3400-0K

Note:

A maximum of 6 contact blocks (HS) per circuit breaker (VL160X, VL160, VL250, VL400; 3VL1 to 3VL4) and a maximum of 8 contact blocks (HS) per circuit breaker (VL630, VL800, VL1250, VL1600; 3VL5 to 3VL8) are possible.

Four 3SB34 auxiliary contact blocks and one mounting adapter (right), suitable for VL630, VL800, VL1250, VL1600 (3VL5 to 3VL8) circuit breakers.



NSE0_00684

For retrofitting/equipment options, see Technical Information at www.siemens.com/lowvoltage/product-support.

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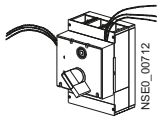
Accessories and spare parts

	Version	DT	For VL160X to VL250 (3VL1 to 3VL3) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Manual operating mechanisms								
	3- or 4-pole							
3VL9.00-3H.00	**Front-operated rotary operating mechanisms**[1] For direct mounting on the circuit breaker, without leading auxiliary switch, degree of protection IP30[2], black, max. 3 padlocks		3VL9300-3HA00		1	1 unit	1CC	0.534
	EMERGENCY-STOP version							
	Red knob, yellow indicator plate		3VL9300-3HC00		1	1 unit	1CC	0.500
	Safety locks for installation by the customer, see pages 2/200 to 2/204.							
3VL9300-3HE00	**Front-operated rotary operating mechanisms with shaft stub, without knob**[1] Without leading auxiliary switch, for auxiliary switches, see below.		3VL9300-3HE00		1	1 unit	1CC	0.411
3VL9.00-3H.05	**Door-coupling rotary operating mechanisms, complete**[1] **Installation in doors and covers** Degree of protection IP65, including handle ti-grey, with masking plate, indicator plate, removable door coupling (die cast with reduced tolerance compensation), extension shaft (8 × 8 mm), length 300 mm and front-operated rotary operating mechanism for the respective circuit breaker, lockable with up to 3 padlocks, with door interlocking		3VL9300-3HF05		1	1 unit	1CC	0.800
	EMERGENCY-STOP version							
	Red knob, yellow indicator plate, without leading auxiliary switch		3VL9300-3HG05		1	1 unit	1CC	0.800
	Safety locks for installation by the customer, see pages 2/200 to 2/204.							
 3VL9.00-3A.10	**Leading auxiliary switches for installation in a front-operated rotary operating mechanism, door-coupling rotary operating mechanism or side panel rotary operating mechanism** Standard or EMERGENCY-STOP version							
	"OFF after ON" Leading auxiliary switches when switching on							
	1 changeover contact with 1.5 m long cables		3VL9300-3AS10		1	1 unit	1CC	0.113
	2 changeover contacts with 1.5 m long cables		3VL9300-3AT10		1	1 unit	1CC	0.183
	"ON after OFF" Leading auxiliary switches when switching off							
	1 changeover contact with 1.5 m long cables		3VL9300-3AU10		1	1 unit	1CC	0.109
	2 changeover contacts with 1.5 m long cables		3VL9300-3AW10		1	1 unit	1CC	0.189
	Side panel rotary operating mechanisms, complete[1] Degree of protection IP65, including black knob with masking plate, indicator plate, Bowden wire, lockable with up to 3 padlocks							
	- With 600 mm Bowden wire		3VL9300-3HR10		1	1 unit	1CC	1.758
	- With 1000 mm Bowden wire		3VL9300-3HR20		1	1 unit	1CC	2.100
	- With 1500 mm Bowden wire		3VL9300-3HR30		1	1 unit	1CC	1.900
	Side panel rotary operating mechanisms, complete[1] EMERGENCY-STOP version Degree of protection IP65, including red knob with masking plate, yellow indicator plate, Bowden wire, lockable with up to 3 padlocks							
	- With 600 mm Bowden wire		3VL9300-3HR11		1	1 unit	1CC	2.100
	- With 1000 mm Bowden wire		3VL9300-3HR21		1	1 unit	1CC	2.100
	- With 1500 mm Bowden wire		3VL9300-3HR31		1	1 unit	1CC	2.100
	Retaining brackets, suitable for matching door-coupling rotary operating mechanisms, complete with locking device							
	Retaining bracket is mounted on the operating mechanism, recommended for extension shafts > 250 mm		3VL9300-3HP02		1	1 unit	1CC	0.409
	- For 6 mm shaft		3VL9300-3HP00		1	1 unit	1CC	0.385

Additional accessories and components for door-coupling rotary operating mechanism, see pages 2/183 and 2/185.

[1] Not possible on VL160X with RCD module.
[2] IP40 with additional masking frame mounted on the door cutout

* You can order this quantity or a multiple thereof.

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DT	For VL400 (3VL4) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	DT	For VL630 (3VL5) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL9400-3HA00		1	1 unit	1CC	1.281		3VL9600-3HA00		1	1 unit	1CC	1.373
	3VL9400-3HC00		1	1 unit	1CC	1.291		3VL9600-3HC00		1	1 unit	1CC	1.404
	3VL9400-3HE00		1	1 unit	1CC	1.126		3VL9600-3HE00		1	1 unit	1CC	1.154
	3VL9400-3HF05		1	1 unit	1CC	1.510		3VL9600-3HF05		1	1 unit	1CC	1.660
	3VL9400-3HG05		1	1 unit	1CC	1.569		3VL9600-3HG05		1	1 unit	1CC	1.640
	3VL9400-3AS10		1	1 unit	1CC	0.082		3VL9600-3AS10		1	1 unit	1CC	0.098
	3VL9400-3AT10		1	1 unit	1CC	0.181		3VL9600-3AT10		1	1 unit	1CC	0.148
	3VL9400-3AU10		1	1 unit	1CC	0.117		3VL9600-3AU10		1	1 unit	1CC	0.111
	3VL9400-3AW10		1	1 unit	1CC	0.185		3VL9600-3AW10		1	1 unit	1CC	0.181
	3VL9400-3HR10		1	1 unit	1CC	2.640		3VL9500-3HR10		1	1 unit	1CC	2.705
	3VL9400-3HR20		1	1 unit	1CC	2.657		3VL9500-3HR20		1	1 unit	1CC	2.852
	3VL9400-3HR30		1	1 unit	1CC	2.690		3VL9500-3HR30		1	1 unit	1CC	2.852
	3VL9400-3HR11		1	1 unit	1CC	2.619		3VL9500-3HR11		1	1 unit	1CC	2.870
	3VL9400-3HR21		1	1 unit	1CC	2.660		3VL9500-3HR21		1	1 unit	1CC	2.889
	3VL9400-3HR31		1	1 unit	1CC	3.500		3VL9500-3HR31		1	1 unit	1CC	2.940
	3VL9400-3HP00		1	1 unit	1CC	0.516		3VL9600-3HP00		1	1 unit	1CC	0.562
	--							--					

*** You can order this quantity or a multiple thereof.**

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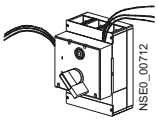
Accessories and spare parts

	Version	DT	For VL800 (3VL6) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Manual operating mechanisms								
	3- or 4-pole							
3VL9.00-3H.00	**Front-operated rotary operating mechanisms** For direct mounting on the circuit breaker, without leading auxiliary switch, degree of protection IP30[1], black, max. 3 padlocks		3VL9600-3HA00		1	1 unit	1CC	1.373
	EMERGENCY-STOP version Red knob, yellow indicator plate		3VL9600-3HC00		1	1 unit	1CC	1.404
	Safety locks for installation by the customer, see pages 2/200 to 2/204.							
3VL9.00-3H.05	**Front-operated rotary operating mechanisms with shaft stub, without knob** Without leading auxiliary switch, for auxiliary switches, see below.		3VL9600-3HE00		1	1 unit	1CC	1.154
3VL9.00-3H.05	**Door-coupling rotary operating mechanisms, complete Installation in doors and covers** Degree of protection IP65, including handle, ti-grey, with masking plate, indicator plate, detachable door coupling (die cast, for VL800 (3VL6) with reduced tolerance compensation), extension shaft (8 × 8 mm for VL800 (3VL6), 12 × 12 mm for VL1250 (3VL7) and VL1600 (3VL8), length 300 mm and front-operated rotary operating mechanism for the respective circuit breaker, lockable with max. 3 padlocks, with door interlocking		3VL9600-3HF05		1	1 unit	1CC	1.660
	EMERGENCY-STOP version, Red knob, yellow indicator plate, without leading auxiliary switch		3VL9600-3HG05		1	1 unit	1CC	1.640
	Safety locks for installation by the customer, see pages 2/200 to 2/204.							
 3VL9.00-3A.10	**Leading auxiliary switches for installation in a front-operated rotary operating mechanism or door-coupling rotary operating mechanism** Standard or EMERGENCY-STOP version							
	"OFF after ON" Leading auxiliary switches when switching on							
	1 changeover contact with 1.5 m long cables		3VL9600-3AS10		1	1 unit	1CC	0.098
	2 changeover contacts with 1.5 m long cables		3VL9600-3AT10		1	1 unit	1CC	0.148
	"ON after OFF" Leading auxiliary switches when switching off							
	1 changeover contact with 1.5 m long cables		3VL9600-3AU10		1	1 unit	1CC	0.111
	2 changeover contacts with 1.5 m long cables		3VL9600-3AW10		1	1 unit	1CC	0.181
	Retaining brackets, suitable for matching door-coupling rotary operating mechanisms, complete with locking device							
	Retaining bracket is mounted on the operating mechanism, recommended for extension shafts > 250 mm		3VL9600-3HP00		1	1 unit	1CC	0.562

Additional accessories and components for door-coupling rotary operating mechanism, see pages 2/183 and 2/185.

[1] IP40 with additional masking frame mounted on the door cutout.

* You can order this quantity or a multiple thereof.

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DT	For VL1250 to VL1600 (3VL7 to 3VL8) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL9800-3HA00		1	1 unit	1CC	3.562
	3VL9800-3HC00		1	1 unit	1CC	3.580
	3VL9800-3HE00		1	1 unit	1CC	2.859
	3VL9800-3HF05		1	1 unit	1CC	3.940
	3VL9800-3HG05		1	1 unit	1CC	3.980
	3VL9800-3AS20		1	1 unit	1CC	0.122
	3VL9800-3AT20		1	1 unit	1CC	0.172
	3VL9800-3AU10		1	1 unit	1CC	0.124
	3VL9800-3AW10		1	1 unit	1CC	0.196
	3VL9800-3HP00		1	1 unit	1CC	0.630

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Accessories and spare parts

Motorized operating mechanisms

3VL9.00-3M.00

3- or 4-pole

Motorized operating mechanisms with stored energy mechanisms (SEO) for synchronization tasks[1)2)]
Degree of protection IP30, with locking device for 3 padlocks

50/60 Hz V AC	V DC	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
		For VL160X to VL250 (3VL1 to 3VL3)							
--	24			3VL9300-3MJ00		1	1 unit	1CC	2.755
42 ... 48	42 ... 48			3VL9300-3ML00		1	1 unit	1CC	2.810
60	60			3VL9300-3MS00		1	1 unit	1CC	2.773
110 ... 127	110 ... 127			3VL9300-3MN00		1	1 unit	1CC	2.782
220 ... 250	220 ... 250			3VL9300-3MQ00		1	1 unit	1CC	2.802
		For VL400 (3VL4)							
50/60 Hz V AC	V DC								
--	24			3VL9400-3MJ00		1	1 unit	1CC	4.610
42 ... 48	42 ... 48			3VL9400-3ML00		1	1 unit	1CC	4.594
60	60			3VL9400-3MS00		1	1 unit	1CC	4.596
110 ... 127	110 ... 127			3VL9400-3MN00		1	1 unit	1CC	4.602
220 ... 250	220 ... 250			3VL9400-3MQ00		1	1 unit	1CC	4.593
		For VL630 and VL800 (3VL5 and 3VL6)							
50/60 Hz V AC	V DC								
--	24			3VL9600-3MJ00		1	1 unit	1CC	5.630
42 ... 48	42 ... 48			3VL9600-3ML00		1	1 unit	1CC	5.486
60	60			3VL9600-3MS00		1	1 unit	1CC	5.662
110 ... 127	110 ... 127			3VL9600-3MN00		1	1 unit	1CC	5.473
220 ... 250	220 ... 250			3VL9600-3MQ00		1	1 unit	1CC	5.639

3VL9.00-3M.10

Motorized operating mechanisms (MO)[1)]
Degree of protection IP30, with locking device for 3 padlocks

50/60 Hz V AC	V DC	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
		For VL160X (3VL1)							
--	24			3VL9100-3MA10		1	1 unit	1CC	1.807
42 ... 60	42 ... 60			3VL9100-3MC10		1	1 unit	1CC	1.790
110 ... 127	110 ... 127			3VL9100-3MD10		1	1 unit	1CC	1.770
220 ... 250	220 ... 250			3VL9100-3ME10		1	1 unit	1CC	1.802
		For VL160 and VL250 (3VL2 and 3VL3)							
50/60 Hz V AC	V DC								
--	24			3VL9300-3MA10		1	1 unit	1CC	1.800
42 ... 60	42 ... 60			3VL9300-3MC10		1	1 unit	1CC	1.799
110 ... 127	110 ... 127			3VL9300-3MD10		1	1 unit	1CC	1.797
220 ... 250	220 ... 250			3VL9300-3ME10		1	1 unit	1CC	1.805
		For VL400 (3VL4)							
50/60 Hz V AC	V DC								
--	24			3VL9400-3MA10		1	1 unit	1CC	2.298
42 ... 60	42 ... 60			3VL9400-3MC10		1	1 unit	1CC	2.330
110 ... 127	110 ... 127			3VL9400-3MD10		1	1 unit	1CC	2.320
220 ... 250	220 ... 250			3VL9400-3ME10		1	1 unit	1CC	2.325
		For VL630 and VL800 (3VL5 and 3VL6)							
50/60 Hz V AC	V DC								
--	24			3VL9600-3MA10		1	1 unit	1CC	2.310
42 ... 60	42 ... 60			3VL9600-3MC10		1	1 unit	1CC	2.261
110 ... 127	110 ... 127			3VL9600-3MD10		1	1 unit	1CC	2.329
220 ... 250	220 ... 250			3VL9600-3ME10		1	1 unit	1CC	2.332
		For VL1250 and VL1600[2)] (3VL7 and 3VL8)							
50/60 Hz V AC	V DC								
--	24			3VL9800-3MJ00		1	1 unit	1CC	7.910
42 ... 48	42 ... 48			3VL9800-3ML00		1	1 unit	1CC	7.945
60	60			3VL9800-3MS00		1	1 unit	1CC	7.945
110 ... 127	110 ... 127			3VL9800-3MN00		1	1 unit	1CC	7.861
220 ... 250	220 ... 250			3VL9800-3MQ00		1	1 unit	1CC	7.865

Toggle lever extension

Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Toggle lever extension		**For VL400 up to VL1600 (3VL4 to 3VL8)**					
• For VL400 (3VL4)		3VL9400-3HN00		1	1 unit	1CC	0.023
• For VL630 and VL800 (3VL5 and 3VL6)		3VL9600-3HN00		1	1 unit	1CC	0.030
• For VL1250 and VL1600 (3VL7 and 3VL8)		3VL9800-3HN00		1	1 unit	1CC	0.251

1) Not possible on VL160X with RCD module.

2) For safety lock as an assembly kit for retrofitting see pages 2/200 to 2/204.

* You can order this quantity or a multiple thereof.

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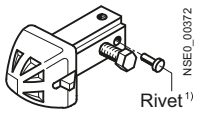
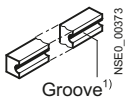
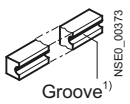
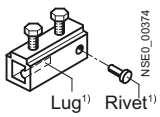
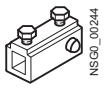
	Switching devices	Rotary operating mechanisms	Size	Cross-section of the actuating shaft	Version[1]	DT	**Individual parts for 8UC7 door-coupling rotary operating mechanisms** Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Type	Type		mm × mm								
Individual parts for 8UC door-coupling rotary operating mechanisms[2]												
8UC7110-1BB	**Handles with masking plate (including flat gasket and fixing screws)**											
	3VL1, 3VL2, 3VL3	8UC71	1	6 × 6 or 8 × 8	Standard		**8UC7110-6BD**		1	1 unit	1CL	0.185
					EMERGENCY-STOP		**8UC7120-8BD**		1	1 unit	1CL	0.183
8UC7210-6BD	3VL4, 3VL5, 3VL6	8UC72	2	8 × 8	Standard		**8UC7210-6BD**		1	1 unit	1CL	0.189
					EMERGENCY-STOP		**8UC7220-8BD**		1	1 unit	1CL	0.194
8UC7310-1BB	3VL7, 3VL8	8UC73	3	12 × 12	Standard		**8UC7310-6BD**		1	1 unit	1CL	0.485
					EMERGENCY-STOP		**8UC7320-8BD**		1	1 unit	1CL	0.488

[1] Standard: Ti-grey handle, light-gray masking plate; EMERGENCY-STOP: Red handle, yellow masking plate.

[2] Cannot be used for side panel rotary operating mechanisms

	Rotary operating mechanisms	Cross-section of the actuating shaft	DT	**Individual parts for 8UC6 door-coupling rotary operating mechanisms** Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Type	mm × mm							
Individual parts for 8UC door-coupling rotary operating mechanisms									
 8UC6014	**Coupling drivers for 3VL**								
	8UC71 (plastic)	6 × 6		**8UC7011-2AA**		1	1 unit	1CL	0.051
	8UC71/8UC72[2] (die cast)	8 × 8		**8UC6017-2AA**		1	1 unit	1CL	0.047
	8UC73/74 (die cast)	12 × 12		**8UC6014**		1	1 unit	1CL	0.234
 8UC6031	**Extension shafts 300 mm long**								
	8UC71	6 × 6		**8UC6031**		1	1 unit	1CL	0.068
	8UC71/8UC72	8 × 8		**8UC6032**		1	1 unit	1CL	0.135
	8UC73	10 × 10		**8UC6033**		1	1 unit	1CL	0.215
	8UC73/74	12 × 12		**8UC6034**		1	1 unit	1CL	0.316
 8UC6081	**Extension shafts 600 mm long**								
	8UC71	6 × 6		**8UC6081**		1	1 unit	1CL	0.136
	8UC71/8UC72	8 × 8		**8UC6082**		1	1 unit	1CL	0.265
	8UC73	10 × 10		**8UC6083**		1	1 unit	1CL	0.424
	8UC73/74	12 × 12		**8UC6084**		1	1 unit	1CL	0.628
 8UC6021 to 8UC6024	**Shaft couplings**								
	8UC71	6 × 6		**8UC6021**		1	1 unit	1CL	0.027
	8UC72	8 × 8		**8UC6022**		1	1 unit	1CL	0.022
	8UC73	10 × 10		**8UC6023**		1	1 unit	1CL	0.084
	8UC73/74	12 × 12		**8UC6024**		1	1 unit	1CL	0.078
 8UC7058	**Reducers**								
	8UC71	8 × 8 to 6 × 6		**8UC7058**		1	1 unit	1CL	0.024
	8UC72	12 × 12 to 8 × 8		**8UC7050**		1	1 unit	1CL	0.081

[1] Non-interchangeability features.

[2] Shortened coupling driver with reduced tolerance compensation.

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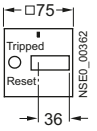
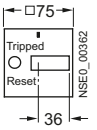
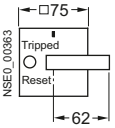
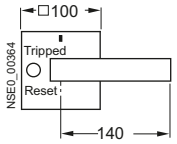
Accessories and spare parts

	Switching devices	Rated current	Cross-section of the actuating shaft	Torque	Rotary operating mecha-nisms	Illustrated: Handle, masking plate
	Type	A	mm	Nm	Size	
8UC door-coupling rotary operating mechanisms						
8UC71 – 3VL circuit breakers						
	3VL1	16 ... 160	6 × 6	4	1	
	3VL2	50 ... 160	6 × 6	4		
	3VL3	200... 250	6 × 6	4		
	3VL1	16 ... 160	8 × 8	4	1	
	3VL2	50 ... 160	8 × 8	4		
	3VL3	200... 250	8 × 8	4		
	(Supplied with door-coupling rotary operating mechanism, complete 3VL9300-3H.05)					
8UC72 – 3VL circuit breakers						
	3VL4	200 ... 400	8 × 8	9	2	
	3VL5	315 ... 600	8 × 8	9		
	3VL6	320 ... 800	8 × 8	9		
8UC73 – 3VL circuit breakers						
	3VL7	400 ... 1250	12 × 12	25	3	
	3VL8	640 ... 1600	12 × 12	25		

[1] Requires in addition a front-operated rotary operating mechanism with shaft stub for direct mounting to the circuit breaker. For ordering the complete operating mechanism, see pages 2/178 to 2/181.

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Version	DT	**Rotary operating mechanisms, complete**[1]		PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.	Individual parts of the rotary operating mechanism			
Standard: Ti-grey handle, light-gray masking plate EMERGENCY-STOP: Red handle, yellow masking plate		Article No. www.siemens.com/product?Article No.	Price per PU				kg	Handle with masking plate Article No.	Coupling drivers Article No.	Extension shaft (length 300 mm) Article No.	Reducer/ shaft coupling Article No.
									☐ 6 mm	**☐ 6 mm**	**☐ 8 mm by 6 mm**
Standard		**8UC7111-6BD15**		1	1 unit	1CL	0.359	8UC7110-6BD	8UC7011-2AA	8UC6031	8UC7058
EMERGENCY-STOP (coupling driver made of plastic)		**8UC7121-8BD15**		1	1 unit	1CL	0.335	8UC7120-8BD	8UC7011-2AA	8UC6031	8UC7058
									☐ 8 mm	**☐ 8 mm**	**☐ 8 mm by 8 mm**
Standard		**8UC7162-6BD22**		1	1 unit	1CL	0.414	8UC7110-6BD	8UC6017-2AA	8UC6032	8UC6022
EMERGENCY-STOP (Die cast coupling driver with reduced tolerance compensation)		**8UC7172-8BD22**		1	1 unit	1CL	0.418	8UC7120-8BD	8UC6017-2AA	8UC6032	8UC6022
									☐ 8 mm	**☐ 8 mm**	**☐ 12 mm by 8 mm**
Standard		**8UC7262-6BD26**		1	1 unit	1CL	0.461	8UC7210-6BD	8UC6017-2AA	8UC6032	8UC7050
EMERGENCY-STOP (Die cast coupling driver with reduced tolerance compensation)		**8UC7262-8BD26**		1	1 unit	1CL	0.482	8UC7220-8BD	8UC6017-2AA	8UC6032	8UC7050
									☐ 12 mm	**☐ 12 mm**	**☐ 12 mm by 12 mm**
Standard		**8UC7314-6BD44**		1	1 unit	1CL	1.186	8UC7310-6BD	8UC6014	8UC6034	8UC6024
EMERGENCY-STOP (Die cast coupling driver)		**8UC7324-8BD44**		1	1 unit	1CL	1.190	8UC7320-8BD	8UC6014	8UC6034	8UC6024

*** You can order this quantity or a multiple thereof.**

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Accessories and spare parts

	Version	DT	For VL160X (3VL1) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Plug-in versions/withdrawable versions								
	3- or 4-pole							
3VL9.00-4PA30	**Plug-in base assembly kits** Base, blade contacts for circuit breakers, terminal covers for degree of protection IP20, fixing screws, trip pin							
	Rear terminals							
	3-pole		3VL9100-4PA30		1	1 unit	1CC	2.490
	3-pole with RCD module		3VL9100-4PB30		1	1 unit	1CC	2.839
	4-pole		3VL9100-4PA40		1	1 unit	1CC	3.272
	4-pole with RCD module		3VL9100-4PB40		1	1 unit	1CC	3.622
	90° angle connecting adapters							
	For rear connection, 3-pole		3VL9300-4PE30		1	1 unit	1CC	0.452
	For rear connection, 4-pole		3VL9300-4PE40		1	1 unit	1CC	0.548
	Front-accessible connections							
	3-pole		3VL9100-4PC30		1	1 unit	1CC	2.291
	3-pole with RCD module		3VL9100-4PD30		1	1 unit	1CC	2.624
	4-pole		3VL9100-4PC40		1	1 unit	1CC	2.942
	4-pole with RCD module		3VL9100-4PD40		1	1 unit	1CC	3.502
	Withdrawable version assembly kits Upgrade of the plug-in base assembly kit to							
	Withdrawable version including side panels and racking mecha-nism. 3-pole		--					
	3-pole with RCD		--					
	4-pole		--					
	4-pole with RCD		--					
	Withdrawable versions Same as plug-in base assembly kit, with additional side panels and racking mechanism							
	Rear terminals							
	3-pole		--					
	3-pole with RCD module		--					
	4-pole		--					
	4-pole with RCD module		--					
3VL9.00-4WA30	**Front-accessible connections**							
	3-pole		--					
	3-pole with RCD module		--					
	4-pole		--					
	4-pole with RCD module		--					
	Blade contacts As replacement for converting fixed-mounted circuit breakers into plug-in/withdrawable circuit breakers, including trip pin							
	1 set = 6 units 3-pole		3VL9100-4PS30		1	1 unit	1CC	0.312
	1 set = 8 units 4-pole		3VL9100-4PS40		1	1 unit	1CC	0.396
	Trip pins and springs							
	As replacement for plug-in/withdrawable circuit breaker		3VL9100-4PF00		1	1 unit	1CC	0.012
	Auxiliary circuit plug connections for plug-in bases Accessory connections for plug-in circuit breakers (factory-wired connectors) and for plug-in bases or withdrawable version (coupling with screw terminal)		[1]					
	8 terminals		3VL9300-4PJ00		1	1 unit	1CC	0.197
3VL9.00-4WA30	**Position signaling switches** (Connected/disconnected position) For plug-in/withdrawable base, 1 changeover contact, max. 2 signaling switches possible		3VL9000-4WL00		1	1 unit	1CC	0.032

[1] It is recommended to use a maximum of 2 auxiliary circuit plug-in systems per circuit breaker (16 terminals).

* You can order this quantity or a multiple thereof.

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DT	For VL160 (3VL2) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	DT	For VL250 (3VL3) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL9200-4PA30		1	1 unit	1CC	2.504		3VL9300-4PA30		1	1 unit	1CC	2.606
	3VL9200-4PB30		1	1 unit	1CC	2.991		3VL9300-4PB30		1	1 unit	1CC	3.120
	3VL9200-4PA40		1	1 unit	1CC	3.120		3VL9300-4PA40		1	1 unit	1CC	3.409
	3VL9200-4PB40		1	1 unit	1CC	3.614		3VL9300-4PB40		1	1 unit	1CC	3.762
	3VL9300-4PE30		1	1 unit	1CC	0.452		3VL9300-4PE30		1	1 unit	1CC	0.452
	3VL9300-4PE40		1	1 unit	1CC	0.548		3VL9300-4PE40		1	1 unit	1CC	0.548
	3VL9200-4PC30		1	1 unit	1CC	2.254		3VL9300-4PC30		1	1 unit	1CC	2.400
	3VL9200-4PD30		1	1 unit	1CC	2.368		3VL9300-4PD30		1	1 unit	1CC	2.668
	3VL9200-4PC40		1	1 unit	1CC	2.920		3VL9300-4PC40		1	1 unit	1CC	3.010
	3VL9200-4PD40		1	1 unit	1CC	3.395		3VL9300-4PD40		1	1 unit	1CC	3.500
	3VL9300-4WF30		1	1 unit	1CC	2.360		3VL9300-4WF30		1	1 unit	1CC	2.360
	3VL9300-4WG30		1	1 unit	1CC	2.740		3VL9300-4WG30		1	1 unit	1CC	2.740
	3VL9300-4WF40		1	1 unit	1CC	2.740		3VL9300-4WF40		1	1 unit	1CC	2.740
	3VL9300-4WG40		1	1 unit	1CC	3.551		3VL9300-4WG40		1	1 unit	1CC	3.551
	3VL9200-4WA30		1	1 unit	1CC	4.940		3VL9300-4WA30		1	1 unit	1CC	5.192
	3VL9200-4WB30		1	1 unit	1CC	6.301		3VL9300-4WB30		1	1 unit	1CC	9.800
	3VL9200-4WA40		1	1 unit	1CC	5.662		3VL9300-4WA40		1	1 unit	1CC	5.932
	3VL9200-4WB40		1	1 unit	1CC	6.919		3VL9300-4WB40		1	1 unit	1CC	6.935
	3VL9200-4WC30		1	1 unit	1CC	4.987		3VL9300-4WC30		1	1 unit	1CC	5.100
	3VL9200-4WD30		1	1 unit	1CC	6.045		3VL9300-4WD30		1	1 unit	1CC	6.249
	3VL9200-4WC40		1	1 unit	1CC	5.560		3VL9300-4WC40		1	1 unit	1CC	5.560
	3VL9200-4WD40		1	1 unit	1CC	6.732		3VL9300-4WD40		1	1 unit	1CC	6.895
	3VL9200-4PS30		1	1 unit	1CC	0.303		3VL9300-4PS30		1	1 unit	1CC	0.424
	3VL9200-4PS40		1	1 unit	1CC	0.381		3VL9300-4PS40		1	1 unit	1CC	0.535
	3VL9300-4PF00		1	1 unit	1CC	0.006		3VL9300-4PF00		1	1 unit	1CC	0.006
	1) 3VL9300-4PJ00		1	1 unit	1CC	0.197		1) 3VL9300-4PJ00		1	1 unit	1CC	0.197
	3VL9000-4WL00		1	1 unit	1CC	0.032		3VL9000-4WL00		1	1 unit	1CC	0.032

*** You can order this quantity or a multiple thereof.**

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Accessories and spare parts

Version	DT	For VL400 (3VL4) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Plug-in versions/withdrawable versions							
3- or 4-pole							
Plug-in base assembly kits Base, blade contacts for circuit breakers, terminal covers for degree of protection IP20, fixing screws, trip pin							
Rear terminals							
3-pole		3VL9400-4PA30		1	1 unit	1CC	6.520
3-pole with RCD module		--[1]					
4-pole		3VL9400-4PA40		1	1 unit	1CC	8.380
4-pole with RCD module		3VL9400-4PB40		1	1 unit	1CC	9.857
90° angle connecting adapters							
For rear connection, 3-pole		--					
For rear connection, 4-pole		--					
Front-accessible connections							
3-pole		3VL9400-4PC30		1	1 unit	1CC	6.190
3-pole with RCD module		--[1]					
4-pole		3VL9400-4PC40		1	1 unit	1CC	7.690
4-pole with RCD module		3VL9400-4PD40		1	1 unit	1CC	9.298
Withdrawable version assembly kits Upgrade of the plug-in base assembly kit to							
Withdrawable version including side panels and racking mechanism. 3-pole		3VL9400-4WF30		1	1 unit	1CC	4.822
3-pole with RCD		--[1]					
4-pole		3VL9400-4WF40		1	1 unit	1CC	4.880
4-pole with RCD		3VL9400-4WG40		1	1 unit	1CC	6.523
Withdrawable versions Same as plug-in base assembly kit, with additional side panels and racking mechanism							
Rear terminals[3]							
3-pole		3VL9400-4WA30		1	1 unit	1CC	12.650
3-pole with RCD module		--[1]					
4-pole		3VL9400-4WA40		1	1 unit	1CC	14.582
4-pole with RCD module		3VL9400-4WB40		1	1 unit	1CC	28.300
Front-accessible connections							
3-pole		3VL9400-4WC30		1	1 unit	1CC	12.240
3-pole with RCD module		--[1]					
4-pole		3VL9400-4WC40		1	1 unit	1CC	14.240
4-pole with RCD module		3VL9400-4WD40		1	1 unit	1CC	18.219
Blade contacts As replacement for converting fixed-mounted circuit breakers into plug-in/withdrawable circuit breakers, including trip pin							
1 set = 6 units 3-pole		3VL9400-4PS30		1	1 unit	1CC	1.292
1 set = 8 units 4-pole		3VL9400-4PS40		1	1 unit	1CC	1.623
Trip pins and springs							
As replacement for plug-in/withdrawable circuit breaker		3VL9400-4PF00		1	1 unit	1CC	0.006
Auxiliary circuit plug connections for plug-in bases Accessory connections for plug-in circuit breakers (factory-wired connectors) and for plug-in bases or withdrawable version (coupling with screw terminal)		[2]					
8 terminals		3VL9400-4PJ00		1	1 unit	1CC	0.215
Position signaling switches (Connected/disconnected position) For plug-in/withdrawable base, 1 changeover contact, max. 2 signaling switches possible		3VL9000-4WL00		1	1 unit	1CC	0.032

3VL9.00-4PA30

3VL9.00-4WA30

3VL9000-4WL00

1) For 3-pole applications please use 4-pole withdrawable version with 4-pole RCD module and 4-pole circuit breaker.

2) It is recommended to use a maximum of 3 auxiliary circuit plug-in systems per circuit breaker (24 terminals).

3) With VL800 (3VL6) to VL1600 (3VL8) as vertical connection.

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DT	For VL630 (3VL5) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	DT	For VL800 (3VL6) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL9500-4PA30		1	1 unit	1CC	9.186		--					
	--							--					
	3VL9500-4PA40		1	1 unit	1CC	12.424		--					
	--							--					
	--							--					
	--							--					
	3VL9500-4PC30		1	1 unit	1CC	8.025		--					
	–							--					
	3VL9500-4PC40		1	1 unit	1CC	10.720		--					
	--							--					
	3VL9500-4WF30		1	1 unit	1CC	5.200		--					
	--							--					
	3VL9500-4WF40		1	1 unit	1CC	4.740		--					
	--							--					
	3VL9500-4WA30		1	1 unit	1CC	15.360		3VL9600-4WA30		1	1 unit	1CC	43.880
	--							--					
	3VL9500-4WA40		1	1 unit	1CC	18.760		3VL9600-4WA40		1	1 unit	1CC	43.800
	--							--					
	3VL9500-4WC30		1	1 unit	1CC	14.180		3VL9600-4WC30		1	1 unit	1CC	44.460
	--							--					
	3VL9500-4WC40		1	1 unit	1CC	16.945		3VL9600-4WC40		1	1 unit	1CC	43.213
	--							--					
	3VL9500-4PS30		1	1 unit	1CC	1.603		3VL9600-4PS30		1	1 unit	1CC	3.744
	3VL9500-4PS40		1	1 unit	1CC	2.101		3VL9600-4PS40		1	1 unit	1CC	4.965
	3VL9500-4PF00		1	1 unit	1CC	0.009		3VL9600-4PF00		1	1 unit	1CC	0.010
	2)							2)					
	3VL9600-4PJ00		1	1 unit	1CC	0.250		3VL9600-4PJ00		1	1 unit	1CC	0.250
	3VL9000-4WL00		1	1 unit	1CC	0.032		3VL9000-4WL00		1	1 unit	1CC	0.032

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Accessories and spare parts

Plug-in versions/withdrawable versions

	Version	DT	For VL1250 (3VL7) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3- or 4-pole							
3VL9.00-4PA30	**Plug-in base assembly kits** Base, blade contacts for circuit breakers, terminal covers for degree of protection IP20, fixing screws, trip pin							
	Rear terminals							
	3-pole		--					
	3-pole with RCD module		--					
	4-pole		--					
	4-pole with RCD module		--					
	90° angle connecting adapters							
	For rear connection, 3-pole		--					
	For rear connection, 4-pole		--					
	Front-accessible connections							
	3-pole		--					
	3-pole with RCD module		--					
	4-pole		--					
	4-pole with RCD module		--					
	Withdrawable version assembly kits Upgrade of the plug-in base assembly kit to							
	Withdrawable version including side panels and racking mechanism. 3-pole		--					
	3-pole with RCD		--					
	4-pole		--					
	4-pole with RCD		--					
3VL9.00-4WA30	**Withdrawable versions** Same as plug-in base assembly kit, with additional side panels and racking mechanism							
	Rear terminals[1])							
	3-pole		3VL9800-4WA30		1	1 unit	1CC	43.420
	3-pole with RCD module		--					
	4-pole		3VL9800-4WA40		1	1 unit	1CC	52.320
	4-pole with RCD module		--					
	Front-accessible connections							
	3-pole		3VL9800-4WC30		1	1 unit	1CC	45.000
	3-pole with RCD module		--					
	4-pole		3VL9800-4WC40		1	1 unit	1CC	53.000
	4-pole with RCD module		--					
	Blade contacts As replacement for converting fixed-mounted circuit breakers into plug-in/withdrawable circuit breakers, including trip pin							
	1 set = 6 units	3-pole	3VL9800-4PS30		1	1 unit	1CC	3.510
	1 set = 8 units	4-pole	3VL9800-4PS40		1	1 unit	1CC	4.595
	Trip pins and springs As replacement for plug-in/withdrawable circuit breaker		3VL9800-4PF00		1	1 unit	1CC	0.016
	Auxiliary circuit plug connections for plug-in bases Accessory connections for plug-in circuit breakers (factory-wired connectors) and for plug-in bases or withdrawable version (coupling with screw terminal)		2)					
	8 terminals		3VL9800-4PJ00		1	1 unit	1CC	0.217
3VL9000-4WL00	**Position signaling switches** (Connected/disconnected position) For plug-in/withdrawable base, 1 changeover contact, max. 2 signaling switches possible		3VL9000-4WL00		1	1 unit	1CC	0.032

1) With VL800 (3VL6) to VL1600 (3VL8) as vertical connection.

2) It is recommended to use a maximum of 3 auxiliary circuit plug-in systems per circuit breaker (24 terminals).

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DT	For VL1600 (3VL8) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
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	--					
	--					
	3VL9800-4WA30		1	1 unit	1CC	43.420
	--					
	3VL9800-4WA40		1	1 unit	1CC	52.320
	--					
	3VL9800-4WC30		1	1 unit	1CC	45.000
	--					
	3VL9800-4WC40		1	1 unit	1CC	53.000
	--					
	3VL9800-4PS30		1	1 unit	1CC	3.510
	3VL9800-4PS40		1	1 unit	1CC	4.595
	3VL9800-4PF00		1	1 unit	1CC	0.016
	2)					
	3VL9800-4PJ00		1	1 unit	1CC	0.217
	3VL9000-4WL00		1	1 unit	1CC	0.032

* You can order this quantity or a multiple thereof.

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Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A, IEC

Accessories and spare parts

Circuit breakers for line protection, **only for TM, starters, disconnectors**	Rated current I_n	Residual currents I adjustable	Delay time t_d adjustable	Rated operational voltage U_e	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	s	V AC							kg
RCD modules											
3-pole											
VL160X (3VL1)		0.03	Instantaneous								
Bottom mounting[1)2)]	160	0.10	0.06	127 ... 480		3VL9112-5GA30		1	1 unit	1CC	1.500
VL160 (3VL2)	160	0.30	0.10	127 ... 480		3VL9216-5GC30		1	1 unit	1CC	1.438
		0.50	0.25	230 ... 690		3VL9216-5GD30		1	1 unit	1CC	1.427
VL250 (3VL3)	250	1.00	0.50	127 ... 480		3VL9325-5GE30		1	1 unit	1CC	1.478
		3.00	1.00	230 ... 690		3VL9325-5GF30		1	1 unit	1CC	1.487
VL400 (3VL4)	400			127 ... 480		--					
				230 ... 690		--					
4-pole											
VL160X (3VL1)		0.03	Instantaneous								
Bottom mounting[1)2)]	160	0.10	0.06	127 ... 480		3VL9112-5GA40		1	1 unit	1CC	1.849
VL160 (3VL2)	160	0.30	0.10	127 ... 480		3VL9216-5GC40		1	1 unit	1CC	1.743
		0.50	0.25	230 ... 690		3VL9216-5GD40		1	1 unit	1CC	1.700
VL250 (3VL3)	250	1.00	0.50	127 ... 480		3VL9325-5GE40		1	1 unit	1CC	1.806
		3.00	1.00	230 ... 690		3VL9325-5GF40		1	1 unit	1CC	1.810
VL400 (3VL4)	400			127 ... 480		3VL9440-5GG40		1	1 unit	1CC	3.327
				230 ... 690		3VL9440-5GH40		1	1 unit	1CC	3.325

Molded case circuit breakers VL160X to VL400 with RCD module mounted below the circuit breaker

Circuit breakers for line protection, **only for TM, starters, disconnectors**	Rated current I_n	Residual currents I adjustable	Delay time t_d adjustable	Rated operational voltage U_e	**3-pole circuit breakers** Article No. with **"-Z"** **3VL. . . .-. D . . .-. . . .-Z** and additional order code	Add. price	**4-pole circuit breakers** Article No. with **"-Z"** **3VL. . . .-. E . . .-. . . .-Z** and additional order code	Add. price
					☐☐☐ Code for further versions **-Z**		☐☐☐ Code for further versions **-Z**	
	A	A	s	V AC				
Circuit breakers with RCD module								
3- and 4-pole								
VL160X (3VL1)		0.03	Instantaneous					
(Bottom mounting)	160	0.10	0.06	127 ... 480	**A 0 1** [1)2)]	✓	**A 0 1** [1)2)]	✓
		0.30	0.10					
		0.50	0.25					
VL160 (3VL2)	160	1.00	0.50	127 ... 480	**A 0 1**	✓	**A 0 1**	✓
		3.00	1.00	230 ... 690	**A 0 2**	✓	**A 0 2**	✓
VL250 (3VL3)	250			127 ... 480	**A 0 1**	✓	**A 0 1**	✓
				230 ... 690	**A 0 2**	✓	**A 0 2**	✓
VL400 (3VL4)	400			127 ... 480	--		**A 0 1**	✓
				230 ... 690	--		**A 0 2**	✓

Residual current devices (MRCD)

Modular residual current devices (MRCD) monitor residual currents in electrical systems and trip the molded case circuit breaker via an auxiliary release after an adjustable advance warning if the residual current exceeds a defined value.

See chapter "Monitoring Devices".

✓ Additional price

1) Only the right-hand accessory compartment and the N conductor (4-pole) accessory compartment can be used for the installation of accessories, see Technical Information at www.siemens.com/lowvoltage/product-support.

2) VL160X (3VL1) + RCD module cannot be combined with motorized operating mechanism, front operating mechanism, door-coupling rotary operating mechanism, locking device for toggle levers, screw terminal connections (3VL17..-....6-....) and Bowden wire interlocking.

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	Version		DT	For VL160X (3VL1) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
Connection parts for fixed-mounted circuit breakers[1]									
	3- or 4-pole								
	Front connecting bars[2] Phase barriers included.								
3VL9216-4EC40	Standard								
	1 set = 3 units	3-pole		3VL9216-4EC30		1	1 unit	1CC	0.212
	1 set = 4 units	4-pole		3VL9216-4EC40		1	1 unit	1CC	0.287
3VL9216-4ED40	For increased pole spacing								
	1 set = 3 units	3-pole		3VL9216-4ED30		1	1 unit	1CC	0.224
	1 set = 4 units	4-pole		3VL9216-4ED40		1	1 unit	1CC	0.348
	Rear terminals								
3VL9.00-4RA00, 3VL9.00-4RB00	Short connection (1 unit)			3VL9100-4RA00		1	1 unit	1CC	0.163
	Long connection (1 unit)			3VL9100-4RB00		1	1 unit	1CC	0.260
	Terminal kit (2 short + 1 long) 3-pole			3VL9100-4RC30		1	1 unit	1CC	0.556
	Terminal kit (2 short + 2 long) 4-pole			3VL9100-4RF40		1	1 unit	1CC	0.805
3VL9.00-4RK00, 3VL9.00-4RL00	Short flat connection (1 unit)			3VL9100-4RK00		1	1 unit	1CC	0.104
	Long flat connection (1 unit)			3VL9100-4RL00		1	1 unit	1CC	0.222
	Flat connector kit (2 short + 1 long) 3-pole			3VL9100-4RM30		1	1 unit	1CC	0.408
	Flat connector kit (2 short + 2 long) 4-pole			3VL9100-4RN40		1	1 unit	1CC	0.652
3VL9.00-4TC.0	**Box terminals** For connection for flexible flat copper busbar or cable, see Technical Information at www.siemens.com/lowvoltage/product-support.								
	1 set = 3 units			3VL9100-4TC30		1	1 unit	1CC	0.103
	1 set = 4 units			3VL9100-4TC40		1	1 unit	1CC	0.132
3VL9.00-4TD.0	**Circular conductor terminals** Only for cables (Al or Cu), aluminum terminal (tinned)								
	1 set = 3 units			3VL9100-4TD30		1	1 unit	1CC	0.107
	1 set = 4 units			3VL9100-4TD40		1	1 unit	1CC	0.121
	Circular conductor terminal with terminal covers for cable (Al or Cu)								
	1 set = 3 units			3VL9115-4TD30		1	1 unit	1CC	0.337
	1 set = 4 units			3VL9115-4TD40		1	1 unit	1CC	0.429
	Auxiliary conductor terminals For box terminals/circular conductor terminals 1 set = 10 units			3VL9200-3TN00		1	1 unit	1CC	0.125
3VL9.00-4TA.0	**Terminals with screw connection - metric thread** With insulator (for rear) for use with busbars and cable lugs, see Technical Information at www.siemens.com/lowvoltage/product-support.								
	1 set = 3 units			3VL9116-4TA30		1	1 unit	1CC	0.067
	1 set = 4 units			3VL9116-4TA40		1	1 unit	1CC	0.084
NSE0_00730 3VL9.00-3CB.0	**Connection covers (terminal covers) for circuit breakers** Degree of protection IP30 for main connections 1 set = 2 units								
	Extended	3-pole		3VL9300-8CA30		1	1 unit	1CC	0.292
	Standard	3-pole		3VL9300-8CB30		1	1 unit	1CC	0.065
	Extended	4-pole		3VL9300-8CA40		1	1 unit	1CC	0.364
	Standard	4-pole		3VL9300-8CB40		1	1 unit	1CC	0.082
NSE0_00731 3VL9.00-8CE00	**Phase barriers for circuit breakers, fixed-mounted, plug-in or withdrawable versions**								
	1 set = 2 units			3VL9300-8CE00		1	1 unit	1CC	0.035

[1] For an overview of connectable connection parts, see page 2/123.

[2] Screw terminal connections are required for VL160X and VL160 molded case circuit breakers (3VL1 and 3VL2), see Technical Information at www.siemens.com/lowvoltage/product-support.

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Accessories and spare parts

	Version		DT	For VL160 (3VL2) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Connection parts for fixed-mounted circuit breakers[1]									
	3- or 4-pole								
3VL9216-4EC40	**Front connecting bars**[2] Phase barriers included.								
	Standard								
	1 set = 3 units	3-pole		3VL9216-4EC30		1	1 unit	1CC	0.212
	1 set = 4 units	4-pole		3VL9216-4EC40		1	1 unit	1CC	0.287
3VL9216-4ED40	For increased pole spacing								
	1 set = 3 units	3-pole		3VL9216-4ED30		1	1 unit	1CC	0.224
	1 set = 4 units	4-pole		3VL9216-4ED40		1	1 unit	1CC	0.348
3VL9.00-4R.00	**Rear terminals**								
	Short connection (1 unit)			3VL9200-4RA00		1	1 unit	1CC	0.161
	Long connection (1 unit)			3VL9200-4RB00		1	1 unit	1CC	0.264
	Terminal kit (2 short + 1 long) 3-pole			3VL9200-4RC30		1	1 unit	1CC	0.565
	Terminal kit (2 short + 2 long) 4-pole			3VL9200-4RF40		1	1 unit	1CC	0.817
3VL9.00-4R.00	Short flat connection (1 unit)			3VL9200-4RK00		1	1 unit	1CC	0.131
	Long flat connection (1 unit)			3VL9200-4RL00		1	1 unit	1CC	0.227
	Flat connector kit (2 short + 1 long) 3-pole			3VL9200-4RM30		1	1 unit	1CC	0.455
	Flat connector kit (2 short + 2 long) 4-pole			3VL9200-4RN40		1	1 unit	1CC	0.656
3VL9.00-4TC.0	**Box terminal** Connection for flexible flat copper busbar or cable, see Technical Information at www.siemens.com/lowvoltage/product-support.								
	1 set = 3 units			3VL9200-4TC30		1	1 unit	1CC	0.122
	1 set = 4 units			3VL9200-4TC40		1	1 unit	1CC	0.156
3VL9.00-4TD.0	**Circular conductor terminals** Only for cables (Al or Cu), aluminum terminal (tinned)								
	1 set = 3 units			3VL9200-4TD30		1	1 unit	1CC	0.112
	1 set = 4 units			3VL9200-4TD40		1	1 unit	1CC	0.159
	Circular conductor terminal with terminal covers for cable (Al or Cu)								
	1 set = 3 units			3VL9215-4TD30		1	1 unit	1CC	0.360
	1 set = 4 units			3VL9215-4TD40		1	1 unit	1CC	0.455
3VL9.00-4TF.0	**Multiple feed-in terminal without terminal covers**								
	3 units (2 × 50 ... 120)			--					
	4 units (2 × 50 ... 120)			--					
	Multiple feed-in terminal with terminal covers								
	3 units (2 × 70 ... 300)			--					
	4 units (2 × 70 ... 300)			--					
	Auxiliary conductor terminals For box terminals/circular conductor terminals/multiple feed-in terminals 1 set = 10 units			3VL9200-3TN00		1	1 unit	1CC	0.125
3VL9.00-4TA.0	**Terminals with screw connection - metric thread** With insulator (for rear) for use with busbars and cable lugs, see Technical Information at www.siemens.com/lowvoltage/product-support.								
	1 set = 3 units			3VL9216-4TA30		1	1 unit	1CC	0.087
	1 set = 4 units			3VL9216-4TA40		1	1 unit	1CC	0.108
NSE0_00730 3VL9.00-3CB.0	**Connection covers (terminal covers) for circuit breakers** Degree of protection IP30 for main connections 1 set = 2 units								
	Extended	3-pole		3VL9300-8CA30		1	1 unit	1CC	0.292
	Standard	3-pole		3VL9300-8CB30		1	1 unit	1CC	0.065
	Extended	4-pole		3VL9300-8CA40		1	1 unit	1CC	0.364
	Standard	4-pole		3VL9300-8CB40		1	1 unit	1CC	0.082
NSE0_00731 3VL9.00-3CB.0	**Phase barriers for circuit breakers, fixed-mounted, plug-in or withdrawable versions**								
	1 set = 2 units			3VL9300-8CE00		1	1 unit	1CC	0.035

[1] For an overview of connectable connection parts, see page 2/123.

[2] Screw terminal connections are required for VL160X and VL160 molded case circuit breakers (3VL1 and 3VL2), see Technical Information at www.siemens.com/lowvoltage/product-support.

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DT	For VL250 (3VL3) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	DT	For VL400 (3VL4) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL9300-4EC30		1	1 unit	1CC	0.269		3VL9400-4EC30		1	1 unit	1CC	0.918
	3VL9300-4EC40		1	1 unit	1CC	0.346		3VL9400-4EC40		1	1 unit	1CC	1.256
	3VL9300-4ED30		1	1 unit	1CC	0.256		3VL9400-4ED30		1	1 unit	1CC	0.896
	3VL9300-4ED40		1	1 unit	1CC	0.425		3VL9400-4ED40		1	1 unit	1CC	1.476
	3VL9300-4RA00		1	1 unit	1CC	0.161		3VL9400-4RA00		1	1 unit	1CC	0.268
	3VL9300-4RB00		1	1 unit	1CC	0.265		3VL9400-4RB00		1	1 unit	1CC	0.433
	3VL9300-4RC30		1	1 unit	1CC	0.562		3VL9400-4RC30		1	1 unit	1CC	0.930
	3VL9300-4RF40		1	1 unit	1CC	0.850		3VL9400-4RF40		1	1 unit	1CC	1.337
	3VL9300-4RK00		1	1 unit	1CC	0.126		3VL9400-4RK00		1	1 unit	1CC	0.380
	3VL9300-4RL00		1	1 unit	1CC	0.228		3VL9400-4RL00		1	1 unit	1CC	0.542
	3VL9300-4RM30		1	1 unit	1CC	0.447		3VL9400-4RM30		1	1 unit	1CC	1.305
	3VL9300-4RN40		1	1 unit	1CC	0.660		3VL9400-4RN40		1	1 unit	1CC	1.783
	3VL9300-4TC30		1	1 unit	1CC	0.205		3VL9400-4TC30		1	1 unit	1CC	0.488
	3VL9300-4TC40		1	1 unit	1CC	0.275		3VL9400-4TC40		1	1 unit	1CC	0.617
	3VL9300-4TD30		1	1 unit	1CC	0.181		3VL9400-4TD30		1	1 unit	1CC	0.293
	3VL9300-4TD40		1	1 unit	1CC	0.380		3VL9400-4TD40		1	1 unit	1CC	0.391
	3VL9324-4TD30		1	1 unit	1CC	0.487		--					
	3VL9324-4TD40		1	1 unit	1CC	0.676		--					
	--							3VL9400-4TF30		1	1 unit	1CC	0.447
	--							3VL9400-4TF40		1	1 unit	1CC	0.575
	--							3VL9460-4TF30		1	1 unit	1CC	0.892
	--							3VL9460-4TF40		1	1 unit	1CC	1.141
	3VL9300-3TN00		1	1 unit	1CC	0.133		3VL9400-3TN00		1	1 unit	1CC	0.140
	3VL9300-4TA30		1	1 unit	1CC	0.114		3VL9400-4TA30		1	1 unit	1CC	0.125
	3VL9300-4TA40		1	1 unit	1CC	0.144		3VL9400-4TA40		1	1 unit	1CC	0.161
	3VL9300-8CA30		1	1 unit	1CC	0.292		3VL9400-8CA30		1	1 unit	1CC	0.625
	3VL9300-8CB30		1	1 unit	1CC	0.065		3VL9400-8CB30		1	1 unit	1CC	0.124
	3VL9300-8CA40		1	1 unit	1CC	0.364		3VL9400-8CA40		1	1 unit	1CC	0.705
	3VL9300-8CB40		1	1 unit	1CC	0.082		3VL9400-8CB40		1	1 unit	1CC	0.177
	3VL9300-8CE00		1	1 unit	1CC	0.035		3VL9600-8CE00		1	1 unit	1CC	0.057

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Accessories and spare parts

	Version		DT	For VL630 (3VL5) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Connection parts for fixed-mounted circuit breakers[1]									
	3- or 4-pole								
	Front connecting bars Phase barriers included.								
 3VL9216-4EC40	Standard								
	1 set = 3 units	3-pole		3VL9500-4EC30		1	1 unit	1CC	1.160
	1 set = 4 units	4-pole		3VL9500-4EC40		1	1 unit	1CC	1.522
 3VL9216-4ED40	For increased pole spacing								
	1 set = 3 units	3-pole		3VL9500-4ED30		1	1 unit	1CC	1.172
	1 set = 4 units	4-pole		3VL9500-4ED40		1	1 unit	1CC	1.545
 3VL9.00-4RG00	Flat connecting bar (1 unit)			3VL9500-4RG00		1	1 unit	1CC	0.543
	Flat connecting bars Set = 3 units, 3-pole			3VL9500-4RH30		1	1 unit	1CC	1.174
	Flat connecting bars Set = 4 units, 4-pole			3VL9500-4RH40		1	1 unit	1CC	1.519
 3VL9.00-4TG.0	**Multiple feed-in terminals** Only for cables (Al or Cu) Aluminum terminal (tinned)								
	1 set = 3 units			3VL9500-4TG30		1	1 unit	1CC	0.566
	1 set = 4 units			3VL9500-4TG40		1	1 unit	1CC	0.697
	Auxiliary conductor terminals For multiple feed-in terminals 1 set = 10 units			3VL9400-3TN00		1	1 unit	1CC	0.140
 3VL9.00-4TT.0	**Terminal plates[2]** Connection for flexible flat copper busbar with auxiliary conductor connection 0.5 – 4 mm^2 (extended terminal covers or phase barriers required)								
	1 set = 3 units			3VL9500-4TT30		1	1 unit	1CC	1.432
	1 set = 4 units			3VL9500-4TT40		1	1 unit	1CC	1.874
 3VL9.00-4TA.0	**Terminals with screw connection – metric thread** With insulator (for rear) for use with busbars and cable lugs, see Technical Information at www.siemens.com/lowvoltage/product-support.								
	1 set = 3 units			3VL9500-4TA30		1	1 unit	1CC	0.134
	1 set = 4 units			3VL9500-4TA40		1	1 unit	1CC	0.163
 3VL9.00-3CB.0	**Connection covers (terminal covers) for circuit breakers** Degree of protection IP30 for main connections 1 set = 2 units								
	Extended	3-pole		3VL9600-8CA30		1	1 unit	1CC	0.930
	Standard	3-pole		3VL9600-8CB30		1	1 unit	1CC	0.219
	Extended	4-pole		3VL9600-8CA40		1	1 unit	1CC	1.062
	Standard	4-pole		3VL9600-8CB40		1	1 unit	1CC	0.287
 3VL9.00-8CE00	**Phase barriers for circuit breakers, fixed-mounted, plug-in or withdrawable versions[3]** 1 set = 2 units			3VL9600-8CE00		1	1 unit	1CC	0.057

1) For an overview of connectable connection parts, see page 2/123.

2) Front connecting bars included in scope of supply; not for 690 V AC/600 V DC.

3) Plug-in versions: Not for VL1250 (3VL7), withdrawable version: Not for VL800 (3VL6) and VL1250 (3VL7).

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DT	For VL800 (3VL6) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	DT	For VL1250 (3VL7) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL9600-4EC30		1	1 unit	1CC	1.725		3VL9800-4EC30		1	1 unit	1CC	3.562
	3VL9600-4EC40		1	1 unit	1CC	2.301		3VL9800-4EC40		1	1 unit	1CC	4.385
	3VL9600-4ED30		1	1 unit	1CC	1.733		--					
	3VL9600-4ED40		1	1 unit	1CC	2.287		--					
	3VL9600-4RG00		1	1 unit	1CC	1.629		3VL9700-4RG00		1	1 unit	1CC	1.638
	3VL9600-4RH30		1	1 unit	1CC	4.770		3VL9700-4RH30		1	1 unit	1CC	4.960
	3VL9600-4RH40		1	1 unit	1CC	6.510		3VL9700-4RH40		1	1 unit	1CC	6.523
	3VL9600-4TG30		1	1 unit	1CC	1.024		3VL9700-4TG30		1	1 unit	1CC	2.235
	3VL9600-4TG40		1	1 unit	1CC	1.286		3VL9700-4TG40		1	1 unit	1CC	2.950
	3VL9400-3TN00		1	1 unit	1CC	0.140		3VL9400-3TN00		1	1 unit	1CC	0.140
	--							--					
	--							--					
	3VL9600-4TA30		1	1 unit	1CC	0.236		3VL9800-4TA30		1	1 unit	1CC	0.276
	3VL9600-4TA40		1	1 unit	1CC	0.311		3VL9800-4TA40		1	1 unit	1CC	0.506
	3VL9600-8CA30		1	1 unit	1CC	0.930		3VL9800-8CA30		1	1 unit	1CC	1.240
	3VL9600-8CB30		1	1 unit	1CC	0.219		3VL9800-8CB30		1	1 unit	1CC	0.364
	3VL9600-8CA40		1	1 unit	1CC	1.062		3VL9800-8CA40		1	1 unit	1CC	1.500
	3VL9600-8CB40		1	1 unit	1CC	0.287		3VL9800-8CB40		1	1 unit	1CC	0.536
	3VL9600-8CE00		1	1 unit	1CC	0.057		3VL9800-8CE00		1	1 unit	1CC	0.141

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Accessories and spare parts

	Version		DT	For VL1600 (3VL8) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Connection parts for fixed-mounted circuit breakers[1]									
	3- or 4-pole								
	Front connecting bars Phase barriers included.								
 3VL9216-4EC40	Standard[2]								
	1 set = 3 units	3-pole		3VL9800-4EC30		1	1 unit	1CC	3.562
	1 set = 4 units	4-pole		3VL9800-4EC40		1	1 unit	1CC	4.385
 3VL9216-4ED40	For increased pole spacing								
	1 set = 3 units	3-pole		--					
	1 set = 4 units	4-pole		--					
	Rear terminals								
 3VL9.00-4RG00	Flat connecting bar (1 unit)			3VL9800-4RG00		1	1 unit	1CC	1.597
	Flat connecting bars Set = 3 units, 3-pole			3VL9800-4RH30		1	1 unit	1CC	4.965
	Flat connecting bars Set = 4 units, 4-pole			3VL9800-4RH40		1	1 unit	1CC	6.105
 3VL9.00-4TA.0	**Terminals with screw connection - metric thread** With insulator (for rear) for use with busbars and cable lugs, see Technical Information at www.siemens.com/lowvoltage/product-support.								
	1 set = 3 units			3VL9800-4TA30		1	1 unit	1CC	0.276
	1 set = 4 units			3VL9800-4TA40		1	1 unit	1CC	0.506
 NSE0_00730 3VL9.00-3CB.0	**Connection covers (terminal covers) for circuit breakers** Degree of protection IP30 for main connections 1 set = 2 units								
	Extended	3-pole		3VL9800-8CA30		1	1 unit	1CC	1.240
	Standard	3-pole		3VL9800-8CB30		1	1 unit	1CC	0.364
	Extended	4-pole		3VL9800-8CA40		1	1 unit	1CC	1.500
	Standard	4-pole		3VL9800-8CB40		1	1 unit	1CC	0.536
 NSE0_00731 3VL9.00-8CE00	**Phase barriers for fixed-mounted circuit breakers** 1 set = 2 units			3VL9800-8CE00		1	1 unit	1CC	0.141

[1] For an overview of connectable connection parts, see page 2/123.

[2] In scope of supply of circuit breaker.

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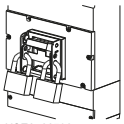
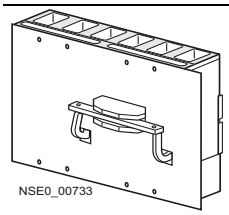
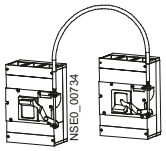
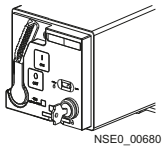
	Version	DT	For VL160X (3VL1) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Interlocks								
	3- or 4-pole							
 NSE0_00732 3VL9.00-3HL00	**Locking devices for toggle levers** For locking the circuit breaker in the "OFF" position. Up to 3 padlocks with Ø 5 – 8 mm can be used. Removable (padlocks not included)		3VL9300-3HL00		1	1 unit	1CC	0.077
 NSE0_00733 3VL9.00-8L.00	**Rear interlocking modules** For the mechanical interlocking of two adjacent circuit breakers. The circuit breakers must be of the same installation type and size. (Mounting plate not included in scope of supply)							
	Fixed-mounted circuit breakers		3VL9300-8LC00		1	1 unit	1CC	0.320
	Plug-in/withdrawable circuit breakers		3VL9300-8LD00		1	1 unit	1CC	0.383
 NSE0_00734 3VL9.00-8LA00	**Interlocking modules for Bowden wire interlocking**[1] For the mechanical interlocking of two circuit breakers. Interlocking module for one circuit breaker		Combination with next size up possible (see Article No.) 3VL9300-8LA00		1	1 unit	1CC	0.191
	Bowden wires for Bowden wire interlocking[1]							
	Wire length 0.5 m		3VL9000-8LH10		1	1 unit	1CC	0.303
	Wire length 1.0 m		3VL9000-8LH20		1	1 unit	1CC	0.444
	Wire length 1.5 m		3VL9000-8LH30		1	1 unit	1CC	0.646
 NSE0_00680 3VL9...-8HA00	**Safety lock assembly kits** Key can be removed with the circuit breaker in the "OFF" position							
	For front-operated rotary operating mechanisms							
	Lock types							
	Ronis		3VL9715-8HA00		1	1 unit	1CC	0.266
	For motorized operating mechanism with stored energy mechanism							
	Lock types							
	Ronis		--					
	Filli Giussani		3VL9321-8HA00		1	1 unit	1CC	0.039
	Sets of fixing screws (metric thread) Including the screws, washers and nuts required to secure a 3- or 4-pole circuit breaker to a prepared surface							
	Set with 4 screws		3VL9300-8SA40		1	1 unit	1CC	0.052
	Transparent covers for releases, sealable To prevent access by unqualified personnel and unauthorized changes to settings (seal not included)							
	Electronic Trip Unit		--					
	Thermal-magnetic		3VL9300-8BM00		1	1 unit	1CC	0.017

[1] Two interlocking modules and one Bowden wire are required. Cannot be used in conjunction with motorized operating mechanism and withdrawable version!

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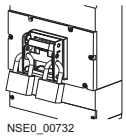
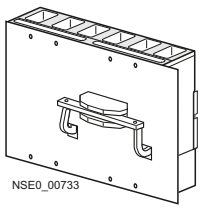
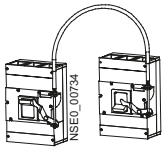
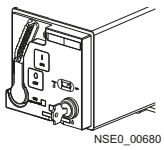
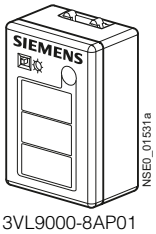
Accessories and spare parts

	Version	DT	For VL160 (3VL2) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Interlocks								
	3- or 4-pole							
 NSE0_00732 3VL9.00-3HL00	**Locking devices for toggle levers** For locking the circuit breaker in the "OFF" position. Up to 3 padlocks with Ø 5 – 8 mm can be used. Removable (padlocks not included)		3VL9300-3HL00		1	1 unit	1CC	0.077
 NSE0_00733 3VL9.00-8L.00	**Rear interlocking modules** For the mechanical interlocking of two adjacent circuit breakers. The circuit breakers must be of the same installation type and size. (Mounting plate not included in scope of supply)							
	Fixed-mounted circuit breakers		3VL9300-8LC00		1	1 unit	1CC	0.320
	Plug-in/withdrawable circuit breakers		3VL9300-8LD00		1	1 unit	1CC	0.383
 NSE0_00734 3VL9.00-8LA00	**Interlocking modules for Bowden wire interlocking**[1] For the mechanical interlocking of two circuit breakers. Interlocking module for one circuit breaker		Combinations with next size up/down possible (see Article No.) 3VL9300-8LA00		1	1 unit	1CC	0.191
	Bowden wires for Bowden wire interlocking[1]							
	Wire length 0.5 m		3VL9000-8LH10		1	1 unit	1CC	0.303
	Wire length 1.0 m		3VL9000-8LH20		1	1 unit	1CC	0.444
	Wire length 1.5 m		3VL9000-8LH30		1	1 unit	1CC	0.646
 NSE0_00680 3VL9...-8HA00	**Safety lock assembly kits** Key can be removed with the circuit breaker in the "OFF" position							
	For front-operated rotary operating mechanisms							
	Lock types							
	Ronis		3VL9715-8HA00		1	1 unit	1CC	0.266
	For motorized operating mechanism with stored energy mechanism							
	Lock types							
	Ronis		--					
	Filli Giussani		3VL9321-8HA00		1	1 unit	1CC	0.039
	Sets of fixing screws (metric thread) Including the screws, washers and nuts required to secure a 3- or 4-pole circuit breaker to a prepared surface							
	Set with 4 screws		3VL9300-8SA40		1	1 unit	1CC	0.052
	Transparent covers for releases, sealable To prevent access by unqualified personnel and unauthorized changes to settings (seal not included)							
	Electronic Trip Unit		3VL9700-8BL00		1	1 unit	1CC	0.009
	Thermal-magnetic		3VL9300-8BM00		1	1 unit	1CC	0.017
 NSE0_01531a 3VL9000-8AP01	**Battery power supply for activating/ parameterizing the LCD ETUs, with test function for all IEC and UL ETUs** (two 9 V blocks are required in addition)		3VL9000-8AP01		1	1 unit	1CC	0.190

[1] Two interlocking modules and one Bowden wire are required. Cannot be used in conjunction with motorized operating mechanism and withdrawable version!

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DT	For VL250 (3VL3) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	DT	For VL400 (3VL4) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL9300-3HL00		1	1 unit	1CC	0.077		3VL9400-3HL00		1	1 unit	1CC	0.144
	3VL9300-8LC00		1	1 unit	1CC	0.320		3VL9400-8LC00		1	1 unit	1CC	1.170
	3VL9300-8LD00		1	1 unit	1CC	0.383		3VL9400-8LD00		1	1 unit	1CC	1.280
	3VL9300-8LA00		1	1 unit	1CC	0.191		3VL9400-8LA00		1	1 unit	1CC	0.226
	3VL9000-8LH10		1	1 unit	1CC	0.303		--					
	3VL9000-8LH20		1	1 unit	1CC	0.444		3VL9000-8LH20		1	1 unit	1CC	0.444
	3VL9000-8LH30		1	1 unit	1CC	0.646		3VL9000-8LH30		1	1 unit	1CC	0.646
	3VL9715-8HA00		1	1 unit	1CC	0.266		3VL9715-8HA00		1	1 unit	1CC	0.266
	--							3VL9715-8HA00		1	1 unit	1CC	0.266
	3VL9321-8HA00		1	1 unit	1CC	0.039		--					
	3VL9300-8SA40		1	1 unit	1CC	0.052		3VL9500-8SA40		1	1 unit	1CC	0.109
	3VL9700-8BL00		1	1 unit	1CC	0.009		3VL9700-8BL00		1	1 unit	1CC	0.009
	3VL9300-8BM00		1	1 unit	1CC	0.017		3VL9400-8BM00		1	1 unit	1CC	0.028
	3VL9000-8AP01		1	1 unit	1CC	0.190		3VL9000-8AP01		1	1 unit	1CC	0.190

*** You can order this quantity or a multiple thereof.**

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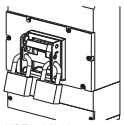
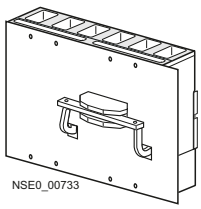
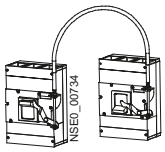
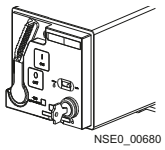
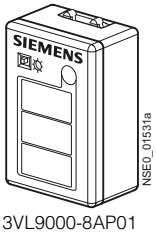
Accessories and spare parts

	Version	DT	For VL630 (3VL5) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Interlocks								
	3- or 4-pole							
 NSE0_00732 3VL9.00-3HL00	**Locking devices for toggle levers** For locking the circuit breaker in the "OFF" position. Up to 3 padlocks with Ø 5 – 8 mm can be used. Removable (padlocks not included)		3VL9600-3HL00		1	1 unit	1CC	0.162
 NSE0_00733 3VL9.00-8L.00	**Rear interlocking modules** For the mechanical interlocking of two adjacent circuit breakers. The circuit breakers must be of the same installation type and size. (Mounting plate not included in scope of supply)							
	Fixed-mounted circuit breakers		3VL9600-8LC00		1	1 unit	1CC	4.356
	Plug-in/withdrawable circuit breakers		3VL9600-8LD00		1	1 unit	1CC	5.413
 NSE0_00734 3VL9.00-8LA00	**Interlocking modules for Bowden wire interlocking**[1] For the mechanical interlocking of two circuit breakers. Interlocking module for one circuit breaker		Combinations with next size up/down possible (see Article No.) 3VL9600-8LA00		1	1 unit	1CC	0.272
	Bowden wires for Bowden wire interlocking[1]							
	Wire length 0.5 m		--					
	Wire length 1.0 m		3VL9000-8LH20		1	1 unit	1CC	0.444
	Wire length 1.5 m		3VL9000-8LH30		1	1 unit	1CC	0.646
 NSE0_00680 3VL9...-8HA00	**Safety lock assembly kits** Key can be removed with the circuit breaker in the "OFF" position For front-operated rotary operating mechanisms							
	Lock types							
	Ronis		3VL9715-8HA00		1	1 unit	1CC	0.266
	For motorized operating mechanism with stored energy mechanism							
	Lock types							
	Ronis		3VL9715-8HA00		1	1 unit	1CC	0.266
	Filli Giussani		--					
	Sets of fixing screws (metric thread) Including the screws, washers and nuts required to secure a 3- or 4-pole circuit breaker to a prepared surface							
	Set with 4 screws		3VL9500-8SA40		1	1 unit	1CC	0.109
 NSE0_01531a 3VL9000-8AP01	**Transparent covers for releases, sealable** To prevent access by unqualified personnel and unauthorized changes to settings (seal not included) Electronic Trip Units							
			3VL9700-8BL00		1	1 unit	1CC	0.009
	Thermal-magnetic		3VL9600-8BM00		1	1 unit	1CC	0.031
	Battery power supply for activating/ parameterizing the LCD ETUs, with test function for all IEC and UL ETUs (two 9 V blocks are required in addition)		3VL9000-8AP01		1	1 unit	1CC	0.190

[1] Two interlocking modules and one Bowden wire are required. Cannot be used in conjunction with motorized operating mechanism and withdrawable version!

* You can order this quantity or a multiple thereof.

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DT	For VL800 (3VL6) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	DT	For VL1250 (3VL7) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL9600-3HL00		1	1 unit	1CC	0.162		3VL9800-3HL00		1	1 unit	1CC	0.244
	3VL9600-8LC00		1	1 unit	1CC	4.356		3VL9800-8LC00		1	1 unit	1CC	2.738
	3VL9600-8LD00		1	1 unit	1CC	5.413		3VL9800-8LD00		1	1 unit	1CC	3.402
	3VL9600-8LA00		1	1 unit	1CC	0.272		3VL9800-8LA00		1	1 unit	1CC	0.305
	--							--					
	3VL9000-8LH20		1	1 unit	1CC	0.444		--					
	3VL9000-8LH30		1	1 unit	1CC	0.646		3VL9000-8LH30		1	1 unit	1CC	0.646
	3VL9715-8HA00		1	1 unit	1CC	0.266		3VL9715-8HA00		1	1 unit	1CC	0.266
	3VL9715-8HA00		1	1 unit	1CC	0.266		3VL9715-8HA00		1	1 unit	1CC	0.266
	--							--					
	3VL9600-8SA40		1	1 unit	1CC	0.118		3VL9800-8SA40		1	1 unit	1CC	0.095
	3VL9700-8BL00		1	1 unit	1CC	0.009		3VL9700-8BL00		1	1 unit	1CC	0.009
	--							--					
	3VL9000-8AP01		1	1 unit	1CC	0.190		3VL9000-8AP01		1	1 unit	1CC	0.190

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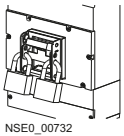
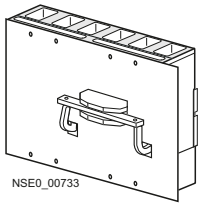
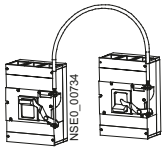
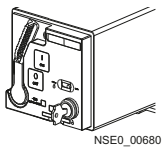
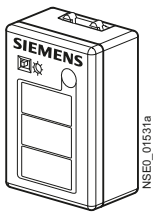
Accessories and spare parts

Interlocks

	Version	DT	For VL1600 (3VL8) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3- or 4-pole							
 NSE0_00732 3VL9.00-3HL00	**Locking devices for toggle levers** For locking the circuit breaker in the "OFF" position. Up to 3 padlocks with Ø 5 – 8 mm can be used. Removable (padlocks not included)		3VL9800-3HL00		1	1 unit	1CC	0.244
 NSE0_00733 3VL9.00-8L.00	**Rear interlocking modules** For the mechanical interlocking of two adjacent circuit breakers. The circuit breakers must be of the same installation type and size.							
	Circuit breakers, fixed-mounted[1]		3VL9800-8LC00		1	1 unit	1CC	2.738
	Plug-in/withdrawable circuit breakers		3VL9800-8LD00		1	1 unit	1CC	3.402
 NSE0_00734 3VL9.00-8LA00	**Interlocking modules for Bowden wire interlocking[2]** For the mechanical interlocking of two circuit breakers. Interlocking module for one circuit breaker		3VL9800-8LA00		1	1 unit	1CC	0.305
	Bowden wires for Bowden wire interlocking[2]							
	Wire length 0.5 m		--					
	Wire length 1.0 m		--					
	Wire length 1.5 m		3VL9000-8LH30		1	1 unit	1CC	0.646
 NSE0_00680 3VL9...-8HA00	**Safety lock assembly kits** Key can be removed with the circuit breaker in the "OFF" position							
	For front-operated rotary operating mechanisms							
	Lock types							
	Ronis		3VL9715-8HA00		1	1 unit	1CC	0.266
	For motorized operating mechanisms							
	Lock types							
	Ronis		3VL9715-8HA00		1	1 unit	1CC	0.266
	Filli Giussani		--					
	Sets of fixing screws (metric thread) Including the screws, washers and nuts required to secure a 3- or 4-pole circuit breaker to a prepared surface							
	Set with 4 screws		3VL9800-8SA40		1	1 unit	1CC	0.095
	Transparent covers for releases, sealable To prevent access by unqualified personnel and unauthorized changes to settings (seal not included)							
	Electronic Trip Unit		3VL9700-8BL00		1	1 unit	1CC	0.009
	Thermal-magnetic		--					
 NSE0_01531a 3VL9000-8AP01	**Battery power supply for activating/ parameterizing the LCD ETUs, with test function for all IEC and UL ETUs** (two 9 V blocks are required in addition)		3VL9000-8AP01		1	1 unit	1CC	0.190

1) Mounting plate not included in scope of supply.

2) Two interlocking modules and one Bowden wire are required. Cannot be used in conjunction with motorized operating mechanism and withdrawable version!

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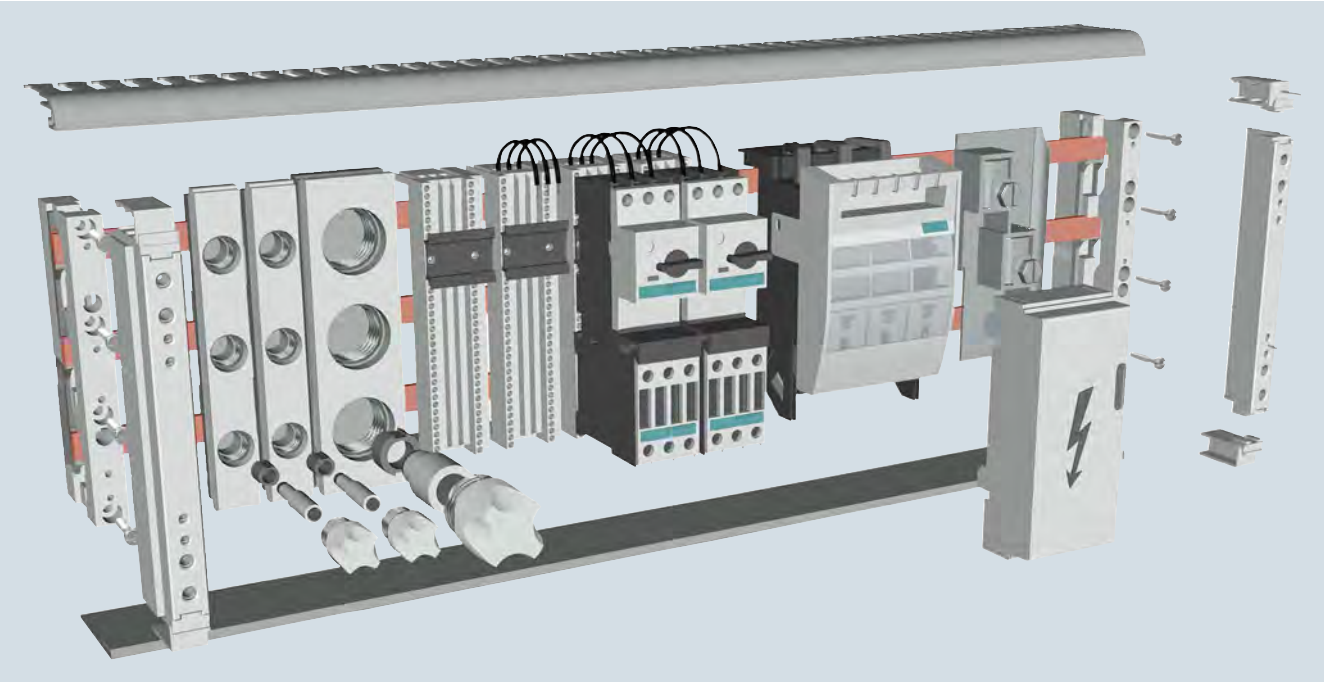
Transfer control devices

3KC ATC5300 and NEW ATC3100 transfer control devices. For combination with two air circuit breakers/molded case circuit breakers for changeover according to 60947-6-1.

For more information, see chapter "Monitoring Devices".

Busbar systems



Busbar adapter systems with 40 mm or 60 mm busbar center-to-center spacing with components for busbar runs, adapters and switching device holders for individual equipment possibilities, devices with an integrated adapter, as well as accessories and flat copper profiles.
Observe the short-circuit strength of the busbar system. Short-circuit strength greater than 50 kA on request.

For more information, see chapter "Busbar Systems".

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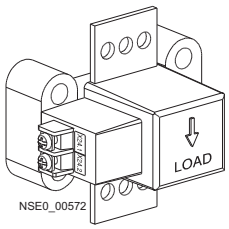
Accessories and spare parts

Further accessories

Current transformers (-T6) for N conductor/grounded neutral point of the transformer for ground-fault protection in 4-wire three-phase systems [1)]



Type	Rated current I_n A	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
VL160/3VL2	63, 80		3VL9280-8TC00		1	1 unit	1CC	0.453
	100		3VL9210-8TC00		1	1 unit	1CC	0.460
	160		3VL9216-8TC00		1	1 unit	1CC	0.475
VL250/3VL3	200		3VL9320-8TC00		1	1 unit	1CC	0.452
	250		3VL9325-8TC00		1	1 unit	1CC	0.455
VL400/3VL4	315		3VL9440-8TC00		1	1 unit	1CC	0.648
	400		3VL9440-8TC00		1	1 unit	1CC	0.648
VL630/3VL5	630		3VL9563-8TC00		1	1 unit	1CC	0.771
VL800/3VL6	800		3VL9680-8TC00		1	1 unit	1CC	0.800
VL1250/3VL7	1000		3VL9712-8TC00		1	1 unit	1CC	2.042
	1250		3VL9712-8TC00		1	1 unit	1CC	2.042
VL1600/3VL8	1600		3VL9816-8TC00		1	1 unit	1CC	2.061

[1)] Please note the rated current of the circuit breaker.

Current transformers for measuring purposes

4NC53 current transformer

See chapter "Measuring Devices and Power Monitoring", Accessories.

*** You can order this quantity or a multiple thereof.**

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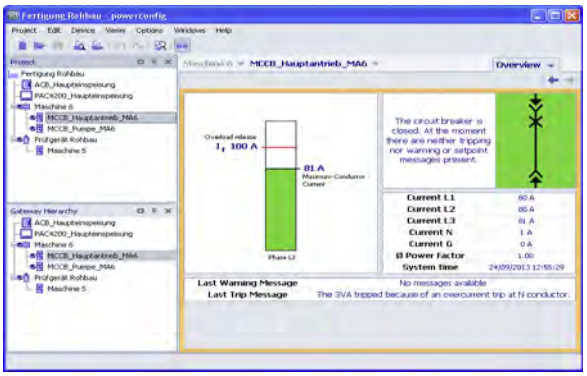
Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Accessories for communication							
3- or 4-pole							
Data transmission through COM20, COM21							
VL160 (3VL2) to VL1600 (3VL8)							
COM20 Release 2 (PROFIBUS module for 3VL molded case circuit breaker) for ETUs with communication function and LCD ETUs Module for connecting the 3VL molded case circuit breaker to the PROFIBUS DP, including switching function and Zone Selective Interlocking functionality, connection cable to ETU included in delivery of the ETU, length 1.5 m.		3VL9000-8AU00		1	1 unit	1CC	0.287
COM21 Release 2 (MODBUS RTU module for 3VL molded case circuit breaker) for ETUs with communication function and LCD ETUs Module for connecting the 3VL molded case circuit breaker to the MODBUS RTU, including switching function and Zone Selective Interlocking functionality, connection cable to ETU included in delivery of the ETU, length 1.5 m.		3VL9000-8AV00		1	1 unit	1CC	0.295
Connection cable ETU – COM20/COM21 For VL160 ... VL250, length 3 m For VL630 ... VL1600, length 3 m For VL400, length 3 m		3VL9000-8AQ81 3VL9000-8AQ71 3VL9000-8AQ61		1 1 1	1 unit 1 unit 1 unit	1CC 1CC 1CC	0.136 0.135 0.149
Addressing plugs **For assigning the PROFIBUS module addresses without using a PC/PG** On COM20/COM21 through the system interface	►	3UF7910-0AA00-0		1	1 unit	42J	0.015
powerconfig parameterization software							



Parameterization, operation, monitoring and diagnostics of 3VL molded case circuit breakers using powerconfig software, see chapter "Software", "Configuring, Visualizing and Controlling with SENTRON".
powerconfig is available free of charge at
http://support.automation.siemens.com/WW/view/en/63452759
You can find more information on the Internet at:
www.siemens.com/sentron

Communication:

- For molded case circuit breakers with communication function, see pages 2/128 to 2/144, 2/156 to 2/166.
- For more information, see chapter "Measuring Devices and Power Monitoring" and see chapter "Software".

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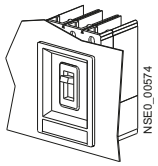
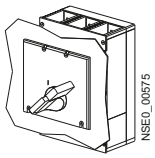
Accessories and spare parts

Further accessories

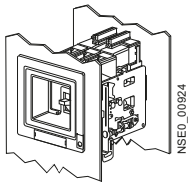
Version	DT	For VL160X (3VL1) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
3- or 4-pole							
Masking frames (cover frames) For door cutouts							
A IP40 Fixed-mounted or plug-in circuit breaker		3VL9300-8BC00		1	1 unit	1CC	0.061
B[1] IP40 Fixed-mounted, plug-in or withdrawable circuit breaker with front-operated rotary operating mechanism or motorized operating mechanism (with or without SEO/MO stored energy mechanisms)		3VL9300-8BG00		1	1 unit	1CC	0.126
C IP20 Withdrawable circuit breaker with toggle lever actuation. Assembly kit contains masking frame and extended escutcheon (cannot be used together with a motorized operating mechanism/rotary operating mechanism)		--					
D IP40 Fixed-mounted circuit breaker or plug-in circuit breaker RCD circuit breaker masking frame		3VL9300-8BD00		1	1 unit	1CC	0.046
RCD masking frame		3VL9300-8BD00		1	1 unit	1CC	0.046
E[1] IP40 Circuit breaker with RCD module and front-operated rotary operating mechanism. Assembly kit contains masking frame and extended escutcheon		--					
Circuit breaker with RCD module and motorized operating mechanism. Assembly kit contains masking frame and extended escutcheon		--					



Masking frame A

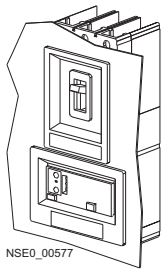


Masking frame B

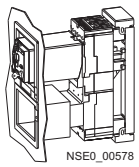


Masking frame C

Version	DT	For VL400 (3VL4) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
3- or 4-pole							
Masking frames (cover frames) For door cutouts							
A IP40 Fixed-mounted or plug-in circuit breaker		3VL9400-8BC00		1	1 unit	1CC	0.046
B[1][2] IP40 Fixed-mounted, plug-in or withdrawable circuit breaker with front-operated rotary operating mechanism or motorized operating mechanism (only with SEO stored energy mechanisms)		3VL9400-8BG00		1	1 unit	1CC	0.154
C IP20 Withdrawable circuit breaker with toggle lever actuation. Assembly kit contains masking frame and extended escutcheon (cannot be used together with a motorized operating mechanism/rotary operating mechanism)		3VL9400-8BH00		1	1 unit	1CC	0.389
D IP40 Fixed-mounted circuit breaker or plug-in circuit breaker RCD circuit breaker masking frame		3VL9400-8BC00		1	1 unit	1CC	0.046
RCD masking frame		3VL9400-8BD00		1	1 unit	1CC	0.044
E[1] IP40 Circuit breaker with RCD module and front-operated rotary operating mechanism. Assembly kit contains masking frame and extended escutcheon		3VL9400-8BH00		1	1 unit	1CC	0.389
Circuit breaker with RCD module and motorized operating mechanism. Assembly kit contains masking frame and extended escutcheon		3VL9400-8BJ00		1	1 unit	1CC	0.396



Masking frame D



Masking frame E

[1] For withdrawable version IP20.

[2] As motorized operating mechanism (without stored energy mechanism) for the 3VL4-3VL6, use article No. 3VL9300-8BG00.

* You can order this quantity or a multiple thereof.

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DT	For VL160 (3VL2) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	DT	For VL250 (3VL3) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL9300-8BC00		1	1 unit	1CC	0.061		3VL9300-8BC00		1	1 unit	1CC	0.061
	3VL9300-8BG00		1	1 unit	1CC	0.126		3VL9300-8BG00		1	1 unit	1CC	0.126
	3VL9300-8BH00		1	1 unit	1CC	0.332		3VL9300-8BH00		1	1 unit	1CC	0.332
	3VL9300-8BC00		1	1 unit	1CC	0.061		3VL9300-8BC00		1	1 unit	1CC	0.061
	3VL9300-8BD00		1	1 unit	1CC	0.046		3VL9300-8BD00		1	1 unit	1CC	0.046
	3VL9300-8BH00		1	1 unit	1CC	0.332		3VL9300-8BH00		1	1 unit	1CC	0.332
	3VL9300-8BJ00		1	1 unit	1CC	0.314		3VL9300-8BJ00		1	1 unit	1CC	0.314

DT	For VL630 (3VL5) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	DT	For VL800 (3VL6) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL9600-8BC00		1	1 unit	1CC	0.076		3VL9600-8BC00		1	1 unit	1CC	0.076
	3VL9600-8BG00		1	1 unit	1CC	0.209		3VL9600-8BG00		1	1 unit	1CC	0.209
	3VL9600-8BH00		1	1 unit	1CC	0.343		3VL9600-8BH00		1	1 unit	1CC	0.343
	--							--					
	--							--					
	--							--					
	--							--					

*** You can order this quantity or a multiple thereof.**

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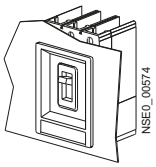
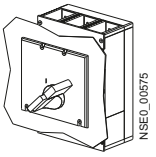
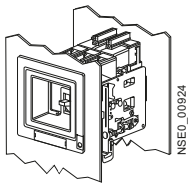
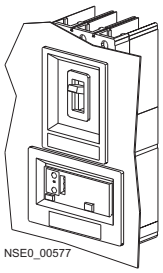
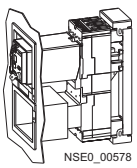
Accessories and spare parts

Further accessories

	Version	DT	For VL1250 (3VL7) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3- or 4-pole							
	Masking frames (cover frames) For door cutouts							
 Masking frame A	**A** **IP40** Fixed-mounted or plug-in circuit breaker		3VL9800-8BC00		1	1 unit	1CC	0.064
 Masking frame B	**B[1]) IP40** Fixed-mounted, plug-in or withdrawable circuit breaker with front-operated rotary operating mechanism or motorized operating mechanism		3VL9800-8BG00		1	1 unit	1CC	0.215
 Masking frame C	**C** **IP20** Withdrawable circuit breaker with toggle lever actuation. Assembly kit contains masking frame and extended escutcheon (cannot be used together with a motorized operating mechanism/rotary operating mechanism)		3VL9800-8BH00		1	1 unit	1CC	0.415
 Masking frame D	**D** **IP40** Fixed-mounted circuit breaker or plug-in circuit breaker RCD circuit breaker masking frame RCD masking frame		-- --					
 Masking frame E	**E[1]) IP40** Circuit breaker with RCD module and front-operated rotary operating mechanism. Assembly kit contains masking frame and extended escutcheon Circuit breaker with RCD module and motorized operating mechanism. Assembly kit contains masking frame and extended escutcheon		-- --					

[1]) For withdrawable version IP20.

* You can order this quantity or a multiple thereof.

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DT	For VL1600 (3VL8) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL9800-8BC00		1	1 unit	1CC	0.064
	3VL9800-8BG00		1	1 unit	1CC	0.215
	3VL9800-8BH00		1	1 unit	1CC	0.415
	-- --					
	-- --					

* You can order this quantity or a multiple thereof.

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More information

Manual for the 3VL molded case circuit breaker

This manual contains additional technical information, covering a product description, mode of operation, electrical wiring system and retrofitting.

The manual and operating instructions are available in PDF format at:

www.siemens.com/lowvoltage/manuals

SENTRON manual for communication solutions

Free download from
www.siemens.com/lowvoltage/manuals

See chapter "Air Circuit Breakers"
"3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC), IEC, "Accessories and spare parts".

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Note

You will find the 3VL molded case circuit breakers up to 1600 A according to UL 489 from page 2/214 onwards.

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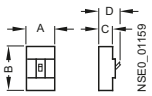
Overview

Type			VL150X UL, CG frame	VL150 UL, DG frame	VL250 UL, FG frame	VL400 UL, JG frame
Molded case circuit breakers						
3VL molded case circuit breakers up to 1600 A, according to UL 489						
Rated current I_n [1] at 40 °C ambient temperature		A	20 to 150	50 to 150	100 to 250	250 to 400
Number of poles			3	3	3	3
Rated operational voltage U_e (UL)						
50/60 Hz AC		V	480, 600/347	480, 600/347	400, 600/347	600
DC [2]		V	250	500	500	500
Overcurrent release						
Thermal-magnetic			✓	✓	✓	✓
Electronic, ETU with setting knobs			--	✓	✓	✓
Electronic LCD ETU			--	✓	✓	✓
Dimensions						
	A	mm	105	105	105	139
	B	mm	157	175	175	279
	C	mm	81	81	81	102
	D	mm	107	107	107	138
Breaking capacity						
Standard breaking capacity N (N)						
Up to 240 V AC		kA	65	65	65	65
Up to 480 V AC		kA	35	35	35	35
Up to 600 V AC		kA	--	--	--	25
Up to 600/347 V AC		kA	10	18	18	--
Up to 250 V DC [3]		kA	30	30	30	30
Up to 500 V DC [3] [4]		kA	--	18	18	25
Breaking capacity I_{cu}/I_{cs} RMS value according to IEC 60947-2						
Up to 240 V AC		kA	65/65	65/65	65/65	65/65
Up to 415 V AC		kA	40/40	40/40	40/40	45/45
Up to 690 V AC		kA	8/4 [5]	12/6	12/6	12/6
Up to 250 V DC [3]		kA	30/30	30/30	30/30	30/30
High breaking capacity H (H)						
Up to 240 V AC		kA	100	100	100	100
Up to 480 V AC		kA	65	65	65	65
Up to 600 V AC		kA	--	--	--	25
Up to 600/347 V AC		kA	10	18	18	--
Up to 250 V DC [3]		kA	30	30	30	30
Up to 500 V DC [3] [4]		kA	--	18	25	35
Breaking capacity I_{cu}/I_{cs} RMS value according to IEC 60947-2						
Up to 240 V AC		kA	100/75	100/75	100/75	100/75
Up to 415 V AC		kA	70/70	70/70	70/70	70/70
Up to 690 V AC		kA	10/5 [5]	12/6	12/6	15/8
Up to 250 V DC [3]		kA	30/30	30/30	30/30	30/30
Very high breaking capacity L (L)						
Up to 240 V AC		kA	--	200	200	200
Up to 480 V AC		kA	--	100	100	100
Up to 600 V AC		kA	--	--	--	25
Up to 600/347 V AC		kA	--	18	18	--
Up to 250 V DC [3]		kA	--	30	30	30
Up to 500 V DC [3] [4]		kA	--	18	30	35
Breaking capacity I_{cu}/I_{cs} RMS value according to IEC 60947-2						
Up to 240 V AC		kA	--	200/150	200/150	200/150
Up to 415 V AC		kA	--	100/75	100/75	100/75
Up to 690 V AC		kA	--	12/6	12/6	15/8
Up to 250 V DC [3]		kA	--	30/30	30/30	30/30

✓ Available -- Not available

1) 80 % rated current applications according to UL 489, 100 % rated current applications according to IEC 60947-2.

2) Rated DC voltage applies only for molded case circuit breakers with thermal-magnetic release.

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	VL400X UL, LG frame	VL800 UL, MG frame	VL1200 UL, NG frame	VL1600 UL, PG frame
3VL molded case circuit breakers up to 1600 A, according to UL 489				
400 to 600	600 to 800	800 to 1200	1200 to 1600	
3	3	3	3	
600 500	600 500	600 500	600 500	
✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	
139 279 102 138	190 406 118 151	229 406 157 209	229 406 157 209	
65 35 18 -- 30 25	65 35 25 -- 22 35	65 35 25 -- 22 35	65 35 25 -- 22 35	
65/65 45/45 12/6 30/30	65/65 50/50 20/10 30/30	65/35 50/25 20/10 30/30	65/35 50/25 20/10 30/30	
100 65 18 -- 30 35	100 65 35 -- 25 50	100 65 35 -- 25 50	100 65 35 -- 25 50	
100/75 70/70 15/8 30/30	100/75 70/70 20/10 30/30	100/50 70/35 30/15 30/30	100/50 70/35 30/15 30/30	
200 100 18 -- 30 35	200 100 50 -- 42 65	200 100 65 -- 42 65	200 100 65 -- 42 65	
200/150 100/75 15/8 30/30	200/150 100/75 20/10 30/30	200/100 100/50 35/17 30/30	200/100 100/50 35/17 30/30	

3) The maximum permitted DC voltage for each conducting path needs to be taken into account for DC switching applications.
4) 500 V DC rated / 600 V DC max. for use in ungrounded UPS DC applications (according to UL 489, Supplement SC)
5) Rated current $I_n \geq 25$ A.

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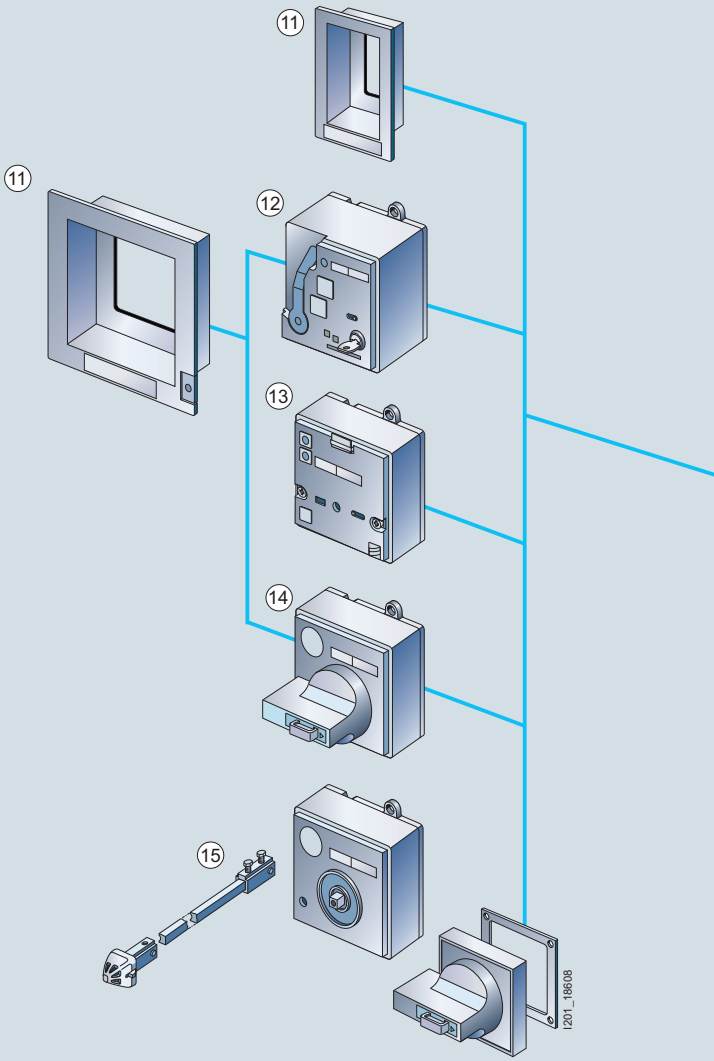

1 Standard terminal cover
2 Extended terminal cover
3 Phase barriers
4 Side panels of the withdrawable unit
5 Box terminal for Cu
6 Multiple feed-in terminal for Al/Cu (size-dependent)
7 Circular conductor terminal for Al/Cu
8 Withdrawable/plug-in base
9 Internal accessories
10 3VL molded case circuit breakers
11 Masking frame/cover frame for door cutout
12 Motorized operating mechanism with stored energy mechanism (SEO), only CG frame to MG frame
13 Motorized operating mechanism (MO), only NG frame and PG frame
14 Front-operated rotary operating mechanism
15 Door-coupling rotary operating mechanism
16 Max Flex operating mechanism
17 Battery power supply with test function for electronic release
18 Thermal-magnetic release
19 Electronic Trip Unit with LCD (LCD ETU)
20 Electronic Trip Unit with setting knobs (ETU)
21 Communication module COM20/21 (Release 2)
22 Rear terminals – flat and round

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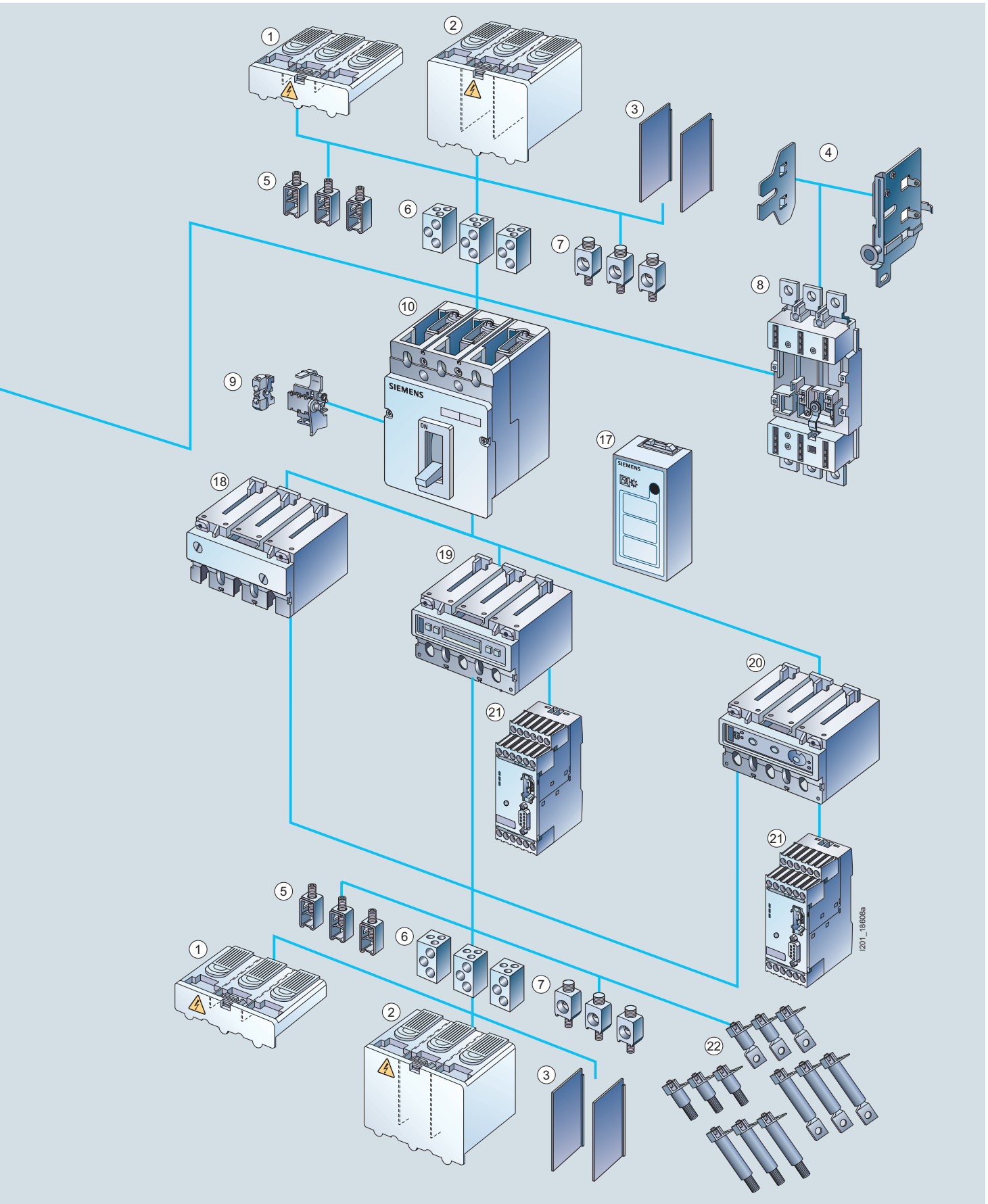

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Benefits

- 3VL molded case circuit breakers according to UL 489 optimally fulfill the high demands prevalent in modern power distribution.
- The molded case circuit breakers have a compact design and at the same time a high breaking capacity of up to 100 kA at 480 V.
- They are available both in thermal-magnetic (20 A to 1600 A) and in electronic versions (60 A to 1600 A).
- Via PROFIBUS DP and Modbus RTU, the molded case circuit breakers with Electronic Trip Units (ETUs) are consistently communication-capable.

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Application

The different versions of 3VL molded case circuit breakers according to UL are suitable for the following applications:

- Incoming circuit breakers (feeders) and outgoing circuit breakers (branches) in distribution systems
- Switching and protection devices for motors (motor protection in combination with a contactor and motor protection relay), transformers and capacitors
- Disconnecting means with features for stopping and switching off in an emergency (main disconnecting means and EMERGENCY-STOP switches) in conjunction with lockable rotary operating mechanisms.

The 3VL molded case circuit breakers according to UL are available in the following versions:

1. For line protection
   The overload and short-circuit releases are designed for the protection of cables, leads and non-motor loads.
2. For starter combinations
   These molded case circuit breakers are used both for short-circuit protection as well as for isolating functions, which may be required in starter combinations consisting of molded case circuit breakers, overload relays and motor contactors. These molded case circuit breakers exclusively feature adjustable, instantaneous short-circuit releases.
3. As non-automatic circuit breakers
   These molded case circuit breakers can be used as feeder circuit breakers, main control switches or non-automatic circuit breakers without overload protection. They incorporate an integrated short-circuit self-protection system.

Breaking capacity

(N)	Molded case circuit breakers with standard breaking capacity N (up to 35 kA at 480 V)
(H)	Molded case circuit breakers with high breaking capacity H (up to 65 kA at 480 V)
(L)	Molded case circuit breakers with very high breaking capacity L (up to 100 kA at 480 V)

Standards and specifications

3VL molded case circuit breakers according to UL comply with:

UL 489,
CSA (CSA C22.2 No. 5),
IEC/EN 60947-2,
For isolating features according to IEC 60947-2, EN 60947-2,
NOM (NMX-J-266-ANCE), please inquire.
CCC (only VL2 UL/DG, VL3 UL/FG, VL4 UL/JG and VL4X UL/LG)
GOST and FireSafety (Russia)

The 3VL UL molded case circuit breakers comply in addition with requirements for "disconnecting means with features for stopping and switching off in an emergency" (EMERGENCY-STOP switches) in conjunction with lockable rotary operating mechanisms (red-yellow).

Please contact Siemens for details of other standards.

Operating conditions

The 3VL molded case circuit breakers according to UL are designed for operation in enclosed areas.

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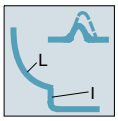
Selection and ordering data

Standard breaking capacity N, up to 35 kA at 480 V see "Overview". (N)

Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Operating current of the instantaneous short-circuit protection "I" I_i	DT	Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	A							kg
Fixed-mounted molded case circuit breakers, VL150X UL (CG frame) up to VL1600 UL (PG frame), thermal-magnetic releases (UL file: E10848, CCN[1]: DIVQ)										
 I201_19069					***Line protection, TM, LI function***					
					With non-adjustable thermal overcurrent releases, adjustable short-circuit releases,					
					VL150X UL: non-adjustable short-circuit releases					
					Connection type: Molded case circuit breakers without preassembled connections, connections must be ordered under "Accessories", "Plug-in versions/withdrawable versions", pages 2/250 to 2/254 or under "Accessories", "Connection parts for fixed-mounted molded case circuit breakers", pages 2/255 to 2/262.					
VL150X UL, CG frame	20	20	300		**3VL1102-1KM30-□□□□**		1	1 unit	1CC	1.900
	25	25	300		**3VL1125-1KM30-□□□□**		1	1 unit	1CC	2.000
	30	30	300		**3VL1103-1KM30-□□□□**		1	1 unit	1CC	2.000
	35	35	600		**3VL1135-1KM30-□□□□**		1	1 unit	1CC	2.000
	40	40	600		**3VL1104-1KM30-□□□□**		1	1 unit	1CC	2.000
	50	50	600		**3VL1105-1KM30-□□□□**		1	1 unit	1CC	2.000
	60	60	600		**3VL1106-1KM30-□□□□**		1	1 unit	1CC	2.000
	70	70	1000		**3VL1107-1KM30-□□□□**		1	1 unit	1CC	2.000
	80	80	1000		**3VL1108-1KM30-□□□□**		1	1 unit	1CC	2.000
	90	90	1000		**3VL1191-1KM30-□□□□**		1	1 unit	1CC	2.000
	100	100	1000		**3VL1110-1KM30-□□□□**		1	1 unit	1CC	2.000
	125	125	1000		**3VL1112-1KM30-□□□□**		1	1 unit	1CC	2.000
	150	150	1500		**3VL1115-1KM30-□□□□**		1	1 unit	1CC	2.000
VL150 UL, DG frame	50	50	450 ... 700		**3VL2505-1KN30-□□□□**		1	1 unit	1CC	2.200
	60	60	450 ... 700		**3VL2506-1KN30-□□□□**		1	1 unit	1CC	2.200
	70	70	450 ... 700		**3VL2507-1KN30-□□□□**		1	1 unit	1CC	2.200
	80	80	450 ... 800		**3VL2508-1KN30-□□□□**		1	1 unit	1CC	2.200
	90	90	500 ... 1000		**3VL2591-1KN30-□□□□**		1	1 unit	1CC	2.200
	100	100	500 ... 1000		**3VL2510-1KN30-□□□□**		1	1 unit	1CC	2.200
	110	110	550 ... 1100		**3VL2511-1KN30-□□□□**		1	1 unit	1CC	2.200
	125	125	625 ... 1250		**3VL2512-1KN30-□□□□**		1	1 unit	1CC	2.200
	150	150	800 ... 1600		**3VL2515-1KN30-□□□□**		1	1 unit	1CC	2.200
VL250 UL, FG frame	100	100	625 ... 1250		**3VL3510-1KN30-□□□□**		1	1 unit	1CC	2.300
	110	110	800 ... 1600		**3VL3511-1KN30-□□□□**		1	1 unit	1CC	2.300
	125	125	800 ... 1600		**3VL3512-1KN30-□□□□**		1	1 unit	1CC	2.300
	150	150	800 ... 1600		**3VL3515-1KN30-□□□□**		1	1 unit	1CC	2.300
	175	175	1000 ... 2000		**3VL3517-1KN30-□□□□**		1	1 unit	1CC	2.300
	200	200	1000 ... 2000		**3VL3520-1KN30-□□□□**		1	1 unit	1CC	2.300
	225	225	1250 ... 2500		**3VL3522-1KN30-□□□□**		1	1 unit	1CC	2.300
	250	250	1250 ... 2500		**3VL3525-1KN30-□□□□**		1	1 unit	1CC	2.300
VL400 UL, JG frame	250	250	1250 ... 2500		**3VL4125-1KN30-□□□□**		1	1 unit	1CC	5.700
	300	300	1500 ... 3000		**3VL4130-1KN30-□□□□**		1	1 unit	1CC	5.700
	350	350	1750 ... 3500		**3VL4135-1KN30-□□□□**		1	1 unit	1CC	5.700
	400	400	2000 ... 4000		**3VL4140-1KN30-□□□□**		1	1 unit	1CC	5.700
VL400X UL, LG frame	400	400	2000 ... 4000		**3VL4840-1KN30-□□□□**		1	1 unit	1CC	5.700
	500	500	2500 ... 5000		**3VL4850-1KN30-□□□□**		1	1 unit	1CC	5.700
	600	600	2750 ... 5500		**3VL4860-1KN30-□□□□**		1	1 unit	1CC	5.700
VL800 UL, MG frame	600	600	3000 ... 6000		**3VL6160-1KN30-□□□□**		1	1 unit	1CC	14.000
	700	700	3250 ... 6500		**3VL6170-1KN30-□□□□**		1	1 unit	1CC	14.000
	800	800	3250 ... 6500		**3VL6180-1KN30-□□□□**		1	1 unit	1CC	14.000
VL1200 UL, NG frame	800	800	4000 ... 8000		**3VL7180-1KN30-□□□□**		1	1 unit	1CC	21.800
	900	900	5000 ... 10000		**3VL7190-1KN30-□□□□**		1	1 unit	1CC	21.800
	1000	1000	5000 ... 10000		**3VL7110-1KN30-□□□□**		1	1 unit	1CC	21.800
	1200	1200	7000 ... 12000		**3VL7112-1KN30-□□□□**		1	1 unit	1CC	21.800
VL1600 UL, PG frame[2]	1200	1200	7000 ... 12000		**3VL8112-1KN30-□□□□**		1	1 unit	1CC	32.800
	1400	1400	7000 ... 12000		**3VL8114-1KN30-□□□□**		1	1 unit	1CC	32.800
	1600	1600	7000 ... 12000		**3VL8116-1KN30-□□□□**		1	1 unit	1CC	32.800

1) UL Category Code Number.

2) Operation of the molded case circuit breaker within the scope of application of UL 489/CSA is permitted only in conjunction with the mounting base (see page 2/262).

* You can order this quantity or a multiple thereof.

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DT	High breaking capacity H, up to 65 kA at 480 V (H)						DT	Very high breaking capacity L, up to 100 kA at 480 V (L)					
	Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL1102-2KM30-□□□□		1	1 unit	1CC	2.000		--					
	3VL1125-2KM30-□□□□		1	1 unit	1CC	2.000		--					
	3VL1103-2KM30-□□□□		1	1 unit	1CC	2.000		--					
	3VL1135-2KM30-□□□□		1	1 unit	1CC	2.000		--					
	3VL1104-2KM30-□□□□		1	1 unit	1CC	2.000		--					
	3VL1105-2KM30-□□□□		1	1 unit	1CC	2.000		--					
	3VL1106-2KM30-□□□□		1	1 unit	1CC	2.000		--					
	3VL1107-2KM30-□□□□		1	1 unit	1CC	2.000		--					
	3VL1108-2KM30-□□□□		1	1 unit	1CC	2.000		--					
	3VL1191-2KM30-□□□□		1	1 unit	1CC	2.000		--					
	3VL1110-2KM30-□□□□		1	1 unit	1CC	2.000		--					
	3VL1112-2KM30-□□□□		1	1 unit	1CC	2.000		--					
	3VL1115-2KM30-□□□□		1	1 unit	1CC	2.000		--					
	3VL2505-2KN30-□□□□		1	1 unit	1CC	2.200		3VL2505-3KN30-□□□□		1	1 unit	1CC	2.200
	3VL2506-2KN30-□□□□		1	1 unit	1CC	2.200		3VL2506-3KN30-□□□□		1	1 unit	1CC	2.200
	3VL2507-2KN30-□□□□		1	1 unit	1CC	2.200		3VL2507-3KN30-□□□□		1	1 unit	1CC	2.200
	3VL2508-2KN30-□□□□		1	1 unit	1CC	2.200		3VL2508-3KN30-□□□□		1	1 unit	1CC	2.200
	3VL2591-2KN30-□□□□		1	1 unit	1CC	2.200		3VL2591-3KN30-□□□□		1	1 unit	1CC	2.200
	3VL2510-2KN30-□□□□		1	1 unit	1CC	2.200		3VL2510-3KN30-□□□□		1	1 unit	1CC	2.200
	3VL2511-2KN30-□□□□		1	1 unit	1CC	2.200		3VL2511-3KN30-□□□□		1	1 unit	1CC	2.200
	3VL2512-2KN30-□□□□		1	1 unit	1CC	2.200		3VL2512-3KN30-□□□□		1	1 unit	1CC	2.200
	3VL2515-2KN30-□□□□		1	1 unit	1CC	2.200		3VL2515-3KN30-□□□□		1	1 unit	1CC	2.200
	3VL3510-2KN30-□□□□		1	1 unit	1CC	2.300		3VL3510-3KN30-□□□□		1	1 unit	1CC	2.300
	3VL3511-2KN30-□□□□		1	1 unit	1CC	2.300		3VL3511-3KN30-□□□□		1	1 unit	1CC	2.300
	3VL3512-2KN30-□□□□		1	1 unit	1CC	2.300		3VL3512-3KN30-□□□□		1	1 unit	1CC	2.300
	3VL3515-2KN30-□□□□		1	1 unit	1CC	2.300		3VL3515-3KN30-□□□□		1	1 unit	1CC	2.300
	3VL3517-2KN30-□□□□		1	1 unit	1CC	2.300		3VL3517-3KN30-□□□□		1	1 unit	1CC	2.300
	3VL3520-2KN30-□□□□		1	1 unit	1CC	2.300		3VL3520-3KN30-□□□□		1	1 unit	1CC	2.300
	3VL3522-2KN30-□□□□		1	1 unit	1CC	2.300		3VL3522-3KN30-□□□□		1	1 unit	1CC	2.300
	3VL3525-2KN30-□□□□		1	1 unit	1CC	2.300		3VL3525-3KN30-□□□□		1	1 unit	1CC	2.300
	3VL4125-2KN30-□□□□		1	1 unit	1CC	5.700		3VL4125-3KN30-□□□□		1	1 unit	1CC	5.700
	3VL4130-2KN30-□□□□		1	1 unit	1CC	5.700		3VL4130-3KN30-□□□□		1	1 unit	1CC	5.700
	3VL4135-2KN30-□□□□		1	1 unit	1CC	5.700		3VL4135-3KN30-□□□□		1	1 unit	1CC	5.700
	3VL4140-2KN30-□□□□		1	1 unit	1CC	5.700		3VL4140-3KN30-□□□□		1	1 unit	1CC	5.700
	3VL4840-2KN30-□□□□		1	1 unit	1CC	5.700		3VL4840-3KN30-□□□□		1	1 unit	1CC	5.700
	3VL4850-2KN30-□□□□		1	1 unit	1CC	5.700		3VL4850-3KN30-□□□□		1	1 unit	1CC	5.700
	3VL4860-2KN30-□□□□		1	1 unit	1CC	5.700		3VL4860-3KN30-□□□□		1	1 unit	1CC	5.700
	3VL6160-2KN30-□□□□		1	1 unit	1CC	14.000		3VL6160-3KN30-□□□□		1	1 unit	1CC	14.000
	3VL6170-2KN30-□□□□		1	1 unit	1CC	14.000		3VL6170-3KN30-□□□□		1	1 unit	1CC	14.000
	3VL6180-2KN30-□□□□		1	1 unit	1CC	14.000		3VL6180-3KN30-□□□□		1	1 unit	1CC	14.000
	3VL7180-2KN30-□□□□		1	1 unit	1CC	21.800		3VL7180-3KN30-□□□□		1	1 unit	1CC	21.800
	3VL7190-2KN30-□□□□		1	1 unit	1CC	21.800		3VL7190-3KN30-□□□□		1	1 unit	1CC	21.800
	3VL7110-2KN30-□□□□		1	1 unit	1CC	21.800		3VL7110-3KN30-□□□□		1	1 unit	1CC	21.800
	3VL7112-2KN30-□□□□		1	1 unit	1CC	21.800		3VL7112-3KN30-□□□□		1	1 unit	1CC	21.800
	3VL8112-2KN30-□□□□		1	1 unit	1CC	32.800		3VL8112-3KN30-□□□□		1	1 unit	1CC	32.800
	3VL8114-2KN30-□□□□		1	1 unit	1CC	32.800		3VL8114-3KN30-□□□□		1	1 unit	1CC	32.800
	3VL8116-2KN30-□□□□		1	1 unit	1CC	32.800		3VL8116-3KN30-□□□□		1	1 unit	1CC	32.800

*** You can order this quantity or a multiple thereof.**

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Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A, according to UL 489

3-pole

Type	Rated current I_n		Operating current of the instantaneous short-circuit protection "I" I_i	DT	Standard breaking capacity N, up to 35 kA at 480 V see "Overview". (N) Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A		A							kg
Fixed-mounted molded case circuit breakers, VL150 UL (DG frame) to VL1600 UL (PG frame), magnetic and Electronic Trip Units										
NSE0_00707					***Molded case circuit breakers for starter combination, I function (motor circuit protectors; UL file: E10848, CCN[1]: DKPUZ)[2]*** Without overcurrent release, with adjustable short-circuit release. Connection type: Molded case circuit breakers without preassembled connections, connections must be ordered under "Accessories", "Plug-in versions/withdrawable versions", pages 2/250 to 2/254 or under "Accessories", "Connection parts for fixed-mounted molded case circuit breakers", pages 2/255 to 2/262.					
VL150 UL, DG frame	150 150 150		450 ... 900 750 ... 1500 1250 ... 2500		-- -- --					
VL250 UL, FG frame	250 250 250		600 ... 1200 1000 ... 2000 1750 ... 3500		-- -- --					
VL400 UL, JG frame	400 400[3]		1250 ... 2500 2000 ... 4000		-- --					
VL400X UL, LG frame	600 600[3]		2000 ... 4000 2750 ... 5500		-- --					
VL800 UL, MG frame	800		3250 ... 6500		--					
VL1200 UL, NG frame	1200		7000 ... 12000		--					
NSE0_00708					***Non-automatic molded case circuit breakers (molded case switches; UL file: E68312, CCN[1]: WJAZ)*** Without overcurrent release, with non-adjustable short-circuit release (for intrinsic protection only). Connection type: Molded case circuit breakers without preassembled connections, connections must be ordered under "Accessories", "Plug-in versions/withdrawable versions", pages 2/250 to 2/254 or under "Accessories", "Connection parts for fixed-mounted molded case circuit breakers", pages 2/255 to 2/262.					
VL150X UL, CG frame	100 150		1800 1800		**3VL1110-1KE30-□□□□** **3VL1115-1KE30-□□□□**	1 1	1 unit 1 unit	1CC 1CC		2.000 2.000
VL150 UL, DG frame	150		2500		--					
VL250 UL, FG frame	250		3500		--					
VL400 UL, JG frame	400		4400		--					
VL400X UL, LG frame	600		5500		--					
VL800 UL, MG frame	800		6500		--					
VL1200 UL, NG frame	1200		12000		--					
VL1600 UL, PG frame[4]	1600		14000		--					

1) UL Category Code Number.

2) UL-recognized.

3) Motor current according to NEC 430-110.

4) Operation of the molded case circuit breaker within the scope of application of UL 489/CSA is permitted only in conjunction with the mounting base (see page 2/262).

* You can order this quantity or a multiple thereof.

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DT	High breaking capacity H, up to 65 kA at 480 V (H)						DT	Very high breaking capacity L, up to 100 kA at 480 V (L)					
	Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2515-2KJ30-□□□□		1	1 unit	1CC	2.200		--					
	3VL2515-2KK30-□□□□		1	1 unit	1CC	2.200		--					
	3VL2515-2KL30-□□□□		1	1 unit	1CC	2.200		--					
	3VL3525-2KJ30-□□□□		1	1 unit	1CC	2.300		--					
	3VL3525-2KK30-□□□□		1	1 unit	1CC	2.300		--					
	3VL3525-2KL30-□□□□		1	1 unit	1CC	2.300		--					
	3VL4140-2KJ30-□□□□		1	1 unit	1CC	5.700		--					
	3VL4140-2KK30-□□□□		1	1 unit	1CC	5.700		--					
	3VL4860-2KJ30-□□□□		1	1 unit	1CC	5.700		--					
	3VL4860-2KK30-□□□□		1	1 unit	1CC	5.700		--					
	3VL6180-2KK30-□□□□		1	1 unit	1CC	14.000		--					
	3VL7112-2KK30-□□□□		1	1 unit	1CC	21.800		--					
	3VL1110-2KE30-□□□□		1	1 unit	1CC	2.000		--					
	3VL1115-2KE30-□□□□		1	1 unit	1CC	2.000		--					
	3VL2515-2KE30-□□□□		1	1 unit	1CC	2.200		3VL2515-3KE30-□□□□		1	1 unit	1CC	2.200
	3VL3525-2KE30-□□□□		1	1 unit	1CC	2.300		3VL3525-3KE30-□□□□		1	1 unit	1CC	2.300
	3VL4140-2KE30-□□□□		1	1 unit	1CC	5.700		3VL4140-3KE30-□□□□		1	1 unit	1CC	5.700
	3VL4860-2KE30-□□□□		1	1 unit	1CC	5.700		3VL4860-3KE30-□□□□		1	1 unit	1CC	5.700
	3VL6180-2KE30-□□□□		1	1 unit	1CC	15.700		3VL6180-3KE30-□□□□		1	1 unit	1CC	15.700
	3VL7112-2KE30-□□□□		1	1 unit	1CC	23.500		3VL7112-3KE30-□□□□		1	1 unit	1CC	23.500
	3VL8116-2KE30-□□□□		1	1 unit	1CC	29.800		3VL8116-3KE30-□□□□		1	1 unit	1CC	29.800

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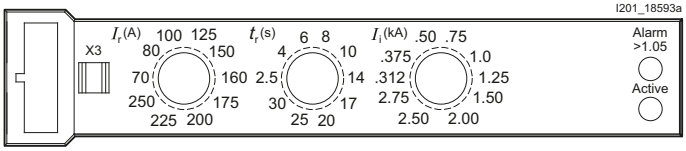
Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Response time of the inverse-time delayed overload protection "L" t_r	Operating current of the instantaneous short-circuit protection "I" I_i	DT	**Standard breaking capacity N, up to 35 kA at 480 V** see "Overview". (N) Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	s	A							kg
Fixed-mounted molded case circuit breakers, VL150 UL (DG frame) to VL1600 UL (PG frame), Electronic Trip Units (UL file: E10848, CCN[1]: DIVQ)											
NSE0_00691											
 I201_18593a											
Line protection											
With Electronic Trip Units ETU (model 555) LI function											
Connection type: Molded case circuit breakers without preassembled connections, connections must be ordered under "Accessories", "Plug-in versions/withdrawable versions", pages 2/250 to 2/254 or under "Accessories", "Connection parts for fixed-mounted molded case circuit breakers", pages 2/255 to 2/262.											
VL150 UL, DG frame	60	30 ... 60	2.5 ... 30	75 ... 660 (11 x I_n)		3VL2506-1PB30-□□□□		1	1 unit	1CC	2.400
	100	40 ... 100	2.5 ... 30	125 ... 1100 (11 x I_n)		3VL2510-1PB30-□□□□		1	1 unit	1CC	2.400
	150	60 ... 150	2.5 ... 30	187 ... 1650 (11 x I_n)		3VL2515-1PB30-□□□□		1	1 unit	1CC	2.400
VL250 UL, FG frame	100	40 ... 100	2.5 ... 30	125 ... 1100 (11 x I_n)		3VL3510-1PB30-□□□□		1	1 unit	1CC	2.500
	150	60 ... 150	2.5 ... 30	187 ... 1650 (11 x I_n)		3VL3515-1PB30-□□□□		1	1 unit	1CC	2.500
	250	70 ... 250	2.5 ... 30	312 ... 2750 (11 x I_n)		3VL3525-1PB30-□□□□		1	1 unit	1CC	2.500
VL400 UL, JG frame	250	70 ... 250	2.5 ... 30	312 ... 2750 (11 x I_n)		3VL4125-1PB30-□□□□		1	1 unit	1CC	5.900
	400	150 ... 400	2.5 ... 30	500 ... 4400 (11 x I_n)		3VL4140-1PB30-□□□□		1	1 unit	1CC	5.900
VL400X UL, LG frame	400	150 ... 400	2.5 ... 30	500 ... 4400 (11 x I_n)		3VL4840-1PB30-□□□□		1	1 unit	1CC	5.900
	600	200 ... 600	2.5 ... 30	750 ... 6000 (10 x I_n)		3VL4860-1PB30-□□□□		1	1 unit	1CC	5.900
VL800 UL, MG frame	600	200 ... 600	2.5 ... 30	750 ... 6000 (10 x I_n)		3VL6160-1PB30-□□□□		1	1 unit	1CC	16.000
	800	300 ... 800	2.5 ... 30	1000 ... 6000 (7.5 x I_n)		3VL6180-1PB30-□□□□		1	1 unit	1CC	16.000
VL1200 UL, NG frame	800	300 ... 800	2.5 ... 30	1000 ... 8800 (11 x I_n)		3VL7180-1PB30-□□□□		1	1 unit	1CC	25.000
	1000	400 ... 1000	2.5 ... 30	1250 ... 11000 (11 x I_n)		3VL7110-1PB30-□□□□		1	1 unit	1CC	25.000
	1200	400 ... 1200	2.5 ... 30	1500 ... 12000 (10 x I_n)		3VL7112-1PB30-□□□□		1	1 unit	1CC	25.000
VL1600 UL, PG frame[2]	1200	400 ... 1200	2.5 ... 30	1500 ... 12000 (10 x I_n)		3VL8112-1PB30-□□□□		1	1 unit	1CC	31.300
	1600	700 ... 1600	2.5 ... 30	2000 ... 9600 (6 x I_n)		3VL8116-1PB30-□□□□		1	1 unit	1CC	31.300

L = overload

I = short-circuit protection, instantaneous

1) UL Category Code Number.

2) Operation of the molded case circuit breaker within the scope of application of UL 489/CSA is permitted only in conjunction with the mounting base (see page 2/262).

* You can order this quantity or a multiple thereof.

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DT	High breaking capacity H, up to 65 kA at 480 V (H)						DT	Very high breaking capacity L, up to 100 kA at 480 V (L)					
	Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2506-2PB30-□□□□		1	1 unit	1CC	2.400		**3VL2506-3PB30-□□□□**		1	1 unit	1CC	2.400
	3VL2510-2PB30-□□□□		1	1 unit	1CC	2.400		**3VL2510-3PB30-□□□□**		1	1 unit	1CC	2.400
	3VL2515-2PB30-□□□□		1	1 unit	1CC	2.400		**3VL2515-3PB30-□□□□**		1	1 unit	1CC	2.400
	3VL3510-2PB30-□□□□		1	1 unit	1CC	2.500		**3VL3510-3PB30-□□□□**		1	1 unit	1CC	2.500
	3VL3515-2PB30-□□□□		1	1 unit	1CC	2.500		**3VL3515-3PB30-□□□□**		1	1 unit	1CC	2.500
	3VL3525-2PB30-□□□□		1	1 unit	1CC	2.500		**3VL3525-3PB30-□□□□**		1	1 unit	1CC	2.500
	3VL4125-2PB30-□□□□		1	1 unit	1CC	5.900		**3VL4125-3PB30-□□□□**		1	1 unit	1CC	5.900
	3VL4140-2PB30-□□□□		1	1 unit	1CC	5.900		**3VL4140-3PB30-□□□□**		1	1 unit	1CC	5.900
	3VL4840-2PB30-□□□□		1	1 unit	1CC	5.900		**3VL4840-3PB30-□□□□**		1	1 unit	1CC	5.900
	3VL4860-2PB30-□□□□		1	1 unit	1CC	5.900		**3VL4860-3PB30-□□□□**		1	1 unit	1CC	5.900
	3VL6160-2PB30-□□□□		1	1 unit	1CC	16.000		**3VL6160-3PB30-□□□□**		1	1 unit	1CC	16.000
	3VL6180-2PB30-□□□□		1	1 unit	1CC	16.000		**3VL6180-3PB30-□□□□**		1	1 unit	1CC	16.000
	3VL7180-2PB30-□□□□		1	1 unit	1CC	25.000		**3VL7180-3PB30-□□□□**		1	1 unit	1CC	25.000
	3VL7110-2PB30-□□□□		1	1 unit	1CC	25.000		**3VL7110-3PB30-□□□□**		1	1 unit	1CC	25.000
	3VL7112-2PB30-□□□□		1	1 unit	1CC	25.000		**3VL7112-3PB30-□□□□**		1	1 unit	1CC	25.000
	3VL8112-2PB30-□□□□		1	1 unit	1CC	31.300		**3VL8112-3PB30-□□□□**		1	1 unit	1CC	31.300
	3VL8116-2PB30-□□□□		1	1 unit	1CC	31.300		**3VL8116-3PB30-□□□□**		1	1 unit	1CC	31.300

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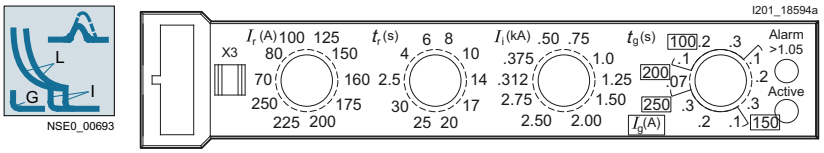
Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A, according to UL 489

3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Response time of the inverse-time delayed overload protection "L" t_r	Operating current of the instantaneous short-circuit protection "I" I_i	Standard setting of I_g/A and t_g/s	t_g/s adjustable to 0.1, 0.2 and 0.3 s for the following I_g /A	DT	Standard breaking capacity N, up to 35 kA at 480 V see "Overview". (N) Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	s	A									kg
Fixed-mounted molded case circuit breakers, VL150 UL (DG frame) to VL1600 UL (PG frame), Electronic Trip Units (UL file: E10848, CCN[1]: DIVQ)													
Line protection													
With Electronic Trip Unit ETU (model 555) LIG function for 4-wire three-phase systems (vectorial summation current formation) Connection type: Molded case circuit breakers without preassembled connections, connections must be ordered under "Accessories", "Plug-in versions/withdrawable versions", pages 2/250 to 2/254 or under "Accessories", "Connection parts for fixed-mounted molded case circuit breakers", pages 2/255 to 2/262. Current transformers must be ordered under "Accessories" page 2/270.													
VL150 UL, DG frame	60	30 ... 60	2.5 ... 30	75 ... 660 (11 x I_n)	48/0.07	24/36/60		3VL2506-1PD30-□□□□		1	1 unit	1CC	2.400
	100	40 ... 100	2.5 ... 30	125 ... 1100 (11 x I_n)	80/0.07	40/60/100		3VL2510-1PD30-□□□□		1	1 unit	1CC	2.400
	150	60 ... 150	2.5 ... 30	187 ... 1650 (11 x I_n)	120/0.07	60/90/150		3VL2515-1PD30-□□□□		1	1 unit	1CC	2.400
VL250 UL, FG frame	100	40 ... 100	2.5 ... 30	125 ... 1100 (11 x I_n)	80/0.07	40/60/100		3VL3510-1PD30-□□□□		1	1 unit	1CC	2.500
	150	60 ... 150	2.5 ... 30	187 ... 1650 (11 x I_n)	120/0.07	60/90/150		3VL3515-1PD30-□□□□		1	1 unit	1CC	2.500
	250	70 ... 250	2.5 ... 30	312 ... 2750 (11 x I_n)	200/0.07	100/150/250		3VL3525-1PD30-□□□□		1	1 unit	1CC	2.500
VL400 UL, JG frame	250	70 ... 250	2.5 ... 30	312 ... 2750 (11 x I_n)	200/0.07	100/150/250		3VL4125-1PD30-□□□□		1	1 unit	1CC	5.900
	400	150 ... 400	2.5 ... 30	500 ... 4400 (11 x I_n)	320/0.11	160/240/400		3VL4140-1PD30-□□□□		1	1 unit	1CC	5.900
VL400X UL, LG frame	400	150 ... 400	2.5 ... 30	500 ... 4400 (11 x I_n)	320/0.11	160/240/400		3VL4840-1PD30-□□□□		1	1 unit	1CC	5.900
	600	200 ... 600	2.5 ... 30	750 ... 6000 (10 x I_n)	360/0.18	240/360/600		3VL4860-1PD30-□□□□		1	1 unit	1CC	5.900
VL800 UL, MG frame	600	200 ... 600	2.5 ... 30	750 ... 6000 (10 x I_n)	360/0.18	240/360/600		3VL6160-1PD30-□□□□		1	1 unit	1CC	16.000
	800	300 ... 800	2.5 ... 30	1000 ... 6000 (7.5 x I_n)	480/0.25	320/480/800		3VL6180-1PD30-□□□□		1	1 unit	1CC	16.000
VL1200 UL, NG frame	800	300 ... 800	2.5 ... 30	1000 ... 8800 (11 x I_n)	480/0.25	320/480/800		3VL7180-1PD30-□□□□		1	1 unit	1CC	25.000
	1000	400 ... 1000	2.5 ... 30	1250 ... 11000 (11 x I_n)	600/0.32	400/600/1000		3VL7110-1PD30-□□□□		1	1 unit	1CC	25.000
	1200	400 ... 1200	2.5 ... 30	1500 ... 12000 (10 x I_n)	720/0.32	480/720/1200		3VL7112-1PD30-□□□□		1	1 unit	1CC	25.000
VL1600 UL, PG frame[2]	1200	400 ... 1200	2.5 ... 30	1500 ... 12000 (10 x I_n)	720/0.32	480/720/1200		3VL8112-1PD30-□□□□		1	1 unit	1CC	31.300
	1600	700 ... 1600	2.5 ... 30	2000 ... 9600 (6 x I_n)	960/0.4	640/960/1200		3VL8116-1PD30-□□□□		1	1 unit	1CC	31.300



L = overload

I = short-circuit protection, instantaneous

G = ground-fault protection

[1] UL Category Code Number.

[2] Operation of the molded case circuit breaker within the scope of application of UL 489/CSA is permitted only in conjunction with the mounting base (see page 2/262).

* You can order this quantity or a multiple thereof.

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DT	High breaking capacity H, up to 65 kA at 480 V (H)						DT	Very high breaking capacity L, up to 100 kA at 480 V (L)					
	Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2506-2PD30-□□□□		1	1 unit	1CC	2.400		**3VL2506-3PD30-□□□□**		1	1 unit	1CC	2.400
	3VL2510-2PD30-□□□□		1	1 unit	1CC	2.400		**3VL2510-3PD30-□□□□**		1	1 unit	1CC	2.400
	3VL2515-2PD30-□□□□		1	1 unit	1CC	2.400		**3VL2515-3PD30-□□□□**		1	1 unit	1CC	2.400
	3VL3510-2PD30-□□□□		1	1 unit	1CC	2.500		**3VL3510-3PD30-□□□□**		1	1 unit	1CC	2.500
	3VL3515-2PD30-□□□□		1	1 unit	1CC	2.500		**3VL3515-3PD30-□□□□**		1	1 unit	1CC	2.500
	3VL3525-2PD30-□□□□		1	1 unit	1CC	2.500		**3VL3525-3PD30-□□□□**		1	1 unit	1CC	2.500
	3VL4125-2PD30-□□□□		1	1 unit	1CC	5.900		**3VL4125-3PD30-□□□□**		1	1 unit	1CC	5.900
	3VL4140-2PD30-□□□□		1	1 unit	1CC	5.900		**3VL4140-3PD30-□□□□**		1	1 unit	1CC	5.900
	3VL4840-2PD30-□□□□		1	1 unit	1CC	5.900		**3VL4840-3PD30-□□□□**		1	1 unit	1CC	5.900
	3VL4860-2PD30-□□□□		1	1 unit	1CC	5.900		**3VL4860-3PD30-□□□□**		1	1 unit	1CC	5.900
	3VL6160-2PD30-□□□□		1	1 unit	1CC	16.000		**3VL6160-3PD30-□□□□**		1	1 unit	1CC	16.000
	3VL6180-2PD30-□□□□		1	1 unit	1CC	16.000		**3VL6180-3PD30-□□□□**		1	1 unit	1CC	16.000
	3VL7180-2PD30-□□□□		1	1 unit	1CC	25.000		**3VL7180-3PD30-□□□□**		1	1 unit	1CC	25.000
	3VL7110-2PD30-□□□□		1	1 unit	1CC	25.000		**3VL7110-3PD30-□□□□**		1	1 unit	1CC	25.000
	3VL7112-2PD30-□□□□		1	1 unit	1CC	25.000		**3VL7112-3PD30-□□□□**		1	1 unit	1CC	25.000
	3VL8112-2PD30-□□□□		1	1 unit	1CC	31.300		**3VL8112-3PD30-□□□□**		1	1 unit	1CC	31.300
	3VL8116-2PD30-□□□□		1	1 unit	1CC	31.300		**3VL8116-3PD30-□□□□**		1	1 unit	1CC	31.300

*** You can order this quantity or a multiple thereof.**

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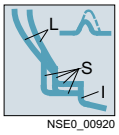
Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A, according to UL 489

3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Response time of the inverse-time delayed overload protection "L" t_r	Operating current of the instantaneous short-circuit protection "I" I_i	Operating current of the short-time delayed short-circuit protection "S" I_{sd}	DT	**Standard breaking capacity N, up to 35 kA at 480 V** see "Overview". (N) Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	s	A	A							kg
Fixed-mounted molded case circuit breakers, VL150 UL (DG frame) to VL1600 UL (PG frame), Electronic Trip Units (UL file: E10848, CCN[1]): DIVQ												
Line and generator protection												
With Electronic Trip Unit ETU (model 555) LSI function (t_{sd} = 0 to 0.5 s) Connection type: Molded case circuit breakers without preassembled connections, connections must be ordered under "Accessories", "Plug-in versions/withdrawable versions", pages 2/250 to 2/254 or under "Accessories", "Connection parts for fixed-mounted molded case circuit breakers", pages 2/255 to 2/262.												
VL150 UL, DG frame	60	30 ... 60	4/14	75 ... 660 (11 x I_n)	1.5 ... 10 x I_r		3VL2506-1PE30-□□□□		1	1 unit	1CC	2.400
	100	40 ... 100	4/14	125 ... 1100 (11 x I_n)	1.5 ... 10 x I_r		3VL2510-1PE30-□□□□		1	1 unit	1CC	2.400
	150	60 ... 150	4/14	187 ... 1650 (11 x I_n)	1.5 ... 10 x I_r		3VL2515-1PE30-□□□□		1	1 unit	1CC	2.400
VL250 UL, FG frame	100	40 ... 100	4/14	125 ... 1100 (11 x I_n)	1.5 ... 10 x I_r		3VL3510-1PE30-□□□□		1	1 unit	1CC	2.500
	150	60 ... 150	4/14	187 ... 1650 (11 x I_n)	1.5 ... 10 x I_r		3VL3515-1PE30-□□□□		1	1 unit	1CC	2.500
	250	125 ... 250	4/14	312 ... 2750 (11 x I_n)	1.5 ... 10 x I_r		3VL3525-1PE30-□□□□		1	1 unit	1CC	2.500
VL400 UL, JG frame	250	125 ... 250	4/14	312 ... 2750 (11 x I_n)	1.5 ... 10 x I_r		3VL4125-1PE30-□□□□		1	1 unit	1CC	5.900
	400	200 ... 400	10/20	500 ... 4400 (11 x I_n)	1.5 ... 10 x I_r		3VL4140-1PE30-□□□□		1	1 unit	1CC	5.900
VL400X UL, LG frame	400	200 ... 400	10/20	500 ... 4400 (11 x I_n)	1.5 ... 10 x I_r		3VL4840-1PE30-□□□□		1	1 unit	1CC	5.900
	600	350 ... 600	10/20	750 ... 6000 (10 x I_n)	1.5 ... 10 x I_r		3VL4860-1PE30-□□□□		1	1 unit	1CC	5.900
VL800 UL, MG frame	600	350 ... 600	10/20	750 ... 6000 (10 x I_n)	1.5 ... 10 x I_r		3VL6160-1PE30-□□□□		1	1 unit	1CC	16.000
	800	400 ... 800	10/20	1000 ... 6000 (7.5 x I_n)	1.5 ... 10 x I_r		3VL6180-1PE30-□□□□		1	1 unit	1CC	16.000
VL1200 UL, NG frame	800	400 ... 800	10/20	1000 ... 8800 (11 x I_n)	1.5 ... 10 x I_r		3VL7180-1PE30-□□□□		1	1 unit	1CC	25.000
	1000	600 ... 1000	10/20	1250 ... 11000 (11 x I_n)	1.5 ... 10 x I_r		3VL7110-1PE30-□□□□		1	1 unit	1CC	25.000
	1200	700 ... 1200	10/20	1500 ... 12000 (10 x I_n)	1.5 ... 10 x I_r		3VL7112-1PE30-□□□□		1	1 unit	1CC	25.000
VL1600 UL, PG frame[2]	1200	700 ... 1200	10/20	1500 ... 12000 (10 x I_n)	1.5 ... 10 x I_r		3VL8112-1PE30-□□□□		1	1 unit	1CC	31.300
	1600	1000 ... 1600	10/20	2000 ... 9600 (6 x I_n)	1.5 ... 10 x I_r		3VL8116-1PE30-□□□□		1	1 unit	1CC	31.300



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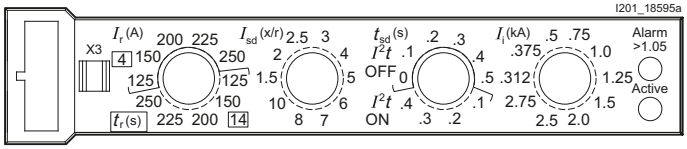

L = overload

S = short-circuit protection, short-time delayed

I = short-circuit protection, instantaneous

1) UL Category Code Number.

2) Operation of the molded case circuit breaker within the scope of application of UL 489/CSA is permitted only in conjunction with the mounting base (see page 2/262).

* You can order this quantity or a multiple thereof.

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DT	High breaking capacity H, up to 65 kA at 480 V (H)						DT	Very high breaking capacity L, up to 100 kA at 480 V (L)					
	Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2506-2PE30-□□□□		1	1 unit	1CC	2.400		3VL2506-3PE30-□□□□		1	1 unit	1CC	2.400
	3VL2510-2PE30-□□□□		1	1 unit	1CC	2.400		3VL2510-3PE30-□□□□		1	1 unit	1CC	2.400
	3VL2515-2PE30-□□□□		1	1 unit	1CC	2.400		3VL2515-3PE30-□□□□		1	1 unit	1CC	2.400
	3VL3510-2PE30-□□□□		1	1 unit	1CC	2.500		3VL3510-3PE30-□□□□		1	1 unit	1CC	2.500
	3VL3515-2PE30-□□□□		1	1 unit	1CC	2.500		3VL3515-3PE30-□□□□		1	1 unit	1CC	2.500
	3VL3525-2PE30-□□□□		1	1 unit	1CC	2.500		3VL3525-3PE30-□□□□		1	1 unit	1CC	2.500
	3VL4125-2PE30-□□□□		1	1 unit	1CC	5.900		3VL4125-3PE30-□□□□		1	1 unit	1CC	5.900
	3VL4140-2PE30-□□□□		1	1 unit	1CC	5.900		3VL4140-3PE30-□□□□		1	1 unit	1CC	5.900
	3VL4840-2PE30-□□□□		1	1 unit	1CC	5.900		3VL4840-3PE30-□□□□		1	1 unit	1CC	5.900
	3VL4860-2PE30-□□□□		1	1 unit	1CC	5.900		3VL4860-3PE30-□□□□		1	1 unit	1CC	5.900
	3VL6160-2PE30-□□□□		1	1 unit	1CC	16.000		3VL6160-3PE30-□□□□		1	1 unit	1CC	16.000
	3VL6180-2PE30-□□□□		1	1 unit	1CC	16.000		3VL6180-3PE30-□□□□		1	1 unit	1CC	16.000
	3VL7180-2PE30-□□□□		1	1 unit	1CC	25.000		3VL7180-3PE30-□□□□		1	1 unit	1CC	25.000
	3VL7110-2PE30-□□□□		1	1 unit	1CC	25.000		3VL7110-3PE30-□□□□		1	1 unit	1CC	25.000
	3VL7112-2PE30-□□□□		1	1 unit	1CC	25.000		3VL7112-3PE30-□□□□		1	1 unit	1CC	25.000
	3VL8112-2PE30-□□□□		1	1 unit	1CC	31.300		3VL8112-3PE30-□□□□		1	1 unit	1CC	31.300
	3VL8116-2PE30-□□□□		1	1 unit	1CC	31.300		3VL8116-3PE30-□□□□		1	1 unit	1CC	31.300

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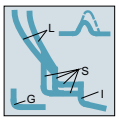
Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A, according to UL 489

3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Response time of the inverse-time delayed overload protection "L" t_r	Operating current of the instantaneous short-circuit protection "I" I_i	Operating current of the short-time delayed short-circuit protection "S" I_{sd}	Standard setting of I_g/A and t_g/s	t_g/s adjustable to 0.1, 0.2 and 0.3 s for the following I_g /A	DT	Standard breaking capacity N, up to 35 kA at 480 V see "Overview". (N) Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	s	A	A									kg
Fixed-mounted molded case circuit breakers, VL150 UL (DG frame) to VL1600 UL (PG frame), Electronic Trip Units (UL file: E10848, CCN[1]): DIVQ														
VL150 UL, DG frame	60	30 ... 60	4/14	300/660 (5/11 x I_n)	1.5 ... 10 x I_r	48/0.07	24/36/60		3VL2506-1PH30-□□□□		1	1 unit	1CC	2.400
	100	40 ... 100	4/14	500/1100 (5/11 x I_n)	1.5 ... 10 x I_r	80/0.07	40/60/100		3VL2510-1PH30-□□□□		1	1 unit	1CC	2.400
	150	60 ... 150	4/14	750/1650 (5/11 x I_n)	1.5 ... 10 x I_r	120/0.07	60/90/150		3VL2515-1PH30-□□□□		1	1 unit	1CC	2.400
VL250 UL, FG frame	100	40 ... 100	4/14	500/1100 (5/11 x I_n)	1.5 ... 10 x I_r	80/0.07	40/60/100		3VL3510-1PH30-□□□□		1	1 unit	1CC	2.500
	150	60 ... 150	4/14	750/1650 (5/11 x I_n)	1.5 ... 10 x I_r	120/0.07	60/90/150		3VL3515-1PH30-□□□□		1	1 unit	1CC	2.500
	250	125 ... 250	4/14	1250/2750 (5/11 x I_n)	1.5 ... 10 x I_r	200/0.07	100/150/250		3VL3525-1PH30-□□□□		1	1 unit	1CC	2.500
VL400 UL, JG frame	250	125 ... 250	4/14	1250/2750 (5/11 x I_n)	1.5 ... 10 x I_r	200/0.07	100/150/250		3VL4125-1PH30-□□□□		1	1 unit	1CC	5.900
	400	200 ... 400	10/20	2000/4400 (5/11 x I_n)	1.5 ... 10 x I_r	320/0.11	160/240/400		3VL4140-1PH30-□□□□		1	1 unit	1CC	5.900
VL400X UL, LG frame	400	200 ... 400	10/20	2000/4400 (5/11 x I_n)	1.5 ... 10 x I_r	320/0.11	160/240/400		3VL4840-1PH30-□□□□		1	1 unit	1CC	5.900
	600	350 ... 600	10/20	3000/6000 (5/10 x I_n)	1.5 ... 10 x I_r	360/0.18	240/360/600		3VL4860-1PH30-□□□□		1	1 unit	1CC	5.900
VL800 UL, MG frame	600	350 ... 600	10/20	3000/6000 (5/10 x I_n)	1.5 ... 10 x I_r	360/0.18	240/360/600		3VL6160-1PH30-□□□□		1	1 unit	1CC	16.000
	800	400 ... 800	10/20	4000/6000 (5/7.5 x I_n)	1.5 ... 10 x I_r	480/0.25	320/480/800		3VL6180-1PH30-□□□□		1	1 unit	1CC	16.000
VL1200 UL, NG frame	800	400 ... 800	10/20	4000/8800 (5/11 x I_n)	1.5 ... 10 x I_r	480/0.25	320/480/800		3VL7180-1PH30-□□□□		1	1 unit	1CC	25.000
	1000	600 ... 1000	10/20	5000/11000 (5/11 x I_n)	1.5 ... 10 x I_r	600/0.32	400/600/1000		3VL7110-1PH30-□□□□		1	1 unit	1CC	25.000
	1200	700 ... 1200	10/20	6000/12000 (5/10 x I_n)	1.5 ... 10 x I_r	720/0.32	480/720/1200		3VL7112-1PH30-□□□□		1	1 unit	1CC	25.000
VL1600 UL, PG frame[2]	1200	700 ... 1200	10/20	6000/12000 (5/10 x I_n)	1.5 ... 10 x I_r	720/0.32	480/720/1200		3VL8112-1PH30-□□□□		1	1 unit	1CC	31.300
	1600	1000...1600	10/20	8000/9600 (5/6 x I_n)	1.5 ... 10 x I_r	960/0.4	640/960/1200		3VL8116-1PH30-□□□□		1	1 unit	1CC	31.300



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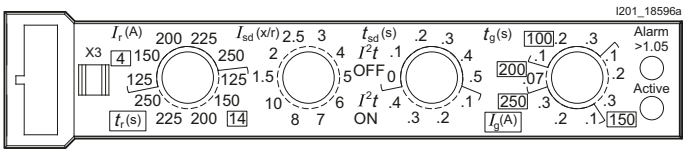

Line and generator protection

With Electronic Trip Unit ETU (model 555)
LSIG function (t_{sd} = 0 to 0.5 s)
for 4-wire three-phase systems (vectorial summation current formation)
Connection type:
Molded case circuit breakers without preassembled connections,
connections must be ordered under "Accessories", "Plug-in versions/withdrawable versions", pages 2/250 to 2/254 or under "Accessories", "Connection parts for fixed-mounted molded case circuit breakers", pages 2/255 to 2/262.
Current transformers must be ordered under "Accessories" page 2/270.

L = overload
S = short-circuit protection, short-time delayed
I = short-circuit protection, instantaneous
G = ground-fault protection

1) UL Category Code Number.
2) Operation of the molded case circuit breaker within the scope of application of UL 489/CSA is permitted only in conjunction with the mounting base (see page 2/262).

* You can order this quantity or a multiple thereof.

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DT	High breaking capacity H, up to 65 kA at 480 V (H)						DT	Very high breaking capacity L, up to 100 kA at 480 V (L)					
	Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2506-2PH30-□□□□		1	1 unit	1CC	2.400		**3VL2506-3PH30-□□□□**		1	1 unit	1CC	2.400
	3VL2510-2PH30-□□□□		1	1 unit	1CC	2.400		**3VL2510-3PH30-□□□□**		1	1 unit	1CC	2.400
	3VL2515-2PH30-□□□□		1	1 unit	1CC	2.400		**3VL2515-3PH30-□□□□**		1	1 unit	1CC	2.400
	3VL3510-2PH30-□□□□		1	1 unit	1CC	2.500		**3VL3510-3PH30-□□□□**		1	1 unit	1CC	2.500
	3VL3515-2PH30-□□□□		1	1 unit	1CC	2.500		**3VL3515-3PH30-□□□□**		1	1 unit	1CC	2.500
	3VL3525-2PH30-□□□□		1	1 unit	1CC	2.500		**3VL3525-3PH30-□□□□**		1	1 unit	1CC	2.500
	3VL4125-2PH30-□□□□		1	1 unit	1CC	5.900		**3VL4125-3PH30-□□□□**		1	1 unit	1CC	5.900
	3VL4140-2PH30-□□□□		1	1 unit	1CC	5.900		**3VL4140-3PH30-□□□□**		1	1 unit	1CC	5.900
	3VL4840-2PH30-□□□□		1	1 unit	1CC	5.900		**3VL4840-3PH30-□□□□**		1	1 unit	1CC	5.900
	3VL4860-2PH30-□□□□		1	1 unit	1CC	5.900		**3VL4860-3PH30-□□□□**		1	1 unit	1CC	5.900
	3VL6160-2PH30-□□□□		1	1 unit	1CC	16.000		**3VL6160-3PH30-□□□□**		1	1 unit	1CC	16.000
	3VL6180-2PH30-□□□□		1	1 unit	1CC	16.000		**3VL6180-3PH30-□□□□**		1	1 unit	1CC	16.000
	3VL7180-2PH30-□□□□		1	1 unit	1CC	25.000		**3VL7180-3PH30-□□□□**		1	1 unit	1CC	25.000
	3VL7110-2PH30-□□□□		1	1 unit	1CC	25.000		**3VL7110-3PH30-□□□□**		1	1 unit	1CC	25.000
	3VL7112-2PH30-□□□□		1	1 unit	1CC	25.000		**3VL7112-3PH30-□□□□**		1	1 unit	1CC	25.000
	3VL8112-2PH30-□□□□		1	1 unit	1CC	31.300		**3VL8112-3PH30-□□□□**		1	1 unit	1CC	31.300
	3VL8116-2PH30-□□□□		1	1 unit	1CC	31.300		**3VL8116-3PH30-□□□□**		1	1 unit	1CC	31.300

*** You can order this quantity or a multiple thereof.**

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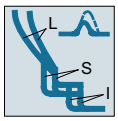
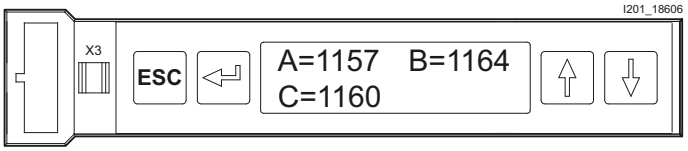
Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A, according to UL 489

3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Operating current of the instantaneous short-circuit protection "I" I_i	DT	**Standard breaking capacity N, up to 35 kA at 480 V** see "Overview". (N)				
					Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	A							kg
Fixed-mounted molded case circuit breakers, VL150 UL (DG frame) to VL1600 UL (PG frame), up to 1600 A, Electronic Trip Units (UL file: E10848, CCN[1]: DIVQ)										
VL150 UL, DG frame	60	30 ... 60	75 ... 660 (11 x I_n)		3VL2506-1VH30-□□□□		1	1 unit	1CC	2.400
	100	40 ... 100	125 ... 1100 (11 x I_n)		3VL2510-1VH30-□□□□		1	1 unit	1CC	2.400
	150	60 ... 150	187 ... 1650 (11 x I_n)		3VL2515-1VH30-□□□□		1	1 unit	1CC	2.400
VL250 UL, FG frame	100	40 ... 100	125 ... 1100 (11 x I_n)		3VL3510-1VH30-□□□□		1	1 unit	1CC	2.500
	150	60 ... 150	187 ... 1650 (11 x I_n)		3VL3515-1VH30-□□□□		1	1 unit	1CC	2.500
	250	70 ... 250	312 ... 2750 (11 x I_n)		3VL3525-1VH30-□□□□		1	1 unit	1CC	2.500
VL400 UL, JG frame	250	70 ... 250	312 ... 2750 (11 x I_n)		3VL4125-1VH30-□□□□		1	1 unit	1CC	5.900
	400	150 ... 400	500 ... 4400 (11 x I_n)		3VL4140-1VH30-□□□□		1	1 unit	1CC	5.900
VL400X UL, LG frame	400	150 ... 400	500 ... 4400 (11 x I_n)		3VL4840-1VH30-□□□□		1	1 unit	1CC	5.900
	600	200 ... 600	750 ... 6000 (10 x I_n)		3VL4860-1VH30-□□□□		1	1 unit	1CC	5.900
VL800 UL, MG frame	600	200 ... 600	750 ... 6000 (10 x I_n)		3VL6160-1VH30-□□□□		1	1 unit	1CC	16.000
	800	300 ... 800	1000 ... 6000 (7.5 x I_n)		3VL6180-1VH30-□□□□		1	1 unit	1CC	16.000
VL1200 UL, NG frame	800	300 ... 800	1000 ... 8800 (11 x I_n)		3VL7180-1VH30-□□□□		1	1 unit	1CC	25.000
	1000	400 ... 1000	1250 ... 11000 (11 x I_n)		3VL7110-1VH30-□□□□		1	1 unit	1CC	25.000
	1200	400 ... 1200	1500 ... 12000 (10 x I_n)		3VL7112-1VH30-□□□□		1	1 unit	1CC	25.000
VL1600 UL, PG frame[3]	1200	400 ... 1200	1500 ... 12000 (10 x I_n)		3VL8112-1VH30-□□□□		1	1 unit	1CC	31.300
	1600	700 ... 1600	2000 ... 9600 (6 x I_n)		3VL8116-1VH30-□□□□		1	1 unit	1CC	31.300





Molded case circuit breakers with Electronic Trip Unit with LCD, line protection with LI/LS/LSI function

- Connection type:
  Molded case circuit breakers without preassembled connections,
  connections must be ordered under "Accessories", "Plug-in versions/withdrawable versions", pages 2/250 to 2/254 or under "Accessories", "Connection parts for fixed-mounted molded case circuit breakers", pages 2/255 to 2/262.
- t_{sd} = 0 to 0.5 s
- t_r/s: 2.5, 4, 6, 8.10,14, 17, 20, 25, 30
- I_{sd}/A: 1.25 to 10 x I_r[2]
- Pre-alarm % of I_r: 80 to 100

L = overload
S = short-circuit protection, short-time delayed
I = short-circuit protection, instantaneous

1) UL Category Code Number.

2) Only for sizes for which I_i (max) = 11 x I_n Here the factor is 11.
Otherwise the following applies:
I_{sd} (max) = (factor-1) x I_r (max). The factor is the value in brackets in the column I_i.

3) Operation of the molded case circuit breaker within the scope of application of UL 489/CSA is permitted only in conjunction with the mounting base (see page 2/262).

* You can order this quantity or a multiple thereof.

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DT	High breaking capacity H, up to 65 kA at 480 V (H)						DT	Very high breaking capacity L, up to 100 kA at 480 V (L)					
	Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2506-2VH30-□□□□		1	1 unit	1CC	2.400		**3VL2506-3VH30-□□□□**		1	1 unit	1CC	2.400
	3VL2510-2VH30-□□□□		1	1 unit	1CC	2.400		**3VL2510-3VH30-□□□□**		1	1 unit	1CC	2.400
	3VL2515-2VH30-□□□□		1	1 unit	1CC	2.400		**3VL2515-3VH30-□□□□**		1	1 unit	1CC	2.400
	3VL3510-2VH30-□□□□		1	1 unit	1CC	2.500		**3VL3510-3VH30-□□□□**		1	1 unit	1CC	2.500
	3VL3515-2VH30-□□□□		1	1 unit	1CC	2.500		**3VL3515-3VH30-□□□□**		1	1 unit	1CC	2.500
	3VL3525-2VH30-□□□□		1	1 unit	1CC	2.500		**3VL3525-3VH30-□□□□**		1	1 unit	1CC	2.500
	3VL4125-2VH30-□□□□		1	1 unit	1CC	5.900		**3VL4125-3VH30-□□□□**		1	1 unit	1CC	5.900
	3VL4140-2VH30-□□□□		1	1 unit	1CC	5.900		**3VL4140-3VH30-□□□□**		1	1 unit	1CC	5.900
	3VL4840-2VH30-□□□□		1	1 unit	1CC	5.900		**3VL4840-3VH30-□□□□**		1	1 unit	1CC	5.900
	3VL4860-2VH30-□□□□		1	1 unit	1CC	5.900		**3VL4860-3VH30-□□□□**		1	1 unit	1CC	5.900
	3VL6160-2VH30-□□□□		1	1 unit	1CC	16.000		**3VL6160-3VH30-□□□□**		1	1 unit	1CC	16.000
	3VL6180-2VH30-□□□□		1	1 unit	1CC	16.000		**3VL6180-3VH30-□□□□**		1	1 unit	1CC	16.000
	3VL7180-2VH30-□□□□		1	1 unit	1CC	25.000		**3VL7180-3VH30-□□□□**		1	1 unit	1CC	25.000
	3VL7110-2VH30-□□□□		1	1 unit	1CC	25.000		**3VL7110-3VH30-□□□□**		1	1 unit	1CC	25.000
	3VL7112-2VH30-□□□□		1	1 unit	1CC	25.000		**3VL7112-3VH30-□□□□**		1	1 unit	1CC	25.000
	3VL8112-2VH30-□□□□		1	1 unit	1CC	31.300		**3VL8112-3VH30-□□□□**		1	1 unit	1CC	31.300
	3VL8116-2VH30-□□□□		1	1 unit	1CC	31.300		**3VL8116-3VH30-□□□□**		1	1 unit	1CC	31.300

*** You can order this quantity or a multiple thereof.**

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Molded Case Circuit Breakers

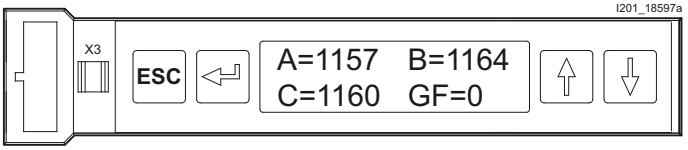
3VL Molded Case Circuit Breakers up to 1600 A, according to UL 489

3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overload protection "L" I_r	Operating current of the instantaneous short-circuit protection "I" I_i	I_g in % of I_n	DT	Standard breaking capacity N, up to 35 kA at 480 V see "Overview". (N) Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	A	A								kg

Fixed-mounted molded case circuit breakers, VL150 UL (DG frame) to VL1600 UL (PG frame), up to 1600 A, Electronic Trip Units (UL file: E10848, CCN[1]: DIVQ)

NSE0_00697



Molded case circuit breakers with Electronic Trip Unit with LCD, line protection with LSIG function or LSIG (alarm) function

- Connection type:
  Molded case circuit breakers without preassembled connections, connections must be ordered under "Accessories", "Plug-in versions/withdrawable versions", pages 2/250 to 2/254 or under "Accessories", "Connection parts for fixed-mounted molded case circuit breakers", pages 2/255 to 2/262.
- t_r/s: 2.5, 4, 6, 8.10,14, 17, 20, 25, 30
- I_{sd}/A: 1.25 to 10 x I_r[2]
- Pre-alarm % of I_r: 80 to 100
- t_g/s: 0,1; 0,2; 0.3; 0.4; 0.5

VL150 UL,	60	30 ... 60	75 ... 660 (11 x I_n)	40 ... 100	3VL2506-1□□30-□□□□	1	1 unit	1CC	2.400
DG frame	100	40 ... 100	125 ... 1100 (11 x I_n)	40 ... 100	3VL2510-1□□30-□□□□	1	1 unit	1CC	2.400
	150	60 ... 150	187 ... 1650 (11 x I_n)	40 ... 100	3VL2515-1□□30-□□□□	1	1 unit	1CC	2.400
VL250 UL,	100	40 ... 100	125 ... 1100 (11 x I_n)	40 ... 100	3VL3510-1□□30-□□□□	1	1 unit	1CC	2.500
FG frame	150	60 ... 150	187 ... 1650 (11 x I_n)	40 ... 100	3VL3515-1□□30-□□□□	1	1 unit	1CC	2.500
	250	70 ... 250	312 ... 2750 (11 x I_n)	40 ... 100	3VL3525-1□□30-□□□□	1	1 unit	1CC	2.500
VL400 UL,	250	70 ... 250	312 ... 2750 (11 x I_n)	40 ... 100	3VL4125-1□□30-□□□□	1	1 unit	1CC	5.900
JG frame	400	150 ... 400	500 ... 4400 (11 x I_n)	40 ... 100	3VL4140-1□□30-□□□□	1	1 unit	1CC	5.900
VL400X UL,	400	150 ... 400	500 ... 4400 (11 x I_n)	40 ... 100	3VL4840-1□□30-□□□□	1	1 unit	1CC	5.900
LG frame	600	200 ... 600	750 ... 6000 (10 x I_n)	40 ... 100	3VL4860-1□□30-□□□□	1	1 unit	1CC	5.900
VL800 UL,	600	200 ... 600	750 ... 6000 (10 x I_n)	40 ... 100	3VL6160-1□□30-□□□□	1	1 unit	1CC	16.000
MG frame	800	300 ... 800	1000 ... 6000 (7.5 x I_n)	40 ... 100	3VL6180-1□□30-□□□□	1	1 unit	1CC	16.000
VL1200 UL,	800	300 ... 800	1000 ... 8800 (11 x I_n)	40 ... 100	3VL7180-1□□30-□□□□	1	1 unit	1CC	25.000
NG frame	1000	400 ... 1000	1250 ... 11000 (11 x I_n)	40 ... 100	3VL7110-1□□30-□□□□	1	1 unit	1CC	25.000
	1200	400 ... 1200	1500 ... 12000 (10 x I_n)	40 ... 100	3VL7112-1□□30-□□□□	1	1 unit	1CC	25.000
VL1600 UL,	1200	400 ... 1200	1500 ... 12000 (10 x I_n)	40 ... 100	3VL8112-1□□30-□□□□	1	1 unit	1CC	31.300
PG frame[3]	1600	700 ... 1600	2000 ... 9600 (6 x I_n)	40 ... 75	3VL8116-1□□30-□□□□	1	1 unit	1CC	31.300

Electronic Trip Units with LCD, 3-pole version

Line protection with LSIG function For 4-wire three-phase systems (vectorial summation current formation) t_{sd} = 0 to 0.5 s, tg = 0 to 0.5 s	**V M**
Line protection with LSIG (alarm) function For 4-wire three-phase systems (vectorial summation current formation) t_{sd} = 0 to 0.5 s, tg = 0 to 0.5 s	**V J**

L = overload
S = short-circuit protection, short-time delayed
I = short-circuit protection, instantaneous
G = ground-fault protection

1) UL Category Code Number.
2) Only for sizes for which I_i (max) = 11 x I_n Here the factor is 11. Otherwise the following applies: I_{sd} (max) = (factor-1) x I_r (max). The factor is the value in brackets in the column I_i.
3) Operation of the molded case circuit breaker within the scope of application of UL 489/CSA is permitted only in conjunction with the mounting base (see page 2/262).

* You can order this quantity or a multiple thereof.

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DT	High breaking capacity H, up to 65 kA at 480 V (H)						DT	Very high breaking capacity L, up to 100 kA at 480 V (L)					
	Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Article No. www.siemens.com/product?Article No. Article No. supplement required, see page 2/236	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL2506-2□□30-□□□□		1	1 unit	1CC	2.400		3VL2506-3□□30-□□□□		1	1 unit	1CC	2.400
	3VL2510-2□□30-□□□□		1	1 unit	1CC	2.400		3VL2510-3□□30-□□□□		1	1 unit	1CC	2.400
	3VL2515-2□□30-□□□□		1	1 unit	1CC	2.400		3VL2515-3□□30-□□□□		1	1 unit	1CC	2.400
	3VL3510-2□□30-□□□□		1	1 unit	1CC	2.500		3VL3510-3□□30-□□□□		1	1 unit	1CC	2.500
	3VL3515-2□□30-□□□□		1	1 unit	1CC	2.500		3VL3515-3□□30-□□□□		1	1 unit	1CC	2.500
	3VL3525-2□□30-□□□□		1	1 unit	1CC	2.500		3VL3525-3□□30-□□□□		1	1 unit	1CC	2.500
	3VL4125-2□□30-□□□□		1	1 unit	1CC	5.900		3VL4125-3□□30-□□□□		1	1 unit	1CC	5.900
	3VL4140-2□□30-□□□□		1	1 unit	1CC	5.900		3VL4140-3□□30-□□□□		1	1 unit	1CC	5.900
	3VL4840-2□□30-□□□□		1	1 unit	1CC	5.900		3VL4840-3□□30-□□□□		1	1 unit	1CC	5.900
	3VL4860-2□□30-□□□□		1	1 unit	1CC	5.900		3VL4860-3□□30-□□□□		1	1 unit	1CC	5.900
	3VL6160-2□□30-□□□□		1	1 unit	1CC	16.000		3VL6160-3□□30-□□□□		1	1 unit	1CC	16.000
	3VL6180-2□□30-□□□□		1	1 unit	1CC	16.000		3VL6180-3□□30-□□□□		1	1 unit	1CC	16.000
	3VL7180-2□□30-□□□□		1	1 unit	1CC	25.000		3VL7180-3□□30-□□□□		1	1 unit	1CC	25.000
	3VL7110-2□□30-□□□□		1	1 unit	1CC	25.000		3VL7110-3□□30-□□□□		1	1 unit	1CC	25.000
	3VL7112-2□□30-□□□□		1	1 unit	1CC	25.000		3VL7112-3□□30-□□□□		1	1 unit	1CC	25.000
	3VL8112-2□□30-□□□□		1	1 unit	1CC	31.300		3VL8112-3□□30-□□□□		1	1 unit	1CC	31.300
	3VL8116-2□□30-□□□□		1	1 unit	1CC	31.300		3VL8116-3□□30-□□□□		1	1 unit	1CC	31.300
	VM							VM					
	VJ							VJ					

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Selection and ordering data

1st Article No. supplement:
Undervoltage release or shunt release, wiring directly to accessories

Rated control supply voltage U_s/frequency		Article No. supplement		Molded case circuit breakers Type	
50/60 Hz AC DC		**3VL . . . . - . . . . . - ☐ ☐ . .**		**VL150X UL (CG frame) to VL400X UL (LG frame)[1]**	**VL800 UL (MG frame) to VL1600 UL (PG frame)**
				Additional price	Additional price
Without auxiliary release		**0**	**A**	None	None
With undervoltage release Only right pole					
V AC	V DC				
--	12	**2**	**N**	✓[1]	✓
--	24	**2**	**P**	✓[1]	✓
--	48	**2**	**U**	✓[1]	✓
--	60	**2**	**V**	✓[1]	✓
--	110-127	**2**	**R**	✓[1]	✓
--	220-250	**2**	**S**	✓[1]	✓
24	--	**2**	**D**[2]	✓[1]	--
110-127	--	**2**	**G**	✓[1]	✓
220-250	--	**2**	**H**	✓[1]	✓
208	--	**2**	**M**	✓[1]	✓
277	--	**2**	**Q**	✓[1]	✓
380-415	--	**2**	**J**	✓[1]	✓
440-480	--	**2**	**K**	✓[1]	✓
500-525	--	**2**	**L**[2]	✓[1]	--
With shunt release Only right pole					
V AC	V DC				
--	24	**8**	**C**	✓[1]	✓
--	48-60	**8**	**J**	✓[1]	✓
--	110-127	**8**	**K**	✓[1]	✓
--	220-250	**8**	**Q**	✓[1]	✓
48-60	--	**8**	**M**	✓[1]	✓
110-127	--	**8**	**R**	✓[1]	✓
208-277	--	**8**	**T**	✓[1]	✓
380-600	--	**8**	**V**	✓[1]	✓

2nd Article No. supplement:
Auxiliary switches (HS) and alarm switches (AS), left/right pole, directly wired to accessories

Equipment	Article No. supplement		Molded case circuit breakers Type	
HS = 1 NO or 1 NC contact block AS = 1 NO contact block	3VL . . . . - . . . . . - . . ☐ ☐		**VL150X UL (CG frame) to VL400X UL (LG frame)** Additional price	**VL800 UL (MG frame) to VL1600 UL (PG frame)** Additional price
Without auxiliary/alarm switches	**A**	**0**	None	None
2 HS (1 NO/1 NC)[3]	**B**	**1**	✓[4]	--
4 HS (2 NO/2 NC)	**C**	**1**	--	✓
2 HS (1 NO/1 NC) + 1 AS (1 NO)	**D**	**1**	✓[4]	--
2 HS (1 NO/1 NC) + 1 AS (1 NO)[5]	**E**	**1**	--	✓

✓ Additional price

-- Not available

1) Only an undervoltage release or a shunt release or an auxiliary/alarm switch combination is possible for VL150 UL (DG frame)/VL250 UL (FG frame) molded case circuit breakers with an Electronic Trip Unit.

2) Not for VL800 UL (MG frame), VL1200 UL (NG frame) and VL1600 UL (PG frame) molded case circuit breakers.

3) Up to 3 HS are possible with a mounting adapter.

4) Except for installation in the left accessory compartment of the VL150 UL (DG frame)/VL250 UL (FG frame) molded case circuit breakers with Electronic Trip Unit because this compartment is fitted with the tripping solenoid. Only an auxiliary release or an auxiliary/alarm switch combination can be installed on the right.

5) Up to 2 HS + 2 AS are possible with a mounting adapter.

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When ordering, add **"-Z"** to the complete Article No. and add the relevant order code(s).		Article No. with **"–Z"** 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 **3VL** . . . . – . . . . . – . . . . **–Z** and additional order code(s) □ □ □ + . . . + . . . Code for further versions **–Z**	Additional price
For fixed-mounted molded case circuit breakers (wired in factory)			
Wiring for internal accessories (auxiliary switches, alarm switches, or auxiliary releases not included in scope of supply) with connecting cables (3 m long) brought out at the rear	VL150X UL (CG frame) to VL1600 UL (PG frame)	**L 0 2**	✓
Wiring for motorized operating mechanisms (Motorized operating mechanism not included in scope of supply, for selection and ordering data, see pages 2/242 to 2/250) with connecting cables (3 m long) or brought out at the top in the case of VL150X UL (CG frame) to VL400X UL (LG frame) or brought out at the right in the case of VL800 UL (MG frame) to VL1600 UL (PG frame)	VL150X UL (CG frame) to VL1600 UL (PG frame)	**L 1 2**	✓
Motorized operating mechanism (24 V DC) Mounted on molded case circuit breaker (motorized operating mechanism included in the scope of supply) **with wiring for internal accessories** of the molded case circuit breaker with connecting cables (3 m long) brought out at the rear (auxiliary switches, alarm switches, or auxiliary releases not included in scope of supply)	VL150X UL (CG frame) to VL250 UL (FG frame)	**M 2 4**	✓
	VL400 UL (JG frame) to VL400X UL (LG frame)		✓
	VL800 UL (MG frame)		✓
	VL1200 UL (NG frame) to VL1600 UL (PG frame)		✓
Motorized operating mechanism (42-48 V AC/DC) Mounted on molded case circuit breaker (motorized operating mechanism included in the scope of supply) **with wiring for internal accessories** of the molded case circuit breaker with connecting cables (3 m long) brought out at the rear (auxiliary switches, alarm switches, or auxiliary releases not included in scope of supply)	VL150X UL (CG frame) to VL250 UL (FG frame)	**M 4 2**	✓
	VL400 UL (JG frame) to VL400X UL (LG frame)		✓
	VL800 UL (MG frame)		✓
	VL1200 UL (NG frame) to VL1600 UL (PG frame)		✓
Motorized operating mechanisms (60 V AC/DC) Mounted on molded case circuit breaker (motorized operating mechanism included in the scope of supply) **with wiring for internal accessories** of the molded case circuit breaker with connecting cables (3 m long) brought out at the rear (auxiliary switches, alarm switches, or auxiliary releases not included in scope of supply)	VL150X UL (CG frame) to VL250 UL (FG frame)	**M 6 0**	✓
	VL400 UL (JG frame) to VL400X UL (LG frame)		✓
	VL800 UL (MG frame)		✓
	VL1200 UL (NG frame) to VL1600 UL (PG frame)		✓
Motorized operating mechanism (110-127 V AC/DC) Mounted on molded case circuit breaker (motorized operating mechanism included in the scope of supply) **with wiring for internal accessories** of the molded case circuit breaker with connecting cables (3 m long) brought out at the rear (auxiliary switches, alarm switches, or auxiliary releases not included in scope of supply)	VL150X UL (CG frame) to VL250 UL (FG frame)	**M 1 1**	✓
	VL400 UL (JG frame) to VL400X UL (LG frame)		✓
	VL800 UL (MG frame)		✓
	VL1200 UL (NG frame) to VL1600 UL (PG frame)		✓
Motorized operating mechanism (220-250 V AC/DC) Mounted on molded case circuit breaker (motorized operating mechanism included in the scope of supply) **with wiring for internal accessories** of the molded case circuit breaker with connecting cables (3 m long) brought out at the rear (auxiliary switches, alarm switches, or auxiliary releases not included in scope of supply)	VL150X UL (CG frame) to VL250 UL (FG frame)	**M 2 2**	✓
	VL400 UL (JG frame) to VL400X UL (LG frame)		✓
	VL800 UL (MG frame)		✓
	VL1200 UL (NG frame) to VL1600 UL (PG frame)		✓

✓ Additional price

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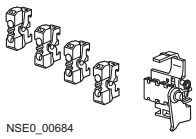
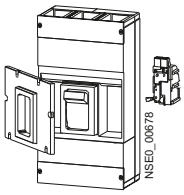
Selection and ordering data

	Wiring directly to accessories	DT	For VL150X UL (CG frame) to VL400X UL (LG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Auxiliary switches and auxiliary releases (UL file: E69455)								
	3-pole							
 NSE0_00684 3VL9400-2A.01	**Auxiliary switches (HS) and alarm switches (AS)** For retrofitting							
	Assembly kits: 2 HS (1 NO + 1 NC); Mounting side: N, left[1], right		3VL9400-2AB01		1	1 unit	1CC	0.054
	4 HS (2 NO + 2 NC); N, left, right		--					
	2 HS (1 NC + 1 NO); Left, right[2]		3VL9400-2AD01		1	1 unit	1CC	0.081
	+ 1 AS (1 NO) (assembly kit); Left		--					
	Additional auxiliary switch/alarm switch combinations		See page 2/240.					
 NSE0_00678 3VL9400-1S.01, 3VL9400 1U.01	**Shunt releases** For retrofitting							
	V AC: --; V DC: 24; Mounting side: Right pole only		3VL9400-1SC01		1	1 unit	1CC	0.101
	V AC: --; V DC: 48 ... 60; Right pole only		3VL9400-1SJ01		1	1 unit	1CC	0.103
	V AC: --; V DC: 110 ... 127; Right pole only		3VL9400-1SK01		1	1 unit	1CC	0.101
	V AC: --; V DC: 220 ... 250; Right pole only		3VL9400-1SQ01		1	1 unit	1CC	0.099
	V AC: 48 ... 60; V DC: --; Right pole only		3VL9400-1SM01		1	1 unit	1CC	0.103
	V AC: 110 ... 127; V DC: --; Right pole only		3VL9400-1SR01		1	1 unit	1CC	0.100
	V AC: 208 ... 277; V DC: --; Right pole only		3VL9400-1ST01		1	1 unit	1CC	1.640
	V AC: 380 ... 600; V DC: --; Right pole only		3VL9400-1SV01		1	1 unit	1CC	0.103
	Undervoltage releases For retrofitting							
	V AC: --; V DC: 12; Mounting side: Right pole only		3VL9400-1UN01		1	1 unit	1CC	0.092
	V AC: --; V DC: 24; Right pole only		3VL9400-1UP01		1	1 unit	1CC	0.096
	V AC: --; V DC: 48; Right pole only		3VL9400-1UU01		1	1 unit	1CC	0.097
	V AC: --; V DC: 60; Right pole only		3VL9400-1UV01		1	1 unit	1CC	0.098
	V AC: 24; V DC: --; Right pole only		3VL9400-1UD01		1	1 unit	1CC	0.100
	V AC: 110 ... 127; V DC: --; Right pole only		3VL9400-1UG01		1	1 unit	1CC	0.099
	V AC: --; V DC: 110 ... 127; Right pole only		3VL9400-1UR01		1	1 unit	1CC	0.099
	V AC: 208; V DC: --; Right pole only		3VL9400-1UM01		1	1 unit	1CC	0.101
	V AC: 220 ... 250; V DC: --; Right pole only		3VL9400-1UH01		1	1 unit	1CC	0.099
	V AC: --; V DC: 220 ... 250; Right pole only		3VL9400-1US01		1	1 unit	1CC	0.092
	V AC: 277; V DC: --; Right pole only		3VL9400-1UQ01		1	1 unit	1CC	0.094
	V AC: 380 ... 415; V DC: --; Right pole only		3VL9400-1UJ01		1	1 unit	1CC	0.103
	V AC: 440 ... 480; V DC: --; Right pole only		3VL9400-1UK01		1	1 unit	1CC	0.099
	V AC: 500 ... 525; V DC: --; Right pole only		3VL9400-1UL01		1	1 unit	1CC	0.100

1) Except for installation in the left accessory compartment of the VL150 UL (DG frame)/VL250 UL (FG frame) molded case circuit breakers with Electronic Trip Unit because this compartment is fitted with the tripping solenoid.

2) In the case of VL400 UL (JG frame)/VL400X UL (LG frame): Unsuitable for mounting in the right-hand accessory compartment. The 3VL9400-2AB01 assembly kit with auxiliary switches only is recommended.

*** You can order this quantity or a multiple thereof.**

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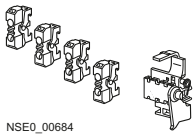
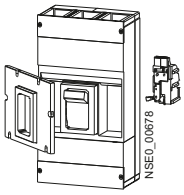
	Wiring directly to accessories	DT	For VL800 UL (MG frame) to VL1600 UL (PG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Auxiliary switches and auxiliary releases (UL file: E69455)								
 NSE0_00684 3VL9800-2A.01	***3-pole*** **Auxiliary switches (HS) and alarm switches (AS)** For retrofitting							
	Assembly kits: 2 HS (1 NO + 1 NC); Mounting side: N, left, right		--					
	Assembly kits: 4 HS (2 NO + 2 NC); Mounting side: N, left, right		3VL9800-2AC01		1	1 unit	1CC	0.080
	Assembly kits: 2 HS (1 NC + 1 NO); Mounting side: Left, right		--					
	Assembly kits: + 1 AS (1 NO) (assembly kit); Mounting side: Left		3VL9800-2AE01		1	1 unit	1CC	0.082
	Additional auxiliary switch/alarm switch combinations		see page 2/240.					
 NSE0_00678 3VL9800-1S.01, 3VL9800-1U.01	**Shunt releases** For retrofitting							
	V AC: 24; V DC: 24; Mounting side: Right pole only		3VL9800-1SC01		1	1 unit	1CC	0.151
	V AC: --; V DC: 48 ... 60; Mounting side: Right pole only		3VL9800-1SJ01		1	1 unit	1CC	0.150
	V AC: --; V DC: 110 ... 127; Mounting side: Right pole only		3VL9800-1SK01		1	1 unit	1CC	0.152
	V AC: --; V DC: 220 ... 250; Mounting side: Right pole only		3VL9800-1SQ01		1	1 unit	1CC	0.150
	V AC: 48 ... 60; V DC: --; Mounting side: Right pole only		3VL9800-1SM01		1	1 unit	1CC	0.144
	V AC: 110 ... 127; V DC: --; Mounting side: Right pole only		3VL9800-1SR01		1	1 unit	1CC	0.153
	V AC: 208 ... 277; V DC: --; Mounting side: Right pole only		3VL9800-1ST01		1	1 unit	1CC	0.148
	V AC: 380 ... 600; V DC: --; Mounting side: Right pole only		3VL9800-1SV01		1	1 unit	1CC	0.144
	Undervoltage releases For retrofitting							
	V AC: --; V DC: 12; Mounting side: Right pole only		3VL9800-1UN01		1	1 unit	1CC	0.116
	V AC: --; V DC: 24; Mounting side: Right pole only		3VL9800-1UP01		1	1 unit	1CC	0.115
	V AC: --; V DC: 48; Mounting side: Right pole only		3VL9800-1UU01		1	1 unit	1CC	0.111
	V AC: --; V DC: 60; Mounting side: Right pole only		3VL9800-1UV01		1	1 unit	1CC	0.115
	V AC: 110 ... 127; V DC: --; Mounting side: Right pole only		3VL9800-1UG01		1	1 unit	1CC	0.111
	V AC: --; V DC: 110 ... 127; Mounting side: Right pole only		3VL9800-1UR01		1	1 unit	1CC	0.112
	V AC: 208; V DC: --; Mounting side: Right pole only		3VL9800-1UM01		1	1 unit	1CC	0.115
	V AC: 220 ... 250; V DC: --; Mounting side: Right pole only		3VL9800-1UH01		1	1 unit	1CC	0.114
	V AC: --; V DC: 220 ... 250; Mounting side: Right pole only		3VL9800-1US01		1	1 unit	1CC	0.112
	V AC: 277; V DC: --; Mounting side: Right pole only		3VL9800-1UQ01		1	1 unit	1CC	0.135
	V AC: 380 ... 415; V DC: --; Mounting side: Right pole only		3VL9800-1UJ01		1	1 unit	1CC	0.131
	V AC: 440 ... 480; V DC: --; Mounting side: Right pole only		3VL9800-1UK01		1	1 unit	1CC	0.137
	V AC: 500 ... 525; V DC: --; Mounting side: Right pole only		--					

*** You can order this quantity or a multiple thereof.**

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Accessories and spare parts

For molded case circuit breakers	Maximum combination of auxiliary switches (HS) and alarm switches (AS)	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
Type								kg
3SB adapters and 3SB contact blocks								
Mounting adapters for auxiliary and alarm switch combinations (UL file: E69455)								
For installation in the left pole of the molded case circuit breaker								
VL150X UL (CG frame), VL150 UL (DG frame), VL250 UL (FG frame),	Up to 3 HS[1]		3VL9400-2AH01		1	1 unit	1CC	0.037
VL400 UL (JG frame), VL400X UL (LG frame)	2 HS + 1 AS[1) 2)]		3VL9400-2AJ11		1	1 unit	1CC	0.037
VL800 UL (MG frame), VL1200 UL (NG frame),	Up to 4 HS		3VL9816-2AL01		1	1 unit	1CC	0.050
VL1600 UL (PG frame)	2 HS + 2 AS		3VL9816-2AN11		1	1 unit	1CC	0.060
For installation in the right pole of the molded case circuit breaker								
VL150X UL (CG frame), VL150 UL (DG frame), VL250 UL (FG frame),	Up to 3 HS[1]		3VL9400-2AH01		1	1 unit	1CC	0.037
VL400 UL (JG frame), VL400X UL (LG frame)[2]	2 HS + 1 AS[1)2)]		3VL9400-2AJ21		1	1 unit	1CC	0.033
VL800 UL (MG frame), VL1200 UL (NG frame),	Up to 4 HS		3VL9816-2AL01		1	1 unit	1CC	0.050
VL1600 UL (PG frame)	2 HS + 2 AS		--					

1) Except for installation in the left pole for VL150 UL (DG frame)/VL250 UL (FG frame) molded case circuit breakers with Electronic Trip Unit. Only an auxiliary release or an auxiliary/alarm switch combination can be installed on the right.

2) In the case of VL400 UL (JG frame)/VL400X UL (LG frame): 3VL9400-2AJ21 unsuitable for mounting in the right-hand accessory compartment.

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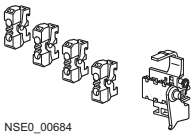
For auxiliary switches (HS) and alarm switches (AS)	DT	Molded case circuit breakers Type **VL150X UL (CG frame) to VL1600 UL (PG frame)** Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Contact blocks for auxiliary switch (HS) and alarm switch (AS) combinations							
1 NO		**3SB3400-0J**		1	1 unit	41J	0.009
1 NC		**3SB3400-0K**		1	1 unit	41J	0.009

For auxiliary switch or alarm switch combinations not included in the kits provided as standard, the mounting adapters specified can be ordered separately together with the required contact blocks:
1 HS or 1 AS with NO contact 3SB3400-0J
1 HS or 1 AS with NC contact 3SB3400-0K

Notes:

A maximum of 6 contact blocks (HS) per molded case circuit breaker (VL150X UL (CG frame) to VL400X UL (LG frame)) and a maximum of 8 contact blocks (HS) per molded case circuit breaker (VL800 UL (MG frame) to VL1600 UL (PG frame)) are possible.

Four 3SB3 auxiliary contact blocks and one mounting adapter (right), suitable for VL800 UL (MG frame) to VL1600 UL (PG frame) molded case circuit breakers.


NSE0_00684

For retrofitting/equipment options, see chapter "Design", "Auxiliary releases and auxiliary switches".

*** You can order this quantity or a multiple thereof.**

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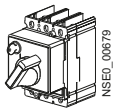
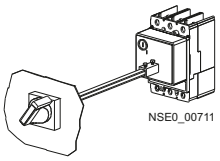
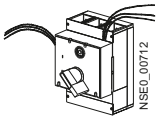
Accessories and spare parts

	Version	DT	For VL150X UL (CG frame) to VL250 UL (FG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Operating mechanisms								
	3-pole							
 3VL9.00-3H.01	**Front-operated rotary operating mechanisms (UL file: E69455)** For direct mounting on the molded case circuit breaker, without leading auxiliary switch, degree of protection IP30[1], black		3VL9300-3HA01		1	1 unit	1CC	0.490
	EMERGENCY-STOP version Red knob, yellow indicator plate		3VL9300-3HC01		1	1 unit	1CC	0.470
	Safety locks for installation by the customer, see pages 2/263 to 2/267.							
 3VL9.00-3H.06	**Door-coupling rotary operating mechanisms, complete; installation in doors and covers (UL file: E69455)** NEMA 1, 12 Degree of protection IP65, including black knob with masking plate, indicator plate, removable door coupling, extension shaft 300 mm and front-operated rotary operating mechanism for the respective molded case circuit breaker		3VL9300-3HF06		1	1 unit	1CC	0.870
	EMERGENCY-STOP version Red knob, yellow indicator plate, without leading auxiliary switch		3VL9300-3HG06		1	1 unit	1CC	0.828
	Safety locks for installation by the customer, see pages 2/263 to 2/267.							
	Interlocking module UL 508A[2]							
	For use with 3VL1, 3VL2, 3VL3, 3VL4, 3VL4X and 3RV19.6-2		8UC9400		1	1 unit	1CL	1.780
 3VL9.00-3A.11	**Leading auxiliary switches for installation in a front-operated rotary operating mechanism or door-coupling rotary operating mechanism (UL file: E69455)** Standard or EMERGENCY-STOP version							
	"OFF after ON" Leading auxiliary switches when switching on		3VL9300-3AS11		1	1 unit	1CC	0.098
	1 changeover contact with 1.5 m long cables							
	2 changeover contacts with 1.5 m long cables		3VL9300-3AT11		1	1 unit	1CC	0.170
	"ON after OFF" Leading auxiliary switches when switching off 1 changeover contact with 1.5 m long cables		3VL9300-3AU11		1	1 unit	1CC	0.113
	2 changeover contacts with 1.5 m long cables		3VL9300-3AW11		1	1 unit	1CC	0.173
	Rotary operating mechanisms with shaft stub, without knob Without leading auxiliary switch, for auxiliary switches, see above.		3VL9300-3HE01		1	1 unit	1CC	0.445

1) IP40 with additional masking frame mounted on the door cutout.

2) In combination with 3VL1 to VL5, the interlocking module can be used with the complete door-coupling rotary operating mechanisms as follows:

	3VL1/3VL2/3VL3	3VL4/3VL4X
Door-coupling rotary operating mechanisms, complete		
• Black knob, light-gray indicator plate	3VL9300-3HF06	3VL9400-3HF06
• Red knob, yellow indicator plate	3VL9300-3HG06	3VL9400-3HG06

* You can order this quantity or a multiple thereof.

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DT	For VL400 UL (JG frame) to VL400X UL (LG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	DT	For VL800 UL (MG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL9400-3HA01		1	1 unit	1CC	1.180		3VL9600-3HA01		1	1 unit	1CC	1.340
	3VL9400-3HC01		1	1 unit	1CC	1.129		3VL9600-3HC01		1	1 unit	1CC	1.376
	3VL9400-3HF06		1	1 unit	1CC	1.542		3VL9600-3HF06		1	1 unit	1CC	1.700
	3VL9400-3HG06		1	1 unit	1CC	1.597		3VL9600-3HG06		1	1 unit	1CC	1.750
	8UC9400		1	1 unit	1CL	1.780		--					
	3VL9400-3AS11		1	1 unit	1CC	0.088		3VL9600-3AS11		1	1 unit	1CC	0.091
	3VL9400-3AT11		1	1 unit	1CC	0.143		3VL9600-3AT11		1	1 unit	1CC	0.142
	3VL9400-3AU11		1	1 unit	1CC	0.100		3VL9600-3AU11		1	1 unit	1CC	0.090
	3VL9400-3AW11		1	1 unit	1CC	0.160		3VL9600-3AW11		1	1 unit	1CC	0.140
	3VL9400-3HE01		1	1 unit	1CC	1.100		3VL9600-3HE01		1	1 unit	1CC	1.282

*** You can order this quantity or a multiple thereof.**

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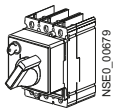
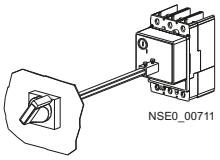
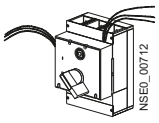
Accessories and spare parts

	Version	DT	For VL1200 UL (NG frame) to VL1600 UL (PG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Operating mechanisms								
	3-pole							
 3VL9.00-3H.01	**Front-operated rotary operating mechanisms (UL file: E69455)** For direct mounting on the molded case circuit breaker, without leading auxiliary switch, degree of protection IP30[1], black		3VL9800-3HA01		1	1 unit	1CC	3.550
	EMERGENCY-STOP version Red knob, yellow indicator plate		3VL9800-3HC01		1	1 unit	1CC	3.145
	Safety locks for installation by the customer, see pages 2/263 to 2/267.							
 3VL9.00-3H.06	**Door-coupling rotary operating mechanisms, complete; installation in doors and covers (UL file: E69455)** Degree of protection IP65, including black knob with masking plate, indicator plate, removable door coupling, extension shaft 300 mm and front-operated rotary operating mechanism for the respective molded case circuit breaker		3VL9800-3HF06		1	1 unit	1CC	4.538
	EMERGENCY-STOP version Red knob, yellow indicator plate, without leading auxiliary switch		3VL9800-3HG06		1	1 unit	1CC	4.445
	Safety locks for installation by the customer, see pages 2/263 to 2/267.							
 3VL9.00-3A.11	**Leading auxiliary switches for installation in a front-operated rotary operating mechanism or door-coupling rotary operating mechanism (UL file: E69455)** Standard or EMERGENCY-STOP version							
	"OFF after ON" Leading auxiliary switches when switching on		3VL9800-3AS21		1	1 unit	1CC	0.080
	1 changeover contact with 1.5 m long cables							
	2 changeover contacts with 1.5 m long cables		3VL9800-3AT21		1	1 unit	1CC	0.178
	"ON after OFF" Leading auxiliary switches when switching off 1 changeover contact with 1.5 m long cables		3VL9800-3AU11		1	1 unit	1CC	0.089
	2 changeover contacts with 1.5 m long cables		3VL9800-3AW11		1	1 unit	1CC	0.140
	Rotary operating mechanisms with shaft stub, without knob Without leading auxiliary switch, for auxiliary switches, see above.		3VL9800-3HE01		1	1 unit	1CC	2.421

[1] IP40 with additional masking frame mounted on the door cutout.

* You can order this quantity or a multiple thereof.

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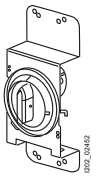
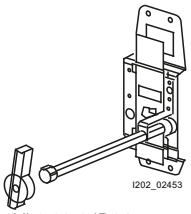
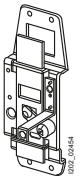
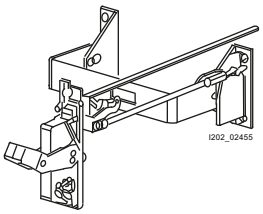
	Version	DT	For VL150 UL (DG frame) to VL250 UL (FG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Operating mechanisms								
	3-pole							
 3VL9.00-3JA01	**Front-operated rotary operating mechanisms** Fixed depth; knob is fastened directly on molded case circuit breaker, silver knob, black lettering Lockable with up to 3 padlocks		3VL9300-3JA01		1	1 unit	1CC	0.980
 3VL9.00-3JD01	**Door-coupling rotary operating mechanisms, complete** Variable installation depth, knob for door fitting, including knob with masking plate Black knob Indicator plate, removable door coupling 12-inch extension shaft and front-operated rotary operating mechanism for the respective molded case circuit breaker Lockable knob (up to 3 padlocks), NEMA 1, 12		3VL9300-3JD01		1	1 unit	1CC	0.854
 3VL9.00-3JE01	**Switching mechanism for door-coupling rotary operating mechanisms** Switching mechanism		3VL9300-3JE01		1	1 unit	1CC	0.376
	Handle for door-coupling rotary operating mechanisms							
	Standard version NEMA 1, 12		3VL9600-3JF11		1	1 unit	1CC	0.100
	NEMA 3R		3VL9600-3JF01		1	1 unit	1CC	0.100
	NEMA 4X		3VL9600-3JF41		1	1 unit	1CC	0.100
	Extension shaft for door-coupling rotary operating mechanisms							
	2 inch (50 mm)		3VL9600-3JJ01		1	1 unit	1CC	0.100
	3 inch (76 mm)		--					
	12 inch (0.3 m)		3VL9600-3JJ11		1	1 unit	1CC	0.100
	16 inch (0.4 m)		3VL9600-3JJ21		1	1 unit	1CC	0.100
	24 inch (0.6 m) with support bracket		--					
3VL9300-3JF81	**NFPA-79 intermediate operating mechanism** For door-coupling rotary operating mechanisms		3VL9300-3JF81		1	1 unit	1CC	0.278
 3VL9300-3JS01	**Operating mechanism with flange connection for variable installation depth** Adjustable from 8 to 16 inch (approx. 200 to 400 mm) Complete kit, including knob Red/black knob[1)]							
	NEMA 1, 3R, 12 plastic		3VL9300-3JS01		1	1 unit	1CC	1.717
	NEMA 4, 4X chrome-plated steel		3VL9300-3JS41		1	1 unit	1CC	0.010
	Black knob[1)]							
	NEMA 1, 3R, 12 plastic		3VL9300-3JS11		1	1 unit	1CC	0.010
	NEMA 4, 4X chrome-plated steel		3VL9300-3JS51		1	1 unit	1CC	2.417

1) The knobs in monochrome gray or black are preferably used in IEC markets. Red/black knobs (red for ON) are standard in UL markets.

*** You can order this quantity or a multiple thereof.**

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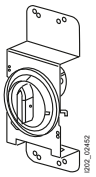
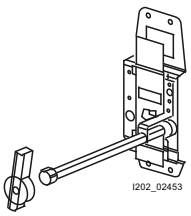
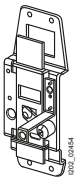
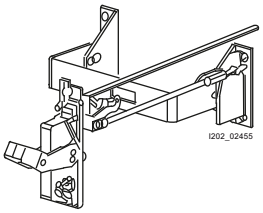
Accessories and spare parts

	Version	DT	For VL400 UL (JG frame) to VL400X UL (LG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Operating mechanisms								
	3-pole							
 3VL9.00-3JA01	**Front-operated rotary operating mechanisms** Fixed depth; knob is fastened directly on molded case circuit breaker, silver knob, black lettering Lockable with up to 3 padlocks		3VL9400-3JA01		1	1 unit	1CC	0.100
 3VL9.00-3JD01	**Door-coupling rotary operating mechanisms, complete** Variable installation depth, knob for door fitting, including knob with masking plate Black knob Indicator plate, removable door coupling 12-inch extension shaft and front-operated rotary operating mechanism for the respective molded case circuit breaker Lockable knob (up to 3 padlocks) NEMA 1, 12		3VL9400-3JD01		1	1 unit	1CC	0.100
 3VL9800-3JE01	**Switching mechanism for door-coupling rotary operating mechanisms** Switching mechanism		3VL9400-3JE01		1	1 unit	1CC	0.100
	Handle for door-coupling rotary operating mechanisms							
	Standard version	NEMA 1, 12	3VL9600-3JF11		1	1 unit	1CC	0.100
		NEMA 3R	3VL9600-3JF01		1	1 unit	1CC	0.100
		NEMA 4X	3VL9600-3JF41		1	1 unit	1CC	0.100
	Extension shaft for door-coupling rotary operating mechanisms							
	2 inch (50 mm)		3VL9600-3JJ01		1	1 unit	1CC	0.100
	3 inch (76 mm)		--					
	12 inch (0.3 m)		3VL9600-3JJ11		1	1 unit	1CC	0.100
	16 inch (0.4 m)		3VL9600-3JJ21		1	1 unit	1CC	0.100
	24 inch (0.6 m) with support bracket		--					
3VL9800-3JF81	**NFPA-79 intermediate operating mechanism** For door-coupling rotary operating mechanisms		3VL9600-3JF81		1	1 unit	1CC	0.010
 3VL9400-3JS01	**Operating mechanism with flange connection for variable installation depth** Adjustable from 8 to 16 inch (approx. 200 to 400 mm) Complete kit, including knob							
	Red/black knob[1]							
	NEMA 1, 3R, 12 plastic		3VL9400-3JS01		1	1 unit	1CC	0.010
	NEMA 4, 4X chrome-plated steel		3VL9400-3JS41		1	1 unit	1CC	0.010
	Black knob[1]							
	NEMA 1, 3R, 12 plastic		3VL9400-3JS11		1	1 unit	1CC	0.010
	NEMA 4, 4X chrome-plated steel		3VL9400-3JS51		1	1 unit	1CC	2.353

[1] The knobs in monochrome gray or black are preferably used in IEC markets. Red/black knobs (red for ON) are standard in UL markets.

* You can order this quantity or a multiple thereof.

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DT	For VL800 UL (MG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	DT	For VL1200 UL (NG frame) to VL1600 UL (PG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	--							--					
	3VL9600-3JD01		1	1 unit	1CC	0.100		--					
	3VL9600-3JE01		1	1 unit	1CC	0.100		3VL9800-3JE01		1	1 unit	1CC	0.100
	3VL9600-3JF11		1	1 unit	1CC	0.100		3VL9800-3JF01		1	1 unit	1CC	0.100
	3VL9600-3JF01		1	1 unit	1CC	0.100		3VL9800-3JF01		1	1 unit	1CC	0.100
	3VL9600-3JF41		1	1 unit	1CC	0.100		3VL9800-3JF41		1	1 unit	1CC	0.100
	3VL9600-3JJ01		1	1 unit	1CC	0.100		--					
	--							3VL9800-3JJ01		1	1 unit	1CC	0.100
	3VL9600-3JJ11		1	1 unit	1CC	0.100		3VL9800-3JJ11		1	1 unit	1CC	0.100
	3VL9600-3JJ21		1	1 unit	1CC	0.100		--					
	--							3VL9800-3JJ21		1	1 unit	1CC	0.100
	3VL9600-3JF81		1	1 unit	1CC	0.010		3VL9800-3JF81		1	1 unit	1CC	0.010
	--							--					
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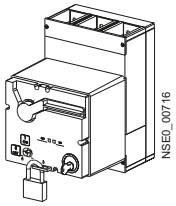
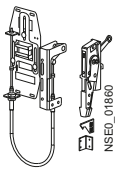
Accessories and spare parts

2

Version	DT	For VL150X UL (CG frame) to VL250 UL (FG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Operating mechanisms							
3-pole							
 3VL9.00-3M.01 **Motorized operating mechanism with spring energy store[1]) (UL file: E69455)** Degree of protection IP30, with locking device for 3 padlocks, synchronizable							
50/60 Hz V AC / V DC							
-- / 24		3VL9300-3MJ01		1	1 unit	1CC	2.797
42 ... 48 / 42 ... 48		3VL9300-3ML01		1	1 unit	1CC	
60 / 60		3VL9300-3MS01		1	1 unit	1CC	2.140
110 ... 127 / 110 ... 127		3VL9300-3MN01		1	1 unit	1CC	2.777
220 ... 250 / 220 ... 250		3VL9300-3MQ01		1	1 unit	1CC	2.735
Toggle lever extension		--					
 3VL9.00-3JM01 **Max Flex operating mechanism, complete including switching mechanism, Bowden wire, red/black knob, NEMA 1, 3R, 12 plastic**							
Bowden wire, 36 inch (0.9 m)		3VL9300-3JM01		1	1 unit	1CC	0.800
Bowden wire, 48 inch (1.2 m)		--					
Knob for Max Flex operating mechanism							
Red/black knob[2])							
NEMA 1, 3R, 12 plastic		3VL9600-3JP01		1	1 unit	1CC	0.813
NEMA 1, 3R, 12 steel – epoxy sheathed		3VL9600-3JP21		1	1 unit	1CC	0.811
NEMA 4, 4X chrome-plated steel		3VL9600-3JP41		1	1 unit	1CC	1.580
Gray knob[2])							
NEMA 1, 3R, 12 plastic		3VL9600-3JP11		1	1 unit	1CC	0.100
Black knob[2])							
NEMA 1, 3R, 12 steel – epoxy sheathed		3VL9600-3JP61		1	1 unit	1CC	1.559
Switching mechanism for Max Flex operating mechanism		3VL9300-3JN01		1	1 unit	1CC	4.536
Bowden wire for Max Flex operating mechanism							
36 inch (0.9 m)		3VL9300-3JQ31		1	1 unit	1CC	0.335
48 inch (1.2 m)		3VL9300-3JQ41		1	1 unit	1CC	0.383
60 inch (1.5 m)		3VL9300-3JQ61		1	1 unit	1CC	0.475
72 inch (1.8 m)		3VL9300-3JQ71		1	1 unit	1CC	0.505
84 inch (2.1 m)		3VL9300-3JQ81		1	1 unit	1CC	0.100
96 inch (2.4 m)		3VL9300-3JQ21		1	1 unit	1CC	0.584
120 inch (3.0 m)		3VL9300-3JQ01		1	1 unit	1CC	0.100
144 inch (3.6 m)		3VL9300-3JQ11		1	1 unit	1CC	0.729
Screw set For attaching the Max Flex operating mechanism incl. circuit breaker to an 8US busbar adapter (60 mm busbar system).							
• 1 set = 3 screws size M4 x 100 mm		3VL9300-8SE20		1	1 unit	1CC	0.042
• 1 set = 2 screws size M6 x 100 mm and 2 special screws with threaded head		--					
Leading auxiliary switch for Max Flex operating mechanism							
• 1 changeover contact with 1.5 m long cables		3VL9300-2AP11		1	1 unit	1CC	0.099
• 2 changeover contacts with 1.5 m long cables		3VL9300-2AP21		1	1 unit	1CC	0.154

1) For safety lock as an assembly kit for retrofitting see pages 2/263 to 2/267.

2) The knobs in monochrome gray or black are preferably used in IEC markets. Red/black knobs (red for ON) are standard in UL markets.

* You can order this quantity or a multiple thereof.

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DT	For VL400 UL (JG frame) to VL400X UL (LG frame) Article No. www.siemens.com/product?Article No.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	DT	For VL800 UL (MG frame) Article No. www.siemens.com/product?Article No.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL9400-3MJ01	1	1 unit	1CC	4.550		3VL9600-3MJ01	1	1 unit	1CC	5.603
	3VL9400-3ML01	1	1 unit	1CC			3VL9600-3ML01	1	1 unit	1CC	
	3VL9400-3MS01	1	1 unit	1CC			3VL9600-3MS01	1	1 unit	1CC	
	3VL9400-3MN01	1	1 unit	1CC	4.651		3VL9600-3MN01	1	1 unit	1CC	5.656
	3VL9400-3MQ01	1	1 unit	1CC	4.592		3VL9600-3MQ01	1	1 unit	1CC	5.800
	3VL9400-3HN01	1	1 unit	1CC	0.024		3VL9600-3HN01	1	1 unit	1CC	0.026
	--						--				
	3VL9400-3JM01	1	1 unit	1CC	2.051		3VL9600-3JM01	1	1 unit	1CC	2.097
	3VL9600-3JP01	1	1 unit	1CC	0.813		3VL9600-3JP01	1	1 unit	1CC	0.813
	3VL9600-3JP21	1	1 unit	1CC	0.811		3VL9600-3JP21	1	1 unit	1CC	0.811
	3VL9600-3JP41	1	1 unit	1CC	1.580		3VL9600-3JP41	1	1 unit	1CC	1.580
	3VL9600-3JP11	1	1 unit	1CC	0.100		3VL9600-3JP11	1	1 unit	1CC	0.100
	3VL9600-3JP61	1	1 unit	1CC	1.559		3VL9600-3JP61	1	1 unit	1CC	1.559
	3VL9400-3JN01	1	1 unit	1CC	0.974		3VL9600-3JN01	1	1 unit	1CC	0.932
	3VL9600-3JQ31	1	1 unit	1CC	4.536		3VL9600-3JQ31	1	1 unit	1CC	4.536
	3VL9600-3JQ41	1	1 unit	1CC	0.370		3VL9600-3JQ41	1	1 unit	1CC	0.370
	3VL9600-3JQ61	1	1 unit	1CC	0.450		3VL9600-3JQ61	1	1 unit	1CC	0.450
	3VL9600-3JQ71	1	1 unit	1CC	0.518		3VL9600-3JQ71	1	1 unit	1CC	0.518
	3VL9600-3JQ81	1	1 unit	1CC	0.550		3VL9600-3JQ81	1	1 unit	1CC	0.550
	3VL9600-3JQ21	1	1 unit	1CC	0.100		3VL9600-3JQ21	1	1 unit	1CC	0.100
	3VL9600-3JQ01	1	1 unit	1CC	0.100		3VL9600-3JQ01	1	1 unit	1CC	0.100
	3VL9600-3JQ11	1	1 unit	1CC	0.100		3VL9600-3JQ11	1	1 unit	1CC	0.100
	--						--				
	3VL9460-8SE20	1	1 unit	1CC	0.123		--				
	3VL9400-2AP11	1	1 unit	1CC	0.075		3VL9800-2AP11	1	1 unit	1CC	0.010
	3VL9400-2AP21	1	1 unit	1CC	0.124		3VL9800-2AP21	1	1 unit	1CC	0.010

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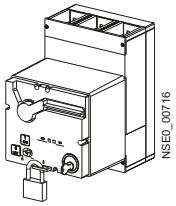
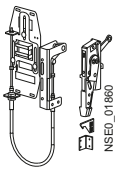
Accessories and spare parts

	Version	DT	For VL1200 UL (NG frame) to VL1600 UL (PG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Operating mechanisms								
 3VL9.00-3M.01	***3-pole*** **Motorized operating mechanism[1]) (UL file: E69455)** Degree of protection IP30, with locking device for 3 padlocks, not synchronizable							
	50/60 Hz V AC / V DC							
	-- / 24		3VL9800-3MJ01		1	1 unit	1CC	7.847
	42 ... 48 / 42 ... 48		3VL9800-3ML01		1	1 unit	1CC	
	60 / 60		3VL9800-3MS01		1	1 unit	1CC	
	110 ... 127 / 110 ... 127		3VL9800-3MN01		1	1 unit	1CC	7.797
	220 ... 250 / 220 ... 250		3VL9800-3MQ01		1	1 unit	1CC	7.770
	Toggle lever extension		3VL9800-3HN01		1	1 unit	1CC	0.241
 3VL9.00-3JM01	**Max Flex operating mechanism, complete including switching mechanism, Bowden wire, red/black knob, NEMA 1, 3R, 12 steel – epoxy sheathed**							
	Bowden wire, 36 inch (0.9 m)		--					
	Bowden wire, 48 inch (1.2 m)		3VL9800-3JM01		1	1 unit	1CC	4.340
	Knob for Max Flex operating mechanism							
	Red/black knob[2])							
	NEMA 1, 3R, 12 plastic		--					
	NEMA 1, 3R, 12 steel – epoxy sheathed		3VL9800-3JP01		1	1 unit	1CC	0.100
	NEMA 4, 4X chrome-plated steel		3VL9800-3JP41		1	1 unit	1CC	0.100
	Gray knob[2])							
	NEMA 1, 3R, 12 plastic		--					
	Black knob[2])							
	NEMA 1, 3R, 12 steel – epoxy sheathed		3VL9800-3JP11		1	1 unit	1CC	0.100
	Switching mechanism for Max Flex operating mechanism		3VL9800-3JN01		1	1 unit	1CC	0.100
	Bowden wire for Max Flex operating mechanism							
	36 inch (0.9 m)		--					
	48 inch (1.2 m)		3VL9800-3JQ41		1	1 unit	1CC	0.100
	60 inch (1.5 m)		3VL9800-3JQ61		1	1 unit	1CC	0.100
	72 inch (1.8 m)		3VL9800-3JQ71		1	1 unit	1CC	0.100
	84 inch (2.1 m)		3VL9800-3JQ81		1	1 unit	1CC	0.100
	96 inch (2.4 m)		3VL9800-3JQ21		1	1 unit	1CC	0.100
	120 inch (3.0 m)		3VL9800-3JQ01		1	1 unit	1CC	0.100
	144 inch (3.6 m)		3VL9800-3JQ11		1	1 unit	1CC	0.100
	Leading auxiliary switch for Max Flex operating mechanism							
	• 1 changeover contact with 1.5 m long cables		3VL9300-2AP11		1	1 unit	1CC	0.099
	• 2 changeover contacts with 1.5 m long cables		3VL9300-2AP21		1	1 unit	1CC	0.154

1) For safety lock as an assembly kit for retrofitting see pages 2/263 to 2/267.

2) The knobs in monochrome gray or black are preferably used in IEC markets. Red/black knobs (red for ON) are standard in UL markets.

* You can order this quantity or a multiple thereof.

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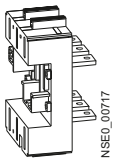
	Version	DT	For VL150X UL (CG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Plug-in versions/withdrawable versions (UL file: E69455)								
	3-pole							
 3VL9.00-4PA31	**Plug-in base assembly kits** Complete with base plate, base, blade contacts for circuit breakers, terminal covers for degree of protection IP20, fixing screws, trip pin							
	Rear terminals							
	3-pole		3VL9100-4PA31		1	1 unit	1CC	2.710
	Front-accessible connections							
	3-pole		3VL9100-4PC31		1	1 unit	1CC	2.440
	Blade contacts As replacement for converting fixed-mounted into plug-in/withdrawable molded case circuit breakers, including trip pin							
	1 set = 6 units 3-pole		3VL9100-4PS31		1	1 unit	1CC	0.332
	Trip pins and springs As replacement for plug-in molded case circuit breaker		3VL9100-4PF01		1	1 unit	1CC	0.013
	Auxiliary circuit plug connections for plug-in bases[1] Accessory connections for plug-in molded case circuit breakers (factory-wired connectors) and for plug-in bases (coupling with screw terminal)							
	8 terminals[1]		3VL9300-4PJ01		1	1 unit	1CC	0.221
	Position signaling switches (Connected/disconnected position) For plug-in base, 1 CO, max. 2 signaling switches possible		3VL9000-4WL01		1	1 unit	1CC	0.040

[1] It is recommended to use a maximum of 2 auxiliary circuit plug-in systems per molded case circuit breaker (16 terminals).

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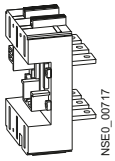
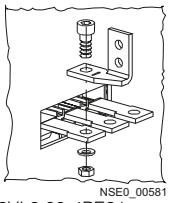
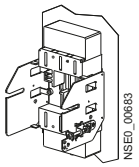
	Version	DT	For VL150 UL (DG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Plug-in versions/withdrawable versions (UL file: E69455)								
	3-pole							
 3VL9.00-4PA31	**Plug-in base assembly kits** Complete with base plate, base, blade contacts for circuit breakers, terminal covers for degree of protection IP20, fixing screws, trip pin							
	Rear terminals							
	3-pole		3VL9200-4PA31		1	1 unit	1CC	2.500
 3VL9.00-4PE31	**90° angle connecting adapters**							
	For rear connection, 3-pole		3VL9300-4PE31		1	1 unit	1CC	0.391
	Front-accessible connections							
	3-pole		3VL9200-4PC31		1	1 unit	1CC	2.530
 3VL9.00-4WA31	**Withdrawable versions** Same as plug-in base assembly kit, with additional side panels and racking mechanism							
	Rear terminals							
	3-pole		3VL9200-4WA31		1	1 unit	1CC	5.231
	Front-accessible connections							
	3-pole		3VL9200-4WC31		1	1 unit	1CC	4.987
	Blade contacts As replacement for converting fixed-mounted into plug-in/withdrawable molded case circuit breakers, including trip pin							
	1 set = 6 units	3-pole	3VL9200-4PS31		1	1 unit	1CC	0.248
	Trip pins and springs As replacement for plug-in/withdrawable circuit breaker		3VL9300-4PF01		1	1 unit	1CC	0.013
	Auxiliary circuit plug connections for plug-in bases Accessory connections for plug-in molded case circuit breakers (factory-wired connectors) and for plug-in bases or withdrawable version (coupling with screw terminal)		1)					
	8 terminals		3VL9300-4PJ01		1	1 unit	1CC	0.221
	Position signaling switches (connected/disconnected position) For plug-in/withdrawable base, 1 CO, max. 2 signaling switches possible		3VL9000-4WL01		1	1 unit	1CC	0.040

1) It is recommended to use a maximum of 2 auxiliary circuit plug-in systems per molded case circuit breaker (16 terminals).

2) It is recommended to use a maximum of 3 auxiliary circuit plug-in systems per molded case circuit breaker (24 terminals).

*** You can order this quantity or a multiple thereof.**

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DT	For VL250 UL (FG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	DT	For VL400 UL (JG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL9300-4PA31		1	1 unit	1CC	2.920		3VL9400-4PA31		1	1 unit	1CC	6.942
	3VL9300-4PE31		1	1 unit	1CC	0.391		--					
	3VL9300-4PC31		1	1 unit	1CC	2.672		3VL9400-4PC31		1	1 unit	1CC	42.000
	3VL9300-4WA31		1	1 unit	1CC	5.089		3VL9400-4WA31		1	1 unit	1CC	12.650
	3VL9300-4WC31		1	1 unit	1CC	4.940		3VL9400-4WC31		1	1 unit	1CC	6.500
	3VL9300-4PS31		1	1 unit	1CC	0.342		3VL9400-4PS31		1	1 unit	1CC	0.720
	3VL9300-4PF01		1	1 unit	1CC	0.013		3VL9400-4PF01		1	1 unit	1CC	0.015
	1) 3VL9300-4PJ01		1	1 unit	1CC	0.221		2) 3VL9400-4PJ01		1	1 unit	1CC	0.231
	3VL9000-4WL01		1	1 unit	1CC	0.040		3VL9000-4WL01		1	1 unit	1CC	0.040

*** You can order this quantity or a multiple thereof.**

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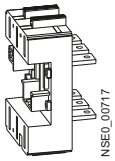
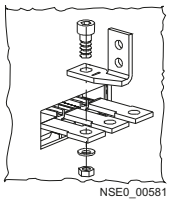
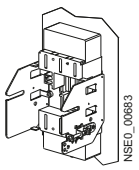
Accessories and spare parts

	Version	DT	For VL400X (LG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Plug-in versions/withdrawable versions (UL file: E69455)								
	3-pole							
 3VL9.00-4PA31	**Plug-in base assembly kits** Complete with base plate, base, blade contacts for circuit breakers, terminal covers for degree of protection IP20, fixing screws, trip pin							
	Rear terminals 3-pole		3VL9460-4PA31		1	1 unit	1CC	8.200
 3VL9.00-4PE31	**90° angle connecting adapters** For rear connection, 3-pole		--					
	Front-accessible connections 3-pole		3VL9460-4PC31		1	1 unit	1CC	6.670
 3VL9.00-4WA31	**Withdrawable versions** Same as plug-in base assembly kit, with additional side panels and racking mechanism							
	Rear terminals[1] 3-pole		3VL9460-4WA31		1	1 unit	1CC	11.500
	Front-accessible connections 3-pole		3VL9460-4WC31		1	1 unit	1CC	10.866
	Blade contacts As replacement for converting fixed-mounted into plug-in/withdrawable molded case circuit breakers, including trip pin 1 set = 6 units 3-pole		3VL9460-4PS31		1	1 unit	1CC	1.313
	Trip pins and springs As replacement for plug-in/ withdrawable molded case circuit breaker		3VL9460-4PF01		1	1 unit	1CC	0.018
	Auxiliary circuit plug connections for plug-in bases[2] Accessory connections for plug-in molded case circuit breakers (factory-wired connectors) and for plug-in bases or withdrawable version (coupling with screw terminal) 8 terminals[2]		3VL9460-4PJ01		1	1 unit	1CC	0.316
	Position signaling switches (connected/disconnected position) For plug-in/withdrawable base, 1 CO, max. 2 signaling switches possible		3VL9000-4WL01		1	1 unit	1CC	0.040

1) With VL800 UL (MG frame) to VL1200 UL (NG frame) as vertical connection.

2) It is recommended to use a maximum of 3 auxiliary circuit plug-in systems per molded case circuit breaker (24 terminals).

* You can order this quantity or a multiple thereof.

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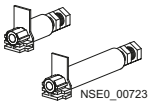
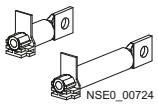
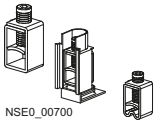
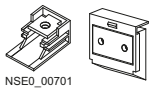
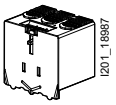
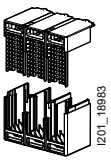
	Version	DT	For VL150X UL (CG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Connection parts for fixed-mounted molded case circuit breakers								
	3-pole							
	Rear terminals							
 NSE0_00723 3VL9.00-4RA01, 3VL9.00-4RB01	Short connection (1 unit)		3VL9100-4RA01		1	1 unit	1CC	0.158
	Long connection (1 unit)		3VL9100-4RB01		1	1 unit	1CC	0.261
	Terminal kit (2 short + 1 long) 3-pole		3VL9100-4RC31		1	1 unit	1CC	0.552
 NSE0_00724 3VL9.00-4RK01, 3VL9.00-4RL01	Short flat connection (1 unit)		3VL9100-4RK01		1	1 unit	1CC	0.126
	Long flat connection (1 unit)		3VL9100-4RL01		1	1 unit	1CC	0.222
	Flat connector kit (2 short + 1 long) 3-pole		3VL9100-4RM31		1	1 unit	1CC	0.462
	Steel box terminal with auxiliary conductor connection							
	Terminal with auxiliary conductor connection up to 0.5 A		3VL9120-4TN31		1	1 unit	1CC	0.269
 NSE0_00700 3VL9...-4TC.1	**Box terminals** Connection for flexible flat copper busbar or cable							
	1 set = 3 units		3VL9120-4TC31		1	1 unit	1CC	0.100
3VL9...-4TD.1	**Circular conductor terminals**[1] Only for cables (Al or Cu) Aluminum terminal (tinned)							
	1 set = 3 units		3VL9130-4TD31		1	1 unit	1CC	0.093
 NSE0_00701 3VL9.00-4TA.1	**Terminals with screw connection** With insulator (for rear) for use with busbars and cable lugs							
	1 set = 3 units	Metric thread	3VL9100-4TA31		1	1 unit	1CC	0.063
 3VL9.00-8CA.1	**Connection covers (terminal covers) for circuit breakers**[2] Degree of protection IP30 for main connections 1 set = 2 units							
	Extended	3-pole	3VL9300-8CA31		1	1 unit	1CC	0.306
NSE0_00730 3VL9.00-8CB.1	Standard	3-pole	3VL9300-8CB31		1	1 unit	1CC	0.063
 3VL9300-8CD31	**Connection covers (terminal covers) for circuit breakers** Degree of protection IP2X for main connections 1 set = 1 unit (consisting of top part and bottom part)							
	3-pole		3VL9300-8CD31		1	1 unit	1CC	0.163
NSE0_00731 3VL9.00-8CE01	**Phase barriers for molded case circuit breakers, fixed-mounted, plug-in or withdrawable versions**							
	1 set = 2 units		3VL9300-8CE01		1	1 unit	1CC	0.029

Note:

Only rear terminals with different lengths may be fitted next to one another (e.g. short-long-short or long-short-long).

1) Circular conductor terminals for VL150X UL (CG frame) suitable for 60 A to 150 A.

2) UL-listed for use with plug-in and withdrawable versions. A system-specific additional test is required for use with circuit breakers.

*** You can order this quantity or a multiple thereof.**

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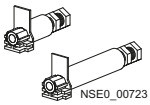
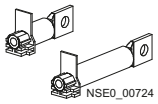
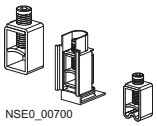
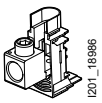
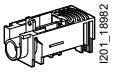
Accessories and spare parts

	Version	DT	For VL150 UL (DG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Connection parts for fixed-mounted molded case circuit breakers								
	3-pole							
	Front connecting bars							
	Terminal set with cover for mounting the circuit breaker on busbars 1 set = 3 units		3VL9200-4EC31		1	1 unit	1CC	1.356
 3VL9.00-4RA01, 3VL9.00-4RB01	**Rear terminals**							
	Short connection (1 unit)		3VL9200-4RA01		1	1 unit	1CC	0.165
	Long connection (1 unit)		3VL9200-4RB01		1	1 unit	1CC	0.271
	Terminal kit (2 short + 1 long) 3-pole		3VL9200-4RC31		1	1 unit	1CC	0.566
 3VL9.00-4RK01, 3VL9.00-4RL01	Short flat connection (1 unit)		3VL9200-4RK01		1	1 unit	1CC	0.132
	Long flat connection (1 unit)		3VL9200-4RL01		1	1 unit	1CC	0.233
	Flat connector kit (2 short + 1 long) 3-pole		3VL9200-4RM31		1	1 unit	1CC	0.460
	Flat connecting bar (1 unit)		--					
	Flat connecting bars 1 set = 3 units, 3-pole		--					
 3VL9...-4TC.1	**Box terminal** Connection for flexible flat copper busbar or cable 1 set = 3 units		3VL9220-4TC31		1	1 unit	1CC	0.115
 3VL9215-4TD31	**Circular conductor terminal with terminal covers for cable (only for Al or Cu cables)** Terminal with auxiliary conductor connection up to 0.5 A 1 set = 3 units		3VL9215-4TD31		1	1 unit	1CC	0.356
 3VL9220-4TN31	**Steel box terminal with auxiliary conductor connection** Terminal with auxiliary conductor connection up to 0.5 A		3VL9220-4TN31		1	1 unit	1CC	0.277
 3VL9...-4TD.1	**Circular conductor terminals**[1)] Only for cables (Al or Cu) Aluminum terminal (tinned) 1 set = 3 units		3VL9230-4TD31		1	1 unit	1CC	0.121
 3VL9...-4TF.1	**Multiple feed-in terminals** Only for cables (Al or Cu) Double Aluminum terminal (tinned) 1 set = 3 units		--					
	Multiple feed-in terminal with terminal cover Terminal with auxiliary conductor connection up to 0.5 A 1 set = 3 units Double		--					

Note:

Only rear terminals with different lengths may be fitted next to one another (e.g. short-long-short or long-short-long).

[1)] Circular conductor terminals for VL150 UL suitable for 60 to 150 A.

* You can order this quantity or a multiple thereof.

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DT	For VL250 UL (FG frame)		PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	DT	For VL400 UL (JG frame)		PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Article No. www.siemens.com/product?Article No.	Price per PU						Article No. www.siemens.com/product?Article No.	Price per PU				
	3VL9300-4EC31		1	1 unit	1CC	0.500		3VL9400-4EC31		1	1 unit	1CC	1.313
	3VL9300-4RA01		1	1 unit	1CC	0.164		3VL9400-4RA01		1	1 unit	1CC	0.428
	3VL9300-4RB01		1	1 unit	1CC	0.264		3VL9400-4RB01		1	1 unit	1CC	0.712
	3VL9300-4RC31		1	1 unit	1CC	0.555		3VL9400-4RC31		1	1 unit	1CC	1.203
	3VL9300-4RK01		1	1 unit	1CC	0.129		3VL9400-4RK01		1	1 unit	1CC	0.389
	3VL9300-4RL01		1	1 unit	1CC	0.224		3VL9400-4RL01		1	1 unit	1CC	0.700
	3VL9300-4RM31		1	1 unit	1CC	0.451		3VL9400-4RM31		1	1 unit	1CC	1.458
	--							--					
	--							--					
	3VL9335-4TC31		1	1 unit	1CC	0.204		3VL9460-4TC31		1	1 unit	1CC	0.467
	--							--					
	3VL9335-4TN31		1	1 unit	1CC	0.374		3VL9460-4TN31		1	1 unit	1CC	0.795
	3VL9335-4TD31		1	1 unit	1CC	0.150		3VL9475-4TD31		1	1 unit	1CC	0.353
	--							3VL9425-4TF31		1	1 unit	1CC	0.495
	--							3VL9460-4TF31		1	1 unit	1CC	0.899

*** You can order this quantity or a multiple thereof.**

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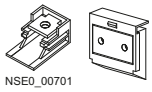
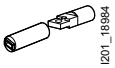
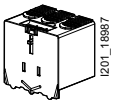
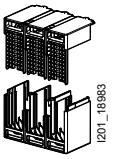
Accessories and spare parts

	Version		DT	For VL150 UL (DG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Connection parts for fixed-mounted molded case circuit breakers									
	3-pole								
 NSE0_00701	**Connection with screw-type terminals** With insulator (for rear) for use with busbars and cable lugs								
3VL9.00-4TA.1	1 set = 3 units	Metric thread		**3VL9200-4TA31**		1	1 unit	1CC	0.075
	1 set = 3 units	Inch thread		**3VL9200-4TB31**		1	1 unit	1CC	0.068
 I201_18984	**Cable lug connection**								
3VL9220-4TM31	1 set = 3 units			**3VL9220-4TM31**		1	1 unit	1CC	0.291
	Connection covers (terminal covers) for circuit breakers[1] Degree of protection IP30 for main connections 1 set = 2 units								
 I201_18987	Extended	3-pole		**3VL9300-8CA31**		1	1 unit	1CC	0.306
3VL9.00-3CA.1									
NSE0_00730	Standard	3-pole		**3VL9300-8CB31**		1	1 unit	1CC	0.063
3VL9.00-3CB.1									
 I201_18983	**Connection covers (terminal covers) for circuit breakers** Degree of protection IP2X for main connections 1 set = 1 unit (consisting of top part and bottom part)								
3VL9300-8CD31	3-pole			**3VL9300-8CD31**		1	1 unit	1CC	0.163
NSE0_00731	**Phase barriers for molded case circuit breakers, fixed-mounted, plug-in or withdrawable versions**								
3VL9.00-8CE01	1 set = 2 units			**3VL9300-8CE01**		1	1 unit	1CC	0.029

[1] UL-listed for use with plug-in and withdrawable versions. A system-specific additional test is required for use with circuit breakers.

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DT	For VL250 UL (FG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	DT	For VL400 UL (JG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL9300-4TA31		1	1 unit	1CC	0.102		3VL9400-4TA31		1	1 unit	1CC	0.116
	3VL9300-4TB31		1	1 unit	1CC	0.095		--					
	3VL9335-4TM31		1	1 unit	1CC	0.352		3VL9460-4TM31		1	1 unit	1CC	0.625
	3VL9300-8CA31		1	1 unit	1CC	0.306		3VL9400-8CA31		1	1 unit	1CC	0.615
	3VL9300-8CB31		1	1 unit	1CC	0.063		3VL9400-8CB31		1	1 unit	1CC	0.150
	3VL9300-8CD31		1	1 unit	1CC	0.163		3VL9400-8CD31		1	1 unit	1CC	0.308
	3VL9300-8CE01		1	1 unit	1CC	0.029		3VL9600-8CE01		1	1 unit	1CC	0.057

*** You can order this quantity or a multiple thereof.**

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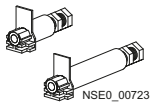
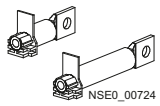
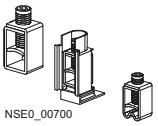
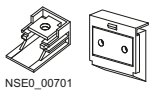
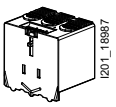
Accessories and spare parts

	Version	DT	For VL400X UL (LG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Connection parts for fixed-mounted molded case circuit breakers								
	3-pole							
	Front connecting bars							
	Terminal set with cover for mounting the circuit breaker on busbars 1 set = 3 units		3VL9460-4EC31		1	1 unit	1CC	2.145
 3VL9.00-4RA01, 3VL9.00-4RB01	**Rear terminals**							
	Short connection (1 unit)		--					
	Long connection (1 unit)		--					
	Terminal kit (2 short + 1 long) 3-pole		--					
 3VL9.00-4RK01, 3VL9.00-4RL01	Short flat connection (1 unit)		--					
	Long flat connection (1 unit)		3VL9460-4RP01		1	1 unit	1CC	0.810
	Flat connector kit (2 short + 1 long) 3-pole		--					
 3VL9.00-4R..1	Flat connecting bar (1 unit)		3VL9460-4RG01		1	1 unit	1CC	0.377
	Flat connecting bars 1 set = 3 units, 3-pole		3VL9460-4RH31		1	1 unit	1CC	1.272
 3VL9.00-4TC.1	**Box terminal** Connection for flexible flat copper busbar or cable 1 set = 3 units		--					
 3VL9.00-4TD.1	**Circular conductor terminals** Only for cables (Al or Cu) Aluminum terminal (tinned) 1 set = 3 units		3VL9475-4TD31		1	1 unit	1CC	0.353
 3VL9...-4TF.1	**Multiple feed-in terminals** Only for cables (Al or Cu) Aluminum terminal (tinned) 1 set = 3 units Double		--					
	• Terminal on feeder side[1]		3VL9460-4TX31		1	1 unit	1CC	0.822
	• Terminal on outgoing side[1]		3VL9460-4TY31		1	1 unit	1CC	0.820
	3 times		--					
	4 times		--					
 3VL9.00-4TA.1	**Connection with screw-type terminals** With insulator (for rear) for use with busbars and cable lugs 1 set = 3 units Metric thread		3VL9460-4TA31		1	1 unit	1CC	0.171
	1 set = 3 units Inch thread		3VL9460-4TB31		1	1 unit	1CC	0.143
 3VL9400-8CA31	**Connection covers (terminal covers) for circuit breakers[2]** Degree of protection IP30 for main connections 1 set = 2 units							
	Extended 3-pole		3VL9400-8CA31		1	1 unit	1CC	0.615
 3VL9.00-3CB.1	Standard 3-pole		3VL9400-8CB31		1	1 unit	1CC	0.150
 3VL9.00-8CE01	**Phase barriers for molded case circuit breakers, fixed-mounted, plug-in or withdrawable versions[3]** 1 set = 2 units		3VL9600-8CE01		1	1 unit	1CC	0.057

Note:

Only rear terminals with different lengths may be fitted next to one another (e.g. short-long-short or long-short-long).

1) Extended terminal cover included in scope of supply.

2) UL-listed for use with plug-in and withdrawable versions. A system-specific additional test is required for use with circuit breakers.

3) Plug-in versions: not for VL1200 UL (NG frame); withdrawable version: not for VL800 UL (MG frame) and VL1200 UL (NG frame).

* You can order this quantity or a multiple thereof.

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DT	For VL800 UL (MG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	DT	For VL1200 UL (NG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL9600-4EC31		1	1 unit	1CC	2.873		3VL9800-4EF01		1	1 unit	1CC	0.020
	--							--					
	--							--					
	--							--					
	--							--					
	3VL9600-4RP01		1	1 unit	1CC	1.653		--					
	--							--					
	3VL9600-4RG01		1	1 unit	1CC	1.305		3VL9700-4RG01		1	1 unit	1CC	1.708
	3VL9600-4RH31		1	1 unit	1CC	4.080		3VL9700-4RH31		1	1 unit	1CC	4.970
	--							--					
	--							--					
	3VL9675-4TF31		1	1 unit	1CC	1.228		--					
	--							--					
	--							--					
	3VL9650-4TG31		1	1 unit	1CC	1.130		3VL9775-4TG31		1	1 unit	1CC	3.414
	--							3VL9750-4TH31		1	1 unit	1CC	2.562
	3VL9600-4TA31		1	1 unit	1CC	0.450		3VL9800-4TA31		1	1 unit	1CC	0.362
	3VL9600-4TB31		1	1 unit	1CC	0.305		3VL9800-4TB31		1	1 unit	1CC	0.356
	3VL9600-8CA31		1	1 unit	1CC	0.910		3VL9800-8CA31		1	1 unit	1CC	1.268
	3VL9600-8CB31		1	1 unit	1CC	0.223		3VL9800-8CB31		1	1 unit	1CC	0.370
	3VL9600-8CE01		1	1 unit	1CC	0.057		3VL9800-8CE01		1	1 unit	1CC	0.150

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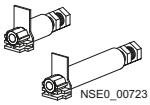
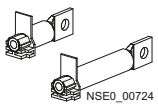
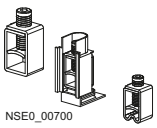
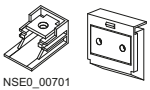
Accessories and spare parts

	Version	DT	For VL1600 UL (PG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Connection parts for fixed-mounted molded case circuit breakers								
	3-pole							
	Front connecting bars							
	Terminal set with cover for mounting the circuit breaker on busbars 1 set = 3 units • Incoming side, mounting from the top • Incoming side, mounting from the bottom		3VL9800-4EF01		1	1 unit	1CC	0.020
 NSE0_00723 3VL9.00-4RA01, 3VL9.00-4RB01	**Rear terminals** Short connection (1 unit) Long connection (1 unit) Terminal kit (2 short + 1 long) 3-pole		-- -- --					
 NSE0_00724 3VL9.00-4RK01, 3VL9.00-4RL01	Short flat connection (1 unit) Long flat connection (1 unit) Flat connector kit (2 short + 1 long) 3-pole		-- -- --					
NSE0_00725 3VL9.00-4R..1	Flat connecting bar (1 unit) Flat connecting bars 1 set = 3 units, 3-pole		-- --					
 NSE0_00700 3VL9...-4TC.1	**Box terminal** Connection for flexible flat copper busbar or cable 1 set = 3 units		--					
 3VL9...-4TD.1	**Circular conductor terminals** Only for cables (Al or Cu) Aluminum terminal (tinned) 1 set = 3 units		--					
I201_18587 3VL9...-4T..1	**Multiple feed-in terminals** Only for cables (Al or Cu) Aluminum terminal (tinned) 4-fold (for installation with mounting base) 1 units		3VL9875-4TH01		1	1 unit	1CC	1.223
 NSE0_00701 3VL9.00-4TA.1	**Terminals with screw connection** With insulator (for rear) for use with busbars and cable lugs 1 set = 3 units 1 set = 3 units	Metric thread Inch thread	3VL9800-4TA31 3VL9800-4TB31		1 1	1 unit 1 unit	1CC 1CC	0.362 0.356
NSE0_00681 3VL9.00-3CA.1	**Connection covers (terminal covers) for circuit breakers**[1] Degree of protection IP30 for main connections 1 set = 2 units							
NSE0_00730 3VL9.00-3CB.1	Extended Standard	3-pole 3-pole	3VL9800-8CA31 3VL9800-8CB31		1 1	1 unit 1 unit	1CC 1CC	1.268 0.370
NSE0_00731 3VL9.00-8CE01	**Phase barriers for molded case circuit breakers, fixed-mounted** 1 set = 2 units		3VL9800-8CE01		1	1 unit	1CC	0.150
	Mounting base Operation of the molded case circuit breaker within the scope of application of UL 489/CSA is permitted only in conjunction with the mounting base							
	Front-accessible connections		3VL9800-4TU31		1	1 unit	1CC	24.830
	Rear terminals		3VL9800-4TV31		1	1 unit	1CC	23.396

[1] Not UL-listed.

* You can order this quantity or a multiple thereof.

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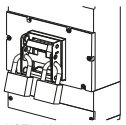
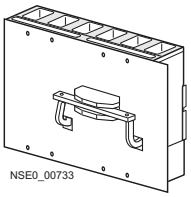
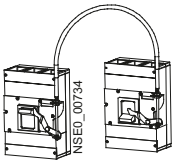
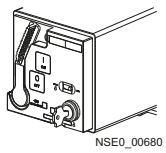
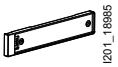
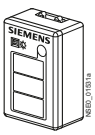
	Version	DT	For VL150X UL (CG frame) and VL150 UL (DG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Interlocks								
	3-pole							
 NSE0_00732 3VL9.00-3HL01	**Locking devices for toggle levers** For locking the molded case circuit breaker in the "OFF" position. Up to 3 padlocks with Ø 5 – 8 mm can be used. Removable (padlocks not included)		3VL9300-3HL01		1	1 unit	1CC	0.074
 NSE0_00733 3VL9.00-8L.01	**Rear interlocking modules** For the mechanical interlocking of two adjacent molded case circuit breakers. The circuit breakers must be of the same installation type and frame size. (Mounting plate not included in scope of supply)							
	Fixed-mounted molded case circuit breakers		3VL9300-8LC01		1	1 unit	1CC	0.473
 NSE0_00734 3VL9.00-8LA01	**Interlocking modules for Bowden wire interlocking[1])** For the mechanical interlocking of two molded case circuit breakers.							
	Interlocking module for one molded case circuit breaker		3VL9300-8LA01		1	1 unit	1CC	0.194
	Note: Combinations with next size up/down possible (see Article No.)							
	Bowden wires for Bowden wire interlocking[1])							
	• Wire length 0.5 m		3VL9000-8LH11		1	1 unit	1CC	0.330
	• Wire length 1.0 m		3VL9000-8LH21		1	1 unit	1CC	0.400
	• Wire length 1.5 m		3VL9000-8LH31		1	1 unit	1CC	0.533
	Sets of fixing screws (metric thread) Including the screws, washers and nuts required to secure a molded case circuit breaker to a prepared surface							
	Set with 4 screws		3VL9300-8SA40		1	1 unit	1CC	0.052
 NSE0_00680 3VL9.00-8L.01	**Safety lock assembly kits** Key can be removed with the molded case circuit breaker in the "OFF" position							
	For front-operated rotary operating mechanisms							
	Ronis lock type		3VL9715-8HA01		1	1 unit	1CC	0.271
	For motorized operating mechanism with stored energy mechanism							
	Filli Giussani lock type		3VL9321-8HA01		1	1 unit	1CC	0.044

	Version	DT	For VL150 UL (DG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
 3VL9...-8B.01	**Transparent covers for releases, sealable** To prevent access by unqualified personnel and unauthorized changes to settings (seal not included)							
	• Electronic Trip Unit		3VL9700-8BL01		1	1 unit	1CC	0.013
	• Thermal-magnetic[2])		3VL9300-8BM01		1	1 unit	1CC	0.052
 3VL9000-8AP01	**Battery power supply for activating/parameterizing/tripping the electronic trip units** (two 9 V blocks are required in addition)		3VL9000-8AP01		1	1 unit	1CC	0.190

1) Two interlocking modules and one Bowden wire are required. Cannot be used in conjunction with motorized operating mechanism!
2) Also suitable for VL150X UL (CG frame).

*** You can order this quantity or a multiple thereof.**

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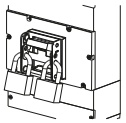
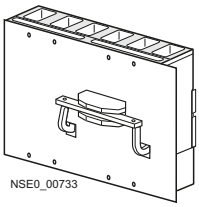
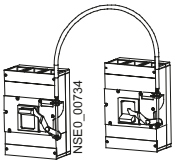
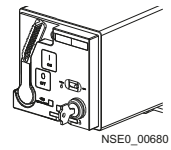
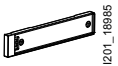
Accessories and spare parts

	Version	DT	For VL250 UL (FG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Interlocks								
 NSE0_00732 3VL9.00-3HL01	***3-pole*** **Locking devices for toggle levers** For locking the molded case circuit breaker in the "OFF" position. Up to 3 padlocks with Ø 5 – 8 mm can be used. Removable (padlocks not included)		3VL9300-3HL01		1	1 unit	1CC	0.074
 NSE0_00733 3VL9.00-8L.01	**Rear interlocking modules** For the mechanical interlocking of two adjacent molded case circuit breakers. The circuit breakers must be of the same installation type and frame size. (Mounting plate not included in scope of supply) Fixed-mounted molded case circuit breakers		3VL9300-8LC01		1	1 unit	1CC	0.473
 NSE0_00734 3VL9.00-8LA01	**Interlocking modules for Bowden wire interlocking**[1] For the mechanical interlocking of two molded case circuit breakers. Interlocking module for one molded case circuit breaker		3VL9300-8LA01		1	1 unit	1CC	0.194
	Note: Combinations with next size up/down possible (see Article No.)							
	Bowden wires for Bowden wire interlocking[1]							
	• Wire length 0.5 m		3VL9000-8LH11		1	1 unit	1CC	0.330
	• Wire length 1.0 m		3VL9000-8LH21		1	1 unit	1CC	0.400
	• Wire length 1.5 m		3VL9000-8LH31		1	1 unit	1CC	0.533
 NSE0_00680 3VL9...-8HA01	**Safety lock assembly kits** Key can be removed with the molded case circuit breaker in the "OFF" position							
	For motorized operating mechanism with stored energy mechanism							
	Lock types							
	• Ronis		--					
	• Filli Giussani		3VL9321-8HA01		1	1 unit	1CC	0.044
	Sets of fixing screws (metric thread) Including the screws, washers and nuts required to secure a molded case circuit breaker to a prepared surface							
	Set with 4 screws		3VL9300-8SA40		1	1 unit	1CC	0.052
 3VL9...-8B.01	**Transparent covers for releases, sealable** To prevent access by unqualified personnel and unauthorized changes to settings (seal not included)							
	• For Electronic Trip Unit		3VL9700-8BL01		1	1 unit	1CC	0.013
	• For thermal-magnetic release		3VL9300-8BM01		1	1 unit	1CC	0.052
3VL9000-8AP01	**Battery power supply for activating/parameterizing/tripping the Electronic Trip Units** (two 9 V blocks are required in addition)		3VL9000-8AP01		1	1 unit	1CC	0.190

[1] Two interlocking modules and one Bowden wire are required. Cannot be used in conjunction with motorized operating mechanism!

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DT	For VL400 UL (JG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	DT	For VL400X UL (LG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL9400-3HL01		1	1 unit	1CC	0.160		3VL9400-3HL01		1	1 unit	1CC	0.160
	3VL9400-8LC01		1	1 unit	1CC	0.386		3VL9400-8LC01		1	1 unit	1CC	0.386
	3VL9400-8LA01		1	1 unit	1CC	0.235		3VL9400-8LA01		1	1 unit	1CC	0.235
	--							--					
	3VL9000-8LH21		1	1 unit	1CC	0.400		3VL9000-8LH21		1	1 unit	1CC	0.400
	3VL9000-8LH31		1	1 unit	1CC	0.533		3VL9000-8LH31		1	1 unit	1CC	0.533
	3VL9715-8HA01		1	1 unit	1CC	0.271		3VL9715-8HA01		1	1 unit	1CC	0.271
	--							--					
	3VL9500-8SA40		1	1 unit	1CC	0.109		3VL9500-8SA40		1	1 unit	1CC	0.109
	3VL9700-8BL01		1	1 unit	1CC	0.013		3VL9700-8BL01		1	1 unit	1CC	0.013
	3VL9400-8BM01		1	1 unit	1CC	0.039		3VL9400-8BM01		1	1 unit	1CC	0.039
	3VL9000-8AP01		1	1 unit	1CC	0.190		3VL9000-8AP01		1	1 unit	1CC	0.190

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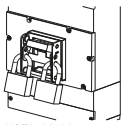
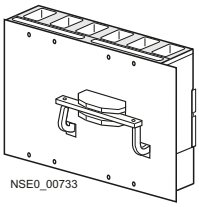
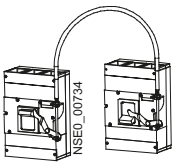
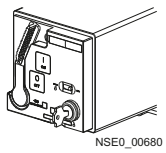
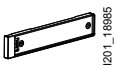
Accessories and spare parts

	Version	DT	For VL800 UL (MG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Interlocks								
	3-pole							
 NSE0_00732 3VL9.00-3HL01	**Locking devices for toggle levers** For locking the molded case circuit breaker in the "OFF" position. Up to 3 padlocks with Ø 5 – 8 mm can be used. Removable (padlocks not included)		3VL9600-3HL01		1	1 unit	1CC	0.130
 NSE0_00733 3VL9.00-8L.01	**Rear interlocking modules** For the mechanical interlocking of two adjacent molded case circuit breakers. The circuit breakers must be of the same installation type and frame size. (Mounting plate not included in scope of supply) Fixed-mounted molded case circuit breakers		3VL9600-8LC01		1	1 unit	1CC	1.499
 NSE0_00734 3VL9.00-8LA01	**Interlocking modules for Bowden wire interlocking**[1] For the mechanical interlocking of two molded case circuit breakers. Interlocking module for one molded case circuit breaker		3VL9600-8LA01		1	1 unit	1CC	0.269
	Note: Combinations with next size up/down possible (see Article No.)							
	Bowden wires for Bowden wire interlocking[1]							
	• Wire length 0.5 m		--					
	• Wire length 1.0 m		3VL9000-8LH21		1	1 unit	1CC	0.400
	• Wire length 1.5 m		3VL9000-8LH31		1	1 unit	1CC	0.533
 NSE0_00680 3VL9....-8HA01	**Safety lock assembly kits** Key can be removed with the molded case circuit breaker in the "OFF" position							
	For motorized operating mechanism with stored energy mechanism							
	Lock types							
	• Ronis		3VL9715-8HA01		1	1 unit	1CC	0.271
	• Filli Giussani		--					
	Sets of fixing screws (metric thread) Including the screws, washers and nuts required to secure a molded case circuit breaker to a prepared surface							
	Set with 4 screws		3VL9600-8SA40		1	1 unit	1CC	0.118
 3VL9...-8B.01	**Transparent covers for releases, sealable** To prevent access by unqualified personnel and unauthorized changes to settings (seal not included)							
	• For Electronic Trip Unit		3VL9700-8BL01		1	1 unit	1CC	0.013
	• For thermal-magnetic release		--					
3VL9000-8AP01	**Battery power supply for activating/parameterizing/tripping the Electronic Trip Units** (two 9 V blocks are required in addition)		3VL9000-8AP01		1	1 unit	1CC	0.190

[1] Two interlocking modules and one Bowden wire are required. Cannot be used in conjunction with motorized operating mechanism!

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DT	For VL1200 UL (NG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	DT	For VL1600 UL (PG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL9800-3HL01		1	1 unit	1CC	0.250		3VL9800-3HL01		1	1 unit	1CC	0.250
	3VL9800-8LC01		1	1 unit	1CC	4.262		3VL9800-8LC01		1	1 unit	1CC	4.262
	3VL9800-8LA01		1	1 unit	1CC	0.298		3VL9800-8LA01		1	1 unit	1CC	0.298
	-- -- 3VL9000-8LH31		1	1 unit	1CC	0.533		-- -- 3VL9000-8LH31		1	1 unit	1CC	0.533
	3VL9715-8HA01 --		1	1 unit	1CC	0.271		3VL9715-8HA01 --		1	1 unit	1CC	0.271
	3VL9800-8SA40		1	1 unit	1CC	0.095		3VL9800-8SA40		1	1 unit	1CC	0.095
	3VL9700-8BL01 --		1	1 unit	1CC	0.013		3VL9700-8BL01 --		1	1 unit	1CC	0.013
	3VL9000-8AP01		1	1 unit	1CC	0.190		3VL9000-8AP01		1	1 unit	1CC	0.190

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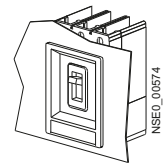
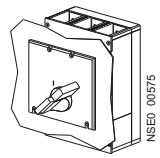
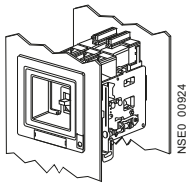
Accessories and spare parts

	Version	DT	For VL150X UL (CG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Further accessories								
	3-pole							
	Masking frames (cover frames) For door cutouts							
 Masking frame A	**A IP40** Fixed-mounted or plug-in molded case circuit breaker		3VL9300-8BC01		1	1 unit	1CC	0.053
 Masking frame B	**B[1] IP40** Fixed-mounted, plug-in or withdrawable molded case circuit breaker with front-operated rotary operating mechanism or motorized operating mechanism		3VL9300-8BG01		1	1 unit	1CC	0.114
 Masking frame C	**C IP20** Withdrawable molded case circuit breaker with toggle lever actuation. Assembly kit contains masking frame and extended escutcheon (cannot be used together with a motorized operating mechanism/rotary operating mechanism)		--					

	Version	DT	For VL800 UL (MG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Further accessories								
	3-pole							
	Masking frames (cover frames) For door cutouts							
	A IP40 Fixed-mounted or plug-in molded case circuit breaker		3VL9600-8BC01		1	1 unit	1CC	0.074
	B[1] IP40 Fixed-mounted, plug-in or withdrawable molded case circuit breaker with front-operated rotary operating mechanism or motorized operating mechanism		3VL9600-8BG01		1	1 unit	1CC	0.192
	C IP20 Withdrawable molded case circuit breaker with toggle lever actuation. Assembly kit contains masking frame and extended escutcheon (cannot be used together with a motorized operating mechanism/rotary operating mechanism)		3VL9600-8BH01		1	1 unit	1CC	0.259

[1] For withdrawable version IP20.

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DT	For VL150 UL (DG frame) and VL250 UL (FG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	DT	For VL400 UL (JG frame) and VL400X UL (LG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL9300-8BC01		1	1 unit	1CC	0.053		3VL9400-8BC01		1	1 unit	1CC	0.046
	3VL9300-8BG01		1	1 unit	1CC	0.114		3VL9400-8BG01		1	1 unit	1CC	0.163
	3VL9300-8BH01		1	1 unit	1CC	0.325		3VL9400-8BH01		1	1 unit	1CC	0.435

DT	For VL1200 UL (NG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	DT	For VL1600 UL (PG frame) Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	3VL9800-8BC01		1	1 unit	1CC	0.054		3VL9800-8BC01		1	1 unit	1CC	0.054
	3VL9800-8BG01		1	1 unit	1CC	0.223		3VL9800-8BG01		1	1 unit	1CC	0.223
	3VL9800-8BH01		1	1 unit	1CC	0.380		3VL9800-8BH01		1	1 unit	1CC	0.380

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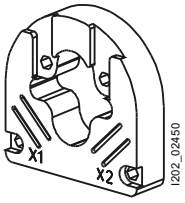
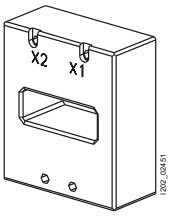
Accessories and spare parts

Further accessories



3VL9206-8TT01



3VL9660-8TT01

3-pole

Current transformers for N-conductor/grounded neutral point of the transformer

for ground-fault protection in 4-wire three-phase systems

Version		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
I_n/A of the ETU	Purpose							
60	for VL150 UL (DG frame)		3VL9206-8TT01		1	1 unit	1CC	0.100
100	for VL150 UL (DG frame)		3VL9310-8TT01		1	1 unit	1CC	0.200
	for VL250 UL (FG frame)		3VL9310-8TT01		1	1 unit	1CC	0.200
150	for VL150 UL (DG frame)		3VL9315-8TT01		1	1 unit	1CC	0.045
	for VL250 UL (FG frame)		3VL9315-8TT01		1	1 unit	1CC	0.045
250	for VL250 UL (FG frame)		3VL9425-8TT01		1	1 unit	1CC	0.200
	for VL400 UL (JG frame)		3VL9425-8TT01		1	1 unit	1CC	0.200
400	for VL400 UL (JG frame)		3VL9440-8TT01		1	1 unit	1CC	0.100
	for VL400X UL (LG frame)		3VL9440-8TT01		1	1 unit	1CC	0.100
600	for VL400X UL (LG frame)		3VL9660-8TT01		1	1 unit	1CC	0.100
	for VL800 UL (MG frame)		3VL9660-8TT01		1	1 unit	1CC	0.100
800	for VL800 UL (MG frame)		3VL9780-8TT01		1	1 unit	1CC	0.020
	for VL1200 UL (NG frame)		3VL9780-8TT01		1	1 unit	1CC	0.020
1000	for VL1200 UL (NG frame)		3VL9812-8TT01		1	1 unit	1CC	0.075
1200	for VL1200 UL (NG frame)		3VL9812-8TT01		1	1 unit	1CC	0.075
	for VL1600 UL (PG frame)		3VL9812-8TT01		1	1 unit	1CC	0.075
1600	for VL1600 UL (PG frame)		3VL9816-8TT01		1	1 unit	1CC	0.100

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For type	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Accessories for communication								
3-pole								
Data transmission								
VL150 UL (DG frame) to VL1600 UL (PG frame)	**COM20 Release 2 (PROFIBUS module for 3VL molded case circuit breaker according to UL)** Module for connecting the 3VL molded case circuit breaker according to UL with Electronic Trip Unit to the PROFIBUS DP, including switching function and Zone Selective Interlocking functionality, connection cable to ETU not included in delivery		3VL9000-8AU00		1	1 unit	1CC	0.287
VL150 UL (DG frame) to VL1600 UL (PG frame)	**COM21 Release 2 (Modbus module for 3VL molded case circuit breaker according to UL)** Module for connecting the 3VL molded case circuit breaker according to UL with electronic trip unit to a Modbus RTU bus system, including switching function and Zone Selective Interlocking functionality, connection cable to ETU not included in delivery		3VL9000-8AV00		1	1 unit	1CC	0.295
	Addressing plugs For assigning the module addresses without using a PC/PG on COM20/COM21 (Release 2) through the system interface	►	3UF7910-0AA00-0		1	1 unit	42J	0.015
VL150 UL (DG frame) to VL250 UL (FG frame)	**COMKIT3** Communication interface for connecting a 3VL molded case circuit breaker according to UL to a COM20/COM21 (Release 2) communication module. Comprising: • Connecting cable length 1.5 m • Alarm switches • Protective cover to protect the connecting cable		3VL9300-8AQ61		1	1 unit	1CC	0.142
VL400 UL (JG frame) to VL400X UL (LG frame)	**COMKIT4** Communication interface for connecting a 3VL molded case circuit breaker according to UL to a COM20/COM21 (Release 2) communication module. Comprising: • Connecting cable length 1.5 m • Auxiliary Switches and Alarm Switches • Protective cover to protect the connecting cable		3VL9400-8AQ61		1	1 unit	1CC	0.145
VL600 UL (MG frame) to VL1600 UL (PG frame)	**COMKIT5** Communication interface for connecting a 3VL molded case circuit breaker according to UL to a COM20/COM21 (Release 2) communication module. Comprising: • Connecting cable length 1.5 m • Auxiliary Switches and Alarm Switches • Protective cover to protect the connecting cable		3VL9800-8AQ61		1	1 unit	1CC	0.181
VL150 UL (DG frame) to VL250 UL (FG frame)	**COMKIT6** Communication interface for connecting a 3VL molded case circuit breaker according to UL to a COM20/COM21 (Release 2) communication module. Comprising: • Connecting cable length 3 m • Alarm switches • Protective cover to protect the connecting cable		3VL9300-8AQ71		1	1 unit	1CC	0.205
VL400 UL (JG frame) to VL400X UL (LG frame)	**COMKIT7** Communication interface for connecting a 3VL molded case circuit breaker according to UL to a COM20/COM21 (Release 2) communication module. Comprising: • Connecting cable length 3 m • Auxiliary Switches and Alarm Switches • Protective cover to protect the connecting cable		3VL9400-8AQ71		1	1 unit	1CC	0.214
VL600 UL (MG frame) to VL1600 UL (PG frame)	**COMKIT8** Communication interface for connecting a 3VL molded case circuit breaker according to UL to a COM20/COM21 (Release 2) communication module. Comprising: • Connecting cable length 3 m • Auxiliary Switches and Alarm Switches • Protective cover to protect the connecting cable		3VL9800-8AQ71		1	1 unit	1CC	0.246

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Design

- Rated current range from 20 A to 1600 A
- Different making and breaking capacities for each size

N	Standard (35 kA)
H	High (65 kA)
L	Very high (100 kA)

- No power reduction/derating up to 40 °C
- Electronic Trip Unit from size 150 A (VL150 UL, DG frame), especially for time-based discrimination and ground-fault protection
- 2 families of internal accessories
- Complete bandwidth of external accessories, e.g. terminals also for aluminum cables.

All molded case circuit breakers are supplied with integrated overcurrent releases. The VL150X UL (CG frame) to VL1600 UL (PG frame) molded case circuit breakers are available with different connection variants (see "Main connections, basic equipment and options", page 2/276). Auxiliary switches, alarm switches and auxiliary releases can be easily retrofitted in the molded case circuit breakers or, if requested, are already installed when delivered.
The breaking capacity is indicated on the front of every molded case circuit breaker.

- Standard breaking capacity:
  35 kA at 50/60 Hz 480 V AC
- High breaking capacity:
  65 kA at 50/60 Hz 480 V AC
- Very high breaking capacity:
  100 kA at 50/60 Hz 480 V AC

Connection

The following connection types are available for 3VL molded case circuit breakers according to UL 489:

- Box terminal, suitable for stranded conductors,
- Screw terminals for flat connection,
- Circular conductor/multiple feed-in terminal for Al/Cu cables,
- Cable lug connection.

The infeed and outgoing sides can be chosen on the molded case circuit breaker to suit requirements. The electrical data remains unaffected.

Various terminals feature an auxiliary conductor connection. Up to 0.5 A can be tapped here to directly power other devices.

Bare conductors at the top terminals must be insulated in the space that is needed above the arc chute.

All auxiliary releases (shunt releases and undervoltage releases), auxiliary switches and alarm switches are equipped with screw terminals and therefore are easy to connect electrically.

The motorized operating mechanisms with spring energy store always feature terminals. The leading auxiliary switches for the rotary operating mechanisms are always supplied with connecting cables.

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VL150X UL (CG frame) to VL1600 UL (PG frame) molded case circuit breakers

The main components of the 3VL molded case circuit breakers according to UL are the three conducting paths with incoming and outgoing terminals. The fixed and movable contacts are designed in such a way that magnetic repulsion of the contacts takes place under short-circuit conditions. In conjunction with the arc splitter chambers, a dynamic impedance is created that causes a current limitation through the reduction in the harmful effects of I^2t and the I_p energy resulting during short-circuits.

The 3VL molded case circuit breaker has a trip-free mechanism.

The double-insulated accessory compartments for the auxiliary releases and auxiliary switches are located on the left and right of the circuit breaker's operating mechanism.

The overcurrent releases for the VL150X UL (CG frame) to VL1600 UL (PG frame) molded case circuit breakers have the following characteristics:

- The overcurrent releases are available in a thermal-magnetic version and in an electronic[1] version.
- The thermal-magnetic releases have non-adjustable overload releases and adjustable[2] short-circuit releases.

In the case of all versions of the 3VL molded case circuit breakers according to UL with electronic overcurrent release, the current transformers are in the same enclosure as the tripping electronics. They supply a signal proportional to the load current to the electronic overcurrent release system.

All 3VL molded case circuit breakers according to UL with electronic overcurrent release measure the actual rms current. This is the most accurate method of measurement. Currents in present-day electrical distribution systems with very high harmonics are evaluated reliably.

Overcurrent tripping systems

The switching unit (frame) and release unit are assembled and tested at the factory. Accordingly, the release unit can only be replaced at the factory. The infeed and outgoing sides can be chosen on the molded case circuit breakers to suit requirements.

1. Thermal-magnetic releases of the VL150X UL (CG frame) to VL1600 UL (PG frame) molded case circuit breakers

The overcurrent releases and short-circuit releases work with bimetals and magnetic releases. They are available with non-adjustable overload releases and adjustable short-circuit releases.[2]

The 3VL molded case circuit breakers for starter combination applications are usually combined with a motor contactor and a suitable overload relay.

[1] VL150X UL (CG frame) only thermal-magnetic.

[2] VL150X UL (CG frame) only with non-adjustable short-circuit release.

The non-automatic air circuit breakers have integrated self-protection against short-circuit so that back-up fuses can be omitted. Non-automatic air circuit breakers do not have overload protection.

2. Overcurrent releases of the VL150X UL (DG frame) to VL1600 UL (PG frame) molded case circuit breakers, electronic, ETU

The electronic tripping system consists of:

- 3 current transformers
- Evaluation electronics with microprocessor
- Intrinsic power supply, no external auxiliary power necessary
- Tripping solenoid.

In the case of VL150 UL (DG frame) and VL250 (FG frame) molded case circuit breakers, the left accessory compartment is needed for the tripping solenoid included in the scope of supply. In the case of all other sizes, the tripping solenoid is integrated in the release unit and the left and right accessory compartments can be used for auxiliary switches, alarm switches and additional auxiliary releases.

The protection functions of the electronic trip units are ensured without additional auxiliary voltage. The overcurrent releases are supplied with energy via internal current transformers in the circuit breaker.

3. Overcurrent releases of the VL150X UL (DG frame) to VL1600 UL (PG frame) molded case circuit breakers

For parameterizing, the electronic overcurrent release must be activated. A load current amounting to at least 20 % of the relevant molded case circuit breaker's rated current I_n is needed to do this. If this load current is not available, the necessary auxiliary energy can be supplied via a battery power supply. In the case of molded case circuit breakers that are connected to an active COM20 (PROFIBUS) or COM21 (Modbus) communication module (Release 2) for data transmission, the release is powered via the module.

Abbreviations (functions)		
L	= Long Time Delay	= Overload protection
S	= Short Time Delay	= Short-circuit protection (short-time delayed)
I	= Instantaneous	= Short-circuit protection (instantaneous)
N	= Neutral Protection	= Neutral conductor protection
G	= Ground Fault	= Ground-fault protection

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General data

VL150 UL (DG frame) to VL1600 UL (PG frame) overcurrent releases – functional overview

Article No. supplement	Release/model	Line protection	Starter protection	Generator protection	Function	Setting options				
						L[1] Overload protection	S[1] Short-circuit protection (short-time delayed)		I[1] Short-circuit protection (instantaneous)	G[1] Ground-fault protection
						$I_r = \times I_n$	$I_{sd} = \times I_r$	t_{sd} [s]	$I_i = \times I_n$	$I_g = \times I_n$
KJ	M	--	✓	--	I	--	--	--	3 ... 6	--
KK	M	--	✓	--	I	--	--	--	4 ... 10	--
KL	M	--	✓	--	I	--	--	--	7 ... 16	--
KN	TM/525	✓	--	--	LI	1	--	--	5 ... 10	--
PB	ETU/555	✓	--	--	LI	0.4 ... 1	--	--	1.25 ... 11	--
PD	ETU/555	✓	--	--	LIG	0.4 ... 1	--	--	1.25 ... 11	0.4 ... 1[3]
PU	ETU/555	✓	--	✓	LSI	0.4 ... 1	1.5 ... 10	0 ... 0.5	1.25 ... 11	--
PH	ETU/555	✓	--	✓	LSIG	0.4 ... 1	1.5 ... 10	0 ... 0.5	1.25 ... 11	0.4 ... 1[3]
VH	LCD-ETU/586	✓	--	--	LI, LSI	0.4 ... 1	1.25 ... 10	0 ... 0.5	1.25 ... 11	--
VM	LCD-ETU/586	✓	--	--	LSIG	0.4 ... 1	1.25 ... 10	0 ... 0.5	1.25 ... 11	0.4 ... 1[2]
VJ	LCD-ETU/586	✓	--	--	LSI G (alarm)	0.4 ... 1	1.25 ... 10	0 ... 0.5	1.25 ... 11	0.4 ... 1[2]

Article No. supplement	Release/model	Thermal image	Communication-capable	Ground-fault protection	Number of poles	I^2t (ON/OFF)	Time-lag class (t_r)	Thermal-magnetic releases	Magnetic releases	Electronic release	LCD display
KJ	M	--	--	--	3	--	--	--	✓	--	--
KK	M	--	--	--	3	--	--	--	✓	--	--
KL	M	--	--	--	3	--	--	--	✓	--	--
KN	TM/525	✓	--	--	3	--	--	✓	--	--	--
PB	ETU/555	✓	✓	--	3	--	2.5 ... 30	--	--	✓	--
PD	ETU/555	✓	✓	①	3	--	2.5 ... 30	--	--	✓	--
PU	ETU/555	✓	✓	--	3	✓	--	--	--	✓	--
PH	ETU/555	✓	✓	①	3	✓	--	--	--	✓	--
VH	LCD-ETU/586	✓	✓	--	3	✓	2.5 ... 30	--	--	✓	✓
VM	LCD-ETU/586	✓	✓	① / ②	3	✓	2.5 ... 30	--	--	✓	✓
VJ	LCD-ETU/586	✓	✓	① / ②	3	✓	2.5 ... 30	--	--	✓	✓

Ground-fault protection
① Vectorial summation current formation (4-conductor system)
② Direct detection of ground-fault current in the neutral point of the transformer

1) Size dependent.

2) t_g 0.1 s to 0.5 s.

3) t_g 0.07 s to 0.4 s size-dependent

Internal accessories (auxiliary switches, undervoltage releases, shunt releases)

3VL molded case circuit breakers according to UL can be supplied completely equipped with internal accessories (e.g. auxiliary switches, undervoltage releases or shunt releases). Refer to the tables of Article No. supplements for details of possible versions.

Fixed-mounted, plug-in or withdrawable version

The fixed-mounted molded case circuit breaker is the basic version. Using the appropriate assembly kit, it can be changed to a plug-in or withdrawable version. This assembly kit contains blade contacts, a locking pin and terminal covers for the plug-in version. The assembly kit for the withdrawable version additionally includes side panels and a racking mechanism. Even when the masking frame is fitted, movement using the withdrawable unit's handle is possible while the door is closed.

Operating mechanisms

In the basic version, the 3VL molded case circuit breakers according to UL have a toggle lever as an operating mechanism. This also functions as an indicator of the switch position. The "Tripped" position is also displayed in addition to the "ON" and "OFF" positions.

The toggle lever goes to the "tripped" position when the internal tripping mechanism is activated by overcurrent tripping, e.g. on overload or short-circuit. Activation of an undervoltage release or shunt release will also cause the toggle lever to move to the "Tripped" position. The toggle lever must be moved to the "OFF/RESET" position before the molded case circuit breaker can be closed again. This enables reset of the internal tripping mechanism and reactivation of the molded case circuit breaker's main contacts (see figure).

A toggle lever extension is supplied with the VL 1200 UL (NG frame) and VL1600 UL (PG frame) molded case circuit breakers. For the VL400 UL (JG frame) to VL800 UL (MG frame) molded case circuit breakers, this accessory must be ordered separately if required.

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Front-operated rotary operating mechanisms

These operating mechanisms are designed for direct attachment to 3VL molded case circuit breakers according to UL and convert movement of the toggle lever from a linear to a rotary movement.

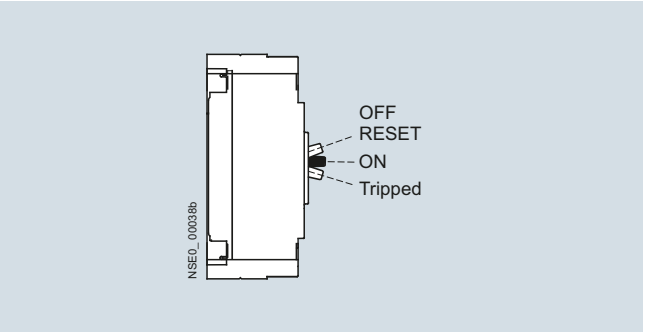
For a molded case circuit breaker with leading auxiliary switches, the undervoltage release can be connected to voltage in a leading fashion, as a result of which the molded case circuit breaker is ready for closing.

Door-coupling rotary operating mechanisms (complete operating mechanisms)

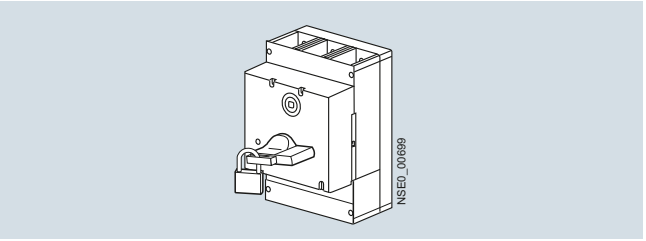
When the molded case circuit breakers are installed in control cabinets and distribution boards, door-coupling rotary operating mechanisms are available for doors and removable covers. These operating mechanisms are supplied as complete assembly kits, including an articulated-shaft mechanism.

With regard to switch positions and the "RESET" position, the same applies to rotary operating mechanisms as to toggle lever operating mechanisms. Indication is by the position of the operator lever (knob).

All 3VL molded case circuit breakers according to UL that feature these rotary operating mechanisms and corresponding terminal covers can be used as main disconnecting means.



Toggle lever operating mechanism positions



Rotary operating mechanism locked with padlock

Motorized operating mechanisms

VL150X UL (CG frame) to VL1600 UL (PG frame) molded case circuit breakers can be equipped with motorized operating mechanisms for operational remote closing and opening.

The motorized operating mechanisms for VL150X UL (CG frame) to VL800 UL (MG frame) molded case circuit breakers have a spring energy store (for synchronization) with a maximum ON period of $t_E \leq 80$ ms.

Motorized operating mechanisms without spring energy store for remotely controlled ON and OFF switching are available for the VL1200 UL (NG frame) and VL1600 UL (PG frame) molded case circuit breakers.

All motorized operating mechanisms are always supplied with a locking device for padlocks. Moreover, optional safety locks for motorized operating mechanisms with stored energy mechanism are also available.

The locking devices can be used for electrical and mechanical blocking of the operating mechanism. All remote operating mechanisms are equipped with a manual operating possibility for maintenance purposes.

Optionally, the motorized operating mechanisms for VL150X UL (CG frame) to VL800 UL (MG frame) and also the motorized operating mechanisms for VL1200 UL (NG frame) and VL1600 UL (PG frame) are each internally equipped with a floating signaling contact (normally open) for the following functions:

- Querying the AUTO/Manual selector switch for VL150X UL (CG frame) to VL800 UL (MG frame)
- Operating the mechanical OFF/0 button

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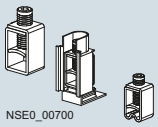
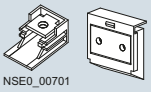
General data

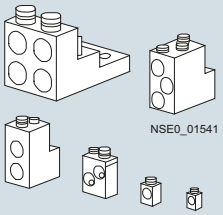
Main connections, basic equipment and options



Box terminal
(for copper cable)



Terminals with screw connection
(metric/inch)



Circular conductor terminals/multiple feed-in terminals
(for Al/Cu cables)

Main connections

Molded case circuit breaker	Connection overview and further options						
	Box terminals	Screw terminals for flat connection		Circular conductor terminal/multiple feed-in terminal	Rear terminals	Cable lug connection	Direct connection of bars possible (IEC-approved circuit breakers only)
	Cu only	with metric thread	with inch thread	Cu or Al			
VL150X UL (CG frame)	×	×	--	×	×	--	--
VL150 UL (DG frame)	×	×	×	×	×	×	--
VL250 UL (FG frame)	×	×	×	×	×	×	--
VL400 UL (JG frame)	×	×	--	×[1) 2)]	×	×	--
VL400X UL (LG frame)	--	×	×	×[1) 2)]	×	×	--
VL800 UL (MG frame)	--	×	×	×[1)]	×	×	--
VL1200 UL (NG frame)	--	×	×	×[1)]	×	×	--
VL1600 UL (PG frame)	--	×	×	×[1)]	×	--	--

× Available
-- Not available

[1)] Multiple feed-in terminals
[2)] Circular conductor terminal also available.

Note

See operating instructions for conductor cross-sections.

Auxiliary releases and auxiliary switches

Undervoltage releases, leading auxiliary switches

If there is no voltage present, closing of the molded case circuit breaker is not possible. When no voltage is applied to the release, operating the circuit breaker leads to no-load switching.

Frequent no-load switching should be avoided to prevent shortening the molded case circuit breaker's useful life.

For a molded case circuit breaker with leading auxiliary switches, the undervoltage release can be connected to voltage in a leading fashion, as a result of which the molded case circuit breaker is ready for closing.

In the case of 3VL molded case circuit breakers according to UL, the leading auxiliary switch can be supplied together with the front-operated rotary operating mechanisms and complete operating mechanisms. For further information, see "Selection and ordering data" for accessories.

Shunt releases

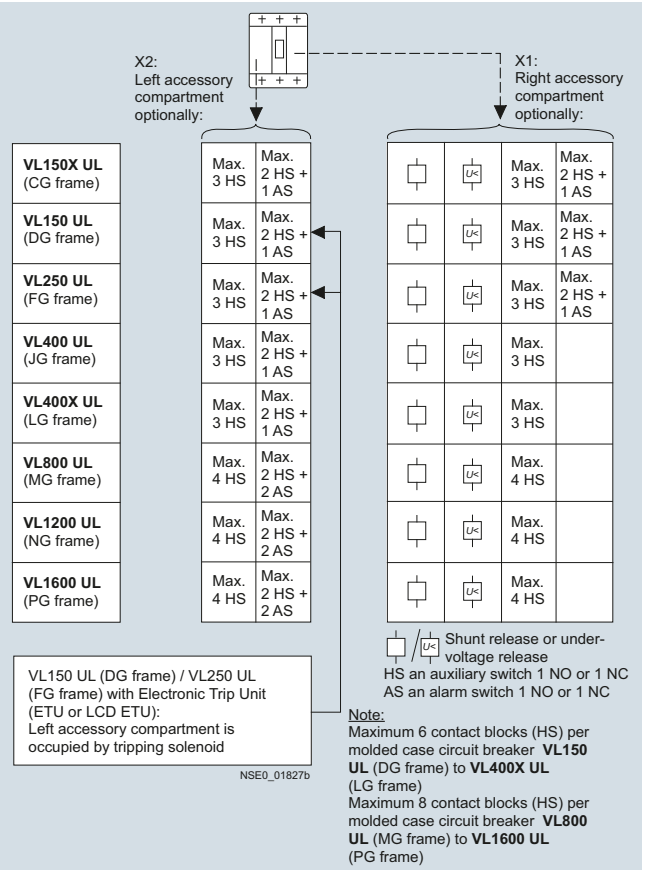
Shunt releases are used to remotely trip the molded case circuit breaker.

The shunt release's coil is designed for short-time operation. Coil deactivation is installed internally.

When a molded case circuit breaker is open, it is not permitted to apply a continuous opening command to the shunt release to prevent closing. A center tap is available as standard to test the coil for continuity.

Note

Before ordering, use the graphic on the right to check whether the required combination of shunt releases, undervoltage releases and auxiliary/alarm switches is feasible.



Equipment options for the insulated accessory compartments in the 3VL molded case circuit breakers according to UL

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Auxiliary switches

Auxiliary switches (HS) are used for signaling and controlling. The contacts of the auxiliary switch open and close along with the main contacts.

Alarm switches

Alarm switches (AS) operate when the molded case circuit breaker has been tripped due to an overcurrent situation, e.g. an overload or short-circuit. However, they are also activated when the molded case circuit breaker has been tripped by a shunt release or an undervoltage release.

Installation of internal accessories

The insulated accessory compartments in the molded case circuit breakers for installation of internal accessories (auxiliary releases and auxiliary/alarm switches) are designated X1, X2 and X4.

Equipment of the molded case circuit breaker with internal accessories and the possibility of combination with auxiliary releases and auxiliary/alarm switches depend on the installation position and frame size of the molded case circuit breaker (see figure entitled "Equipment options for the insulated accessory compartments in the 3VL molded case circuit breakers according to UL").

PLC control

The auxiliary and alarm switches are suitable for PLC control. These switching elements are from the Siemens 3SB3 program.

Leading auxiliary switches

The leading auxiliary switches from OFF to ON or from ON to OFF are available as retrofit kits and for Max Flex operating mechanisms.

Function

Current limiting[1)]

3VL molded case circuit breakers according to UL are designed on the principle of magnetic repulsion of the contacts. The contacts open before the expected peak value of the short-circuit current is reached. The current-limiting effects of the 3VL molded case circuit breakers according to UL protect the system components effectively against thermal and dynamic effects of the short-circuit current in the event of an electrical fault.

Ground-fault protection

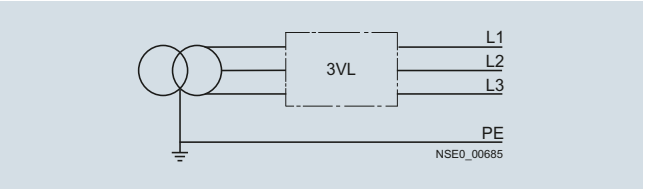
The ground-fault release "G" captures fault currents escaping to ground that can cause fires in the plant. Several molded case circuit breakers connected in series can be assigned graduated discrimination by means of the adjustable delay time.

The following measurement methods can be used to detect neutral conductor and ground-fault currents:

Vectorial summation current formation (measurement method 1)

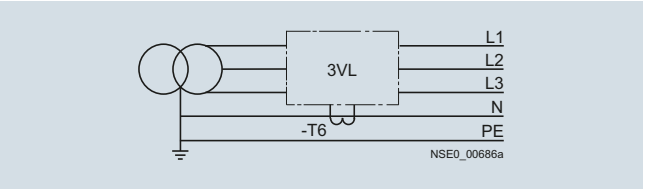
Ground-fault detection in balanced systems

The three phase currents are evaluated using vectorial summation current formation.



Ground-fault detection in unbalanced systems

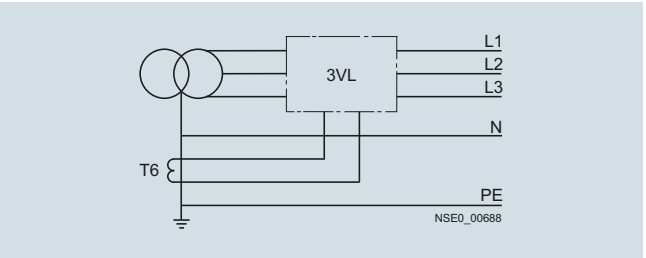
The neutral conductor current is measured directly and, in the case of the 3-pole circuit breakers, is only evaluated for ground-fault protection.
The overcurrent release calculates the ground-fault current using the vectorial summation of the three phase currents and the neutral conductor current.



3-pole molded case circuit breaker, current transformer in neutral conductor

Direct detection of the ground-fault current via a current transformer at the grounded star point of the transformer (measurement method 2)

The current transformer is installed directly at the grounded neutral point of the transformer.



3-pole molded case circuit breaker, current transformer at the grounded star point of the transformer

Transformer protection

The 3VL molded case circuit breakers according to UL protect power distribution systems in the event of overload and short-circuit as from the low-voltage side of the infeed transformer. The resulting requirements for current and/or time-based discrimination are fulfilled reliably by 3VL molded case circuit breakers according to UL for line protection – equipped with thermal-magnetic (TM) or electronic trip units (ETU or LCD ETU).

1) Not current-limiting in terms of "Current limiting according to UL 489".

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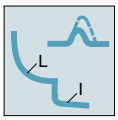
Thermal-magnetic releases (TM)



NSE0_00689

Application: line protection – TM, LI/LIN function

Overload protection, non-adjustable, short-circuit protection, non-adjustable, see "Selection and ordering data" for VL150X UL (CG frame), integrated releases in the circuit breaker enclosure;

KM version.

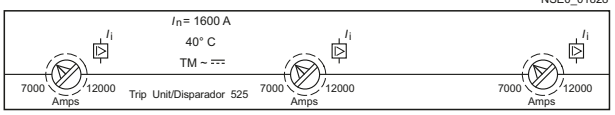
I201_19069

Application: line protection – TM/model 525, LI/LIN function

Overload protection, non-adjustable, short-circuit protection, adjustable I_i = 5 to 10 × I_n[1], for VL150 UL (DG frame) to VL1600 UL (PG frame);

KN version

NSE0_01828



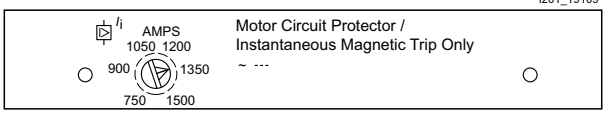
NSE0_00707

Application: starter protection – M, I function

Short-circuit protection, adjustable I_i = 3 to 16 × I_n[1], for VL150 UL (DG frame) to VL1200 UL (NG frame);

KJ, KK, KL versions.

I201_19109



NSE0_00708

Application: switch disconnectors in molded case circuit breaker design – M, I function (for intrinsic protection)

Short-circuit protection, non-adjustable

KE version

[1] Size-dependent, see "Selection and ordering data".

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Electronic Trip Units (ETUs)

For types VL150 UL (DG frame) to VL1600 UL (PG frame)

General information:

- No auxiliary voltage required for release system
- All ETUs have a thermal image
- A flashing green LED indicates correct operation of the microprocessor
- Overload status ($I > 1.05 \times I_r$) is indicated by a permanently lit yellow LED (alarm)
- Integral self-test function
- Socket for battery power supply
- Communication link to PROFIBUS DP and Modbus RTU possible

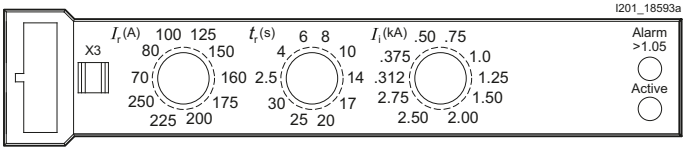
NSE0_00691

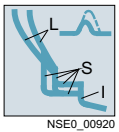
Application: line protection – model 555, LI function

Overload protection I_r = 0.28 to 1 × I_n [1], time-lag class t_r = 2.5 to 30

Short-circuit protection (instantaneous) I_i = 1.25 to 11 × I_n [1];

PB version





NSE0_00920

Application: line and generator protection – model 555, LSI function

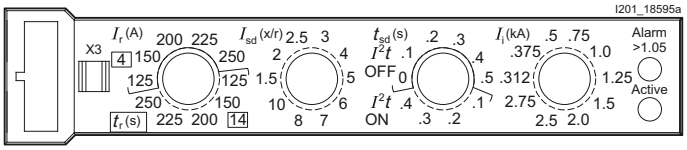
Overload protection I_r = 0.4 to 1 × I_n [1],

Short-circuit protection (short-time delay) I_{sd} = 1.5 to 10 x I_R [1], t_{sd} = 0 to 0.5 s,

I^2t on/off selectable

Short-circuit protection (instantaneous) I_i = 1.25 to 11 × I_n (fixed) [1]

PE version



NSE0_00693

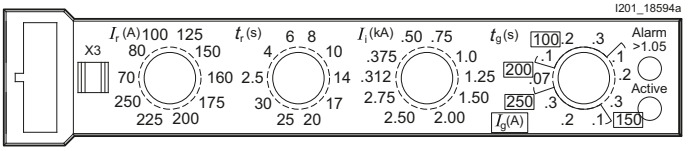
Application: line protection – model 555, LIG function

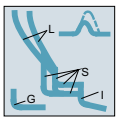
Overload protection I_r = 0.28 to 1 × I_n [1], time-lag class t_r = 2.5 to 30

Short-circuit protection (instantaneous) I_i = 1.25 to 11 × I_n [1]

Ground-fault protection:
Measurement method No. 1:
(G_R) vectorial summation current formation of the currents in the three phases and the neutral conductor (4-wire systems); I_g = 0.4 to 1 × I_n [1]

PD version





NSE0_00921

Application: line and generator protection – model 555, LSIG function

Overload protection I_r = 0.4 to 1 × I_n [1],

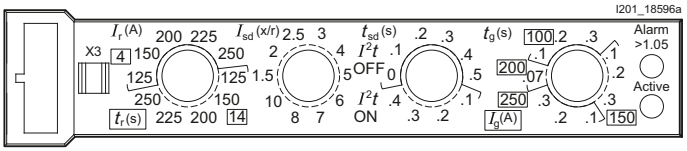
Short-circuit protection (short-time delay) I_{sd} = 1.5 to 10 x I_r [1], t_{sd} = 0 to 0.5 s,

I^2t on/off selectable

Short-circuit protection (instantaneous) I_i = 1.25 to 11 × I_n [1]

Ground-fault protection:
Measurement method No. 1:
(G_R) vectorial summation current formation of the currents in the three phases and the neutral conductor (4-wire systems); I_g = 0.4 to 1 × I_n [1]

PH version



[1] Size-dependent, see "Selection and ordering data".

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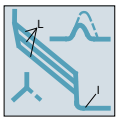
Electronic Trip Units with LCD (LCD ETU)

General information:

- No auxiliary voltage required for release system
- Current display
- An illuminated green LCD display indicates correct operation of the microprocessor
- Overload status (I > 105 % I_r) is indicated by "Overload" on the LCD display
- Direct, user-friendly, menu-driven setting of the absolute values of the protection parameters in the ampere values via keys
- Integral self-test function
- Socket for battery power supply
- Communication link to PROFIBUS DP and Modbus RTU possible



Application: line protection – model 586, LSI function

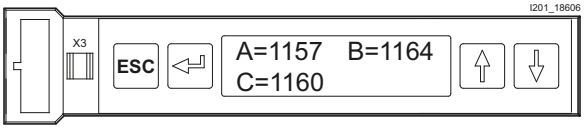
Overload protection I_r = 0.4 to 1 × I_n,
time-lag class t_r = 2.5 to 30

Thermal image selectable on/off

Short-circuit protection (short-time delay)
I_{sd} = 1.25 to 10 x I_R[1)], t_{sd} = 0 to 0.5 s,
I^2t on/off selectable

Short-circuit protection (instantaneous)
I_i = 1.25 to 11 × I_n[1)]

VH version



Application: line protection – model 586, LSIG function

Overload protection I_r = 0.4 to 1 × I_n,
time-lag class t_r = 2.5 to 30

Thermal image selectable on/off

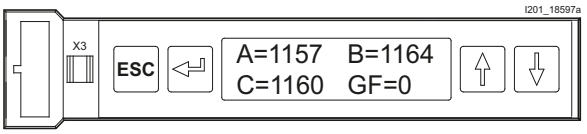
Short-circuit protection (short-time delay)
I_{sd} = 1.25 to 10 x I_R[1)], t_{sd} = 0 to 0.5 s,
I^2t on/off selectable

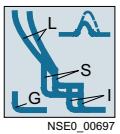
Short-circuit protection (instantaneous)
I_i = 1.25 to 11 × I_n[1)]

Ground-fault protection: Measurement method No. 1:
(G_R) vectorial summation current formation of the currents in the three phases and the neutral conductor (4-wire systems);
I_g = 0.4 to 1 × I_n[1)].

Measurement method No. 2:
(G_{GND}) direct measurement of the ground-fault current using a current transformer, I_g = 0.4 to 1 × I_n,
t_g = 0.1 to 0.5 s.

VM version





Application: line protection – model 586, LSI G (alarm) function

Overload protection I_r = 0.4 to 1 × I_n,
time-lag class t_r = 2.5 to 30

Thermal image selectable on/off

Short-circuit protection (short-time delay)
I_{sd} = 1.25 to 10 x I_R[1)], t_{sd} = 0 to 0.5 s,
I^2t on/off selectable

Short-circuit protection (instantaneous)
I_i = 1.25 to 11 × I_n[1)]

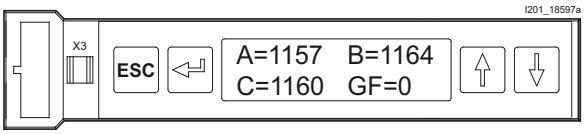
Ground-fault protection:

Measurement method No. 1:
(G_R) vectorial summation current formation of the currents in the three phases and the neutral conductor (4-wire systems);
I_g = 0.4 to 1 × I_n[1)].

Measurement method No. 2:
(G_{GND}) direct measurement of the ground-fault current using a current transformer, I_g = 0.4 to 1 × I_n,
t_g = 0.1 to 0.5 s.

If a ground fault is detected, the LCD ETU only issues an alarm, without tripping the circuit breaker. This alarm is displayed direct on the display and/or is communicated to higher-level systems via PROFIBUS DP/Modbus RTU.

VJ version



[1)] Size-dependent, see "Selection and ordering data".

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Configuration

Communication

All 3VL molded case circuit breakers according to UL 489 with electronic trip unit (ETU) are communication-capable. To this end, the molded case circuit breaker's ETU is connected to a COM20 or COM21 communication module by means of a cable. The COM20 module (Release 2) supports the PROFIBUS DP protocol, while the COM21 module (Release 2) enables data transfer via Modbus RTU.

A communication kit – COMKIT 3 to 8 – is needed to connect the 3VL molded case circuit breaker (see page 2/271).

The COMKITs consists of a connecting cable including a protective cover and also one alarm and auxiliary switch each for installation in the molded case circuit breaker.[1] These are also connected to the electronic trip unit and signal the ON/OFF/TRIPPED circuit breaker status to the electronic trip unit.

The communication modules enable activation and deactivation of an optional motorized operating mechanism.

	Data transmission through COM20/COM21 (Release 2)
Data transferred	
Commands	
Closing or opening	✓
Deleting alarm and tripping operation buffer and also maintenance information	✓
Operating states[2]	
ON or OFF status trip position	✓
Event messages	
Tripped messages with tripping current	✓
Alarms (e.g. overload, phase unbalance current, etc.)	✓
Threshold violation (e.g. phase currents)	✓
Measured values	
Phase currents and neutral conductor current	✓
Parameter values	
Reading and writing	✓
Maintenance information	
(e.g. number of trips, number of switching operations)	✓
Data for device identification	✓
Clock synchronization	✓

✓ Available

Function	**COM20/21 (Release 2) module with overcurrent release version**	
	ETU	LCD ETU
Functions of communication components		
Transfer of the operating state (ON, OFF, tripped, warnings, tripped causes, event log, etc.) to the PROFIBUS	✓	✓
Display of measured values (current only) and parameters in the release, modifying parameters via the display	--	✓[3]
Transferring the maximum value of the actual current in %	✓	✓
Transferring the individual current phase currents	✓	✓
Transferring PROFIBUS identification data	✓	✓
Reading protection parameters via PROFIBUS/Modbus	✓	✓
Reading and setting protection parameters via PROFIBUS/Modbus	--	✓

✓ Function available

Function can optionally be adopted by several trip units.

-- Function not available

1) Only an alarm switch is included with the COMKITs 3 and 6 because the auxiliary switch in the case of DG and FG frame sizes of the 3VL molded case circuit breakers is already included in the magnetic release (Maglatch).

2) Only in the case of built-in auxiliary switches connected to COM20/21 (Release 2)

3) COM20/21 not required

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General data

Switching direct current

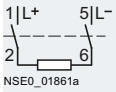
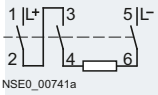
The VL150X UL (CG frame) to VL1600 UL (PG frame) molded case circuit breakers (for line protection with TM, for starter combinations, and for non-automatic air circuit breakers) with the exception of the VL150 UL (DG frame) to VL1600 UL (PG frame) molded case circuit breakers with electronic trip units (ETU), are also suitable for switching and protecting direct current.

The maximum permitted DC voltage for each conducting path needs to be taken into account for DC switching applications, however.

Series connection of 2 to 3 conducting paths is required for voltages in excess of 250 V in the case of VL150 UL (DG frame) to VL1600 UL (PG frame).

The following circuits are recommended since the current must flow through all conducting paths in order to conform to the thermal tripping characteristic curves.

The threshold values of the instantaneous short-circuit release ("I" release) increase by 30 to 40 %.

Recommended circuit/maximum permitted DC voltage U_e		**Remarks**
Circuit A	Circuit B	
For 3-pole molded case circuit breakers		
250 V DC  	500 V DC rated / 600 V DC max. for use in ungrounded UPS DC applications (according to UL 489, Supplement SC)  	2-pole switching (ungrounded system)

Technical specifications

Type				**VL150X UL** CG frame	**VL150 UL** DG frame	**VL250 UL** FG frame	**VL400 UL** JG frame	**VL400X UL** LG frame	**VL800 UL** MG frame	**VL1200 UL** NG frame	**VL1600 UL** PG frame
Max. rated current I_n			A	150	150	250	400	600	800	1200	1600
Rated insulation voltage U_i only in accordance with IEC 60947-2											
Main conducting paths		AC	V	800							
Auxiliary circuits		AC	V	690							
Rated operational voltage U_e											
NEMA	50/60 Hz	AC	V	600							
		DC[1]	V	250	[2]						
IEC	50/60 Hz	AC	V	690							
Utilization category				A							
Permissible ambient temperature											
Operation: 0 °C ... +70 °C for devices with TM release (cf. IEC system manual)			°C	–25 ... +70							
Storage			°C	–40 ... +80							
Permissible load at different ambient temperatures Directly next to the molded case circuit breaker, referred to the molded case circuit breaker's rated current											
• Molded case circuit breaker for line protection	TM/ETU	up to 40 °C	%	100	100/100				100/100		100/100
	TM/ETU	at 50 °C	%	93	93/100				94/100		92/100
	TM/ETU	at 60 °C	%	86	86/95				88/95		83/95
	TM/ETU	at 70 °C	%	79	79/80				82/80		75/80
• Molded case circuit breaker for starter combinations and non-automatic air circuit breakers		up to 40 °C	%	100							
		at 50 °C	%	100							
		at 60 °C	%	93							
		at 70 °C	%	86							
Weight data of 3-pole molded case circuit breakers											
Basic circuit breaker											
• With thermal-magnetic release			kg	2.5	2.2	2.3	5.7	9.0	14.0	21.8	32.8
• With electronic trip unit			kg	--	2.4	2.5	5.9	9.3	16.0	25.0	31.3
Rated short-circuit breaking capacity				Rated short-circuit breaking capacity: see under "Overview" in table.							

1) DC rated data applies to thermal-magnetic releases only.

2) 500 V DC rated / 600 V DC max. for use in ungrounded UPS DC applications (according to UL 489, Supplement SC)

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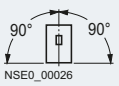
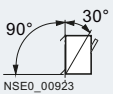
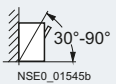
Type		**VL150X UL** CG frame	**VL150 UL** DG frame	**VL250 UL** FG frame	**VL400 UL** JG frame	**VL400X UL** LG frame	**VL800 UL** MG frame	**VL1200 UL** NG frame	**VL1600 UL** PG frame
Endurance	Switching cycles	20000				10000		3000	
Electrical endurance	Switching cycles	10000				5000	3000	1500	
Max. switching frequency	1/h	120				60		30	
Connection types		See "Main connections, basic equipment and options"							
Connection cross-sections for stranded cables									
Box terminal (Cu)	AWG/kcmil	1 x (14 ... 1/0)	1 x (8 ... 1/0)	1 x (3 ... 250)	1 x (1/0 ... 600)	--			
	mm^2	1 x (2.5 ... 50)	1 x (10 ... 50)	1 x (35 ... 120)	1 x (70 ... 300)	--			
Circular conductor terminal (Cu/Al)	AWG/kcmil	1 x (6 ... 3/0)		1 x (4 ... 350)	1 x Cu: 3/0 ... 600 Al: 250 ... 750		--		
	mm^2	1 x (16 ... 70)		1 x (25 ... 150)	1 x Cu: 95 ... 300 Al: 150 ... 300		--		
Circular conductor terminal with terminal cover (Cu/Al) • Terminal with auxiliary conductor connection up to 0.5 A • Aluminium terminals with control cable connection	AWG/kcmil	--	1 x (6 ... 300)	--					
	mm^2	--	1 x (16 ... 150)	--					
Multiple feed-in terminal (Cu/Al)	AWG/kcmil	--			2 x (3/0 ... 250)	2 x (2 ... 600)	2 x (500 ... 750)	--	
	mm^2	--			2 x (95 ... 120)	2 x (35 ... 300)	2 x 300	--	
	AWG/kcmil	--					3 x (1/0 ... 500)	3 x (500 ... 750)	--
	mm^2	--					3 x (70 ... 240)	3 x 300	--
	AWG/kcmil	--					--	4 x (1/0 ... 500)	--
	mm^2	--					--	4 x (70 ... 240)	--
	AWG/kcmil	--					--		4 x (600 ... 750)
	mm^2	--					--		4 x 300
Multiple feed-in terminal with terminal cover • Terminal with auxiliary conductor connection up to 0.5 A • Aluminium terminals with control cable connection	AWG/kcmil	--			2 x (2 ... 600)	--			
	mm^2	--			2 x (35 ... 300)	--			
Direct connection of busbars (Cu/Al, for IEC only)	mm	17 x 7	22 x 7	24 x 7	32 x 10	32 x 10	2 x 40 x 10	2 x 50 x 10	3 x 60 x 10
Screw for connection with screw terminal, metric		M 6		M 8		M10	M 8		
	inch	--	10-32 UNF	5/16	--	3/8	5/16		
Power losses per molded case circuit breaker at max. rated current									
Line protection	TM W	17 ... 36	15 ... 48	32 ... 80	60 ... 175	85 ... 230	194 ... 269	150 ... 204	204 ... 329
Line protection	ETU or LCD ETU W	--	6 ... 40	11 ... 60	38 ... 90	71 ... 160	140 ... 250	93 ... 210	146 ... 260
For starter combinations or non-automatic air circuit breakers	W	36	40	60	90	160	250	210	260
Permissible mounting position[1]		 NSE0_00026		 NSE0_00923		 NSE0_01545b [2]			

[1] For VL800 UL (MG frame) to VL1600 UL (PG frame) molded case circuit breakers with withdrawable unit frame in lateral installation position. Adapter set on request.

[2] Permissible current load factor 0.9; with internal accessories only.

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Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A, according to UL 489

General data

Type			VL150X UL CG frame	VL150 UL DG frame	VL250 UL FG frame	VL400 UL JG frame	VL400X UL LG frame	VL800 UL MG frame	VL1200 UL NG frame	VL1600 UL PG frame
Auxiliary switches and alarm switches										
Conventional free-air thermal current I_{th}		A	10							
Rated making capacity		A	10							
AC										
Rated operational voltage		V	24	48	110	230	400	600	--	
Rated operating current	AC-12	A	10						--	
	AC-15	A	6				3	1	--	
DC										
Rated operational voltage		V	24	48	110	230	--			
Rated operating current	DC-12	A	10	5	2.5	1	--			
	DC-13	A	3	1.5	0.7	0.3	--			
Back-up fuse/miniature circuit breaker		A	10 TDz / 10							
Leading auxiliary switch in rotary mechanism										
Rated thermal current I_{th}		A	2							
Rated making capacity		A	2 (ind. 0.5)							
Rated operational voltage		V AC	230							
Rated operating current		A	2							
Rated breaking capacity, inductive, p.f. = 0.7		A	0.5							
Rated breaking capacity		A	2							
Quick-response short-circuit fuse		A	2							
Position signaling switches										
Rated thermal current I_{th}		A	16		--					
Rated making capacity		A	16	10	--					
Rated operational voltage		V AC	250	400	--					
Rated operating current		A	16	10	--					
Rated breaking capacity, inductive, p.f. = 0.7		A	4		--					
Rated breaking capacity		A	16	10	--					
Quick-response short-circuit fuse		A	16	10	--					

Release			Family 1: VL150X UL (CG frame) to VL400X UL (LG frame)	Family 2: VL800 UL (MG frame) to VL1600 UL (PG frame)
Undervoltage releases				
Response voltage:				
• Release (circuit breaker trips)		V	0.35 ... 0.70 × U_s	0.35 ... 0.70 × U_s
• Pick-up (circuit breaker can be switched on)		V	0.85 ... 1.1 × U_s	0.85 ... 1.1 × U_s
Power consumption (continuous operation) at:				
• 24 V AC 50/60 Hz[1)]		VA	1.4	--
• 110 ... 127 V AC 50/60 Hz		VA	1.0	1.8
• 220 ... 250 V AC 50/60 Hz		VA	1.0	1.8
• 208 V AC 50/60 Hz		VA	1.0	1.8
• 277 V AC 50/60 Hz		VA	1.0	1.8
• 380 ... 415 V AC 50/60 Hz		VA	1.0	1.8
• 440 ... 480 V AC 50/60 Hz		VA	1.0	1.8
• 500 ... 525 V AC 50/60 Hz		VA	1.0	--
• 12 V DC		W	0.8	1.5
• 24 V DC		W	0.8	1.5
• 48 V DC		W	0.8	1.5
• 60 V DC		W	0.8	1.5
• 110 ... 127 V DC		W	0.8	1.5
• 220 ... 250 V DC		W	0.8	1.5
Max. opening time		ms	50	50
Shunt releases				
Response voltage:			U_s	U_s
Pick-up (switch tripped)		V	0.7 ... 1,1	0.7 ... 1,1
Power consumption **(short-time)** at:				
• 24 V AC 50/60 Hz		VA	310	330
• 48 ... 60 V AC 50/60 Hz		VA	335 ... 465	380 ... 460
• 110 ... 127 V AC 50/60 Hz		VA	470 ... 630	330 ... 430
• 208 ... 277 V AC 50/60 Hz		VA	585 ... 1000	520 ... 800
• 380 ... 600 V AC 50/60 Hz		VA	180 ... 500	228 ... 750
• 24 V DC		W	360	385
• 48 ... 60 V DC		W	380 ... 590	480 ... 720
• 110 ... 127 V DC		W	506 ... 680	362 ... 424
• 220 ... 250 V DC		W	470 ... 580	418 ... 476
Max. opening time		ms	50	50
Max. in-service period		s	interrupts automatically, less than 10 ms	interrupts automatically, less than 10 ms

[1)] On request.

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Type		VL150X UL CG frame	VL150 UL DG frame	VL250 UL FG frame	VL400 UL JG frame	VL400X UL LG frame	VL800 UL MG frame	VL1200 UL NG frame	VL1600 UL PG frame
Motorized operating mechanism		--						x	
Motorized operating mechanism with spring energy store (synchronizable)		x						--	
Motorized operating mechanism									
Power consumption	VA/W	--						< 250	
Rated control supply voltage U_s	50/60Hz V AC	--						42 ... 48/60	110 ... 127/220 ... 250
	V DC	--						24 / 42 ... 48/60	110 ... 127/220 ... 250
Fusible link (operational class gG, slow-blow characteristic)	A	--						4	2
Miniature circuit breakers	A	--						4	2
Primary operating range	V	--						0.85 ... 1.1 x U_s	
Min. command duration U_s	ms	--						50	
Max. command duration, connection-dependent [1]		Jog/pushbutton or continuous command			--			Jog/pushbutton or continuous command	
Total make-time	s	--						< 5	
Break-time	s	--						< 5	
Interval between the commands OFF and ON	s	--						> 5	
Interval between the commands ON and OFF	s	--						> 5	
Max. permissible switching frequency	1/h	--						30	
Motorized operating mechanism with spring energy store (synchronizable)									
Power consumption	VA/W	< 100			< 200	< 250		--	
Rated control supply voltage U_s	50/60Hz V AC	42 ... 48 / 60			110 ... 127 / 220 ... 250			--	
	V DC	24 / 42 ... 48 / 60			110 ... 127 / 220 ... 250			--	
Fusible link (operational class gG, slow-blow characteristic)	A	4			2			--	
Miniature circuit breakers	A	4			2			--	
Primary operating range	V	0.85 ... 1.1 x U_s						--	
Min. command duration U_s	ms	50						--	
Max. command duration, connection-dependent [1]		Jog/pushbutton or continuous command						--	
Total make-time	ms	< 100						--	
Break-time	s	< 5						--	
Interval between the commands OFF and ON	s	> 5						--	
Interval between the commands ON and OFF	s	> 1						--	
Max. permissible switching frequency	1/h	120				60		--	

x Available

-- Not available

[1] Changeover contact also permissible, but note the interval times between ON and OFF.

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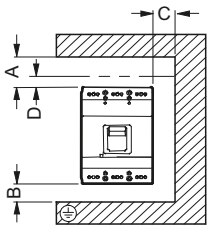
General data

Space requirement above arc chutes, safety clearance (applicable to IEC application)



Arcing spaces
Minimum clearances from adjacent grounded parts and non-insulated live parts.

Inside the arcing space, bare conductors and bars must be insulated with phase barriers.

For bare conductors and bars outside the arcing space, the specific mounting instructions for the different frame sizes must be observed.

For mounting instructions, see www.siemens.com/lowvoltage/product-support

Space requirement above arcing spaces according to IEC 60947-2

Molded case circuit breaker Type	**Breaking capacity**	**Minimum enclosure volume** m^3	**A** ≤ **415 V** without/with terminal cover	**>415 ... 690 V** without terminal cover	**>415 ... 690 V** with terminal cover	**B** ≤ **690 V**	**C** ≤ **690 V**	**D** ≤ **690 V**
VL150X UL (CG frame)	Standard High Very high	0.011	35	70	35	25	25	35
VL150 UL (DG frame)	Standard High Very high	0.011	50	100	50	25	25	35
VL250 UL (FG frame)	Standard High Very high	0.015	50	100	50	25	25	35
VL400 UL (JG frame)	Standard High Very high	0.036	50	100	50	25	25	35
VL400X UL (LG frame)	Standard High Very high	0.18	50	100	50	25	25	35
VL800 UL (MG frame)	Standard High Very high	0.22	50	100	50	25	25	35
VL1200 UL (NG frame)	Standard High Very high	0.22	70	100	70	30	30	50
VL1600 UL (PG frame)	Standard High Very high	0.264	100	100	100	100	30	100

Definition of permissible safety clearances

Clearance between

A: molded case circuit breaker and busbars (uninsulated and grounded metal); terminal cover required above 600 V AC, 500 V DC

B: molded case circuit breaker terminal and lower panel

C: side of the molded case circuit breaker and side panels (uninsulated and grounded metal)

D: molded case circuit breaker and non-conductive parts with at least 3 mm thick insulation (insulator, insulated bar, painted plate)

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3/2	**Introduction**
	5SL miniature circuit breakers
3/3	Introduction
3/5	5SL3, 4500 A
3/7	5SL6, 6000 A
3/9	5SL4, 10000 A
	5SY and 5SP miniature circuit breakers
3/13	Introduction
3/15	5SY6, 6000 A
3/17	5SY4, 10000 A
3/21	5SP4, high-current, 10000 A
3/22	5SY5, universal current, 10000 A
3/24	5SY7, 15000 A
3/27	5SY8, 25000 A
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	Additional components
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3/57	5ST2 distribution blocks
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3/63	**5SJ4 . . . - . HG miniature circuit breakers acc. to UL 489 and IEC, and accessories**
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For further technical product information:

Configuration Manual

Miniature Circuit Breakers
Article No.: 3ZW1012-5SL61-0AC1

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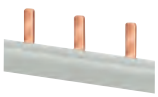
3

Overview

Devices		Page	Application	Standards
	5SL miniature circuit breakers	3/3	For all 0.3 to 63 A applications with B, C and D tripping characteristics with a rated breaking capacity of 4500 A, 6000 A und 10000 A acc. to EN 60898-1.	EN 60898-1
	5SY and 5SP miniature circuit breakers	3/13	For all applications from 0.3 to 125 A with a rated breaking capacity of 10000 A and 15000 A acc. to EN 60898-1. Applications for universal current from 0.3 to 63 A, Version 25 kA, acc. to EN 60947-2.	EN 60898-1/-2 EN 60947-2 UL 1077 CSA 22.2 GB 10963.1/.2
	5SJ6...-.KS miniature circuit breakers, with plug-in terminals	3/29	For socket outlet and lighting circuits in all building installations. The plug-in terminals offer easy front connection for manual insertion of conductors, which considerably reduces mounting times.	EN 60898-1
	5SY miniature circuit breakers, 1+N in 1 MW	3/32	For socket outlet and lighting circuits in all building installations where a switchable neutral conductor is required. The miniature circuit breaker 1+N saves space in the distribution board.	EN 60898-1
	Additional components	3/36	Auxiliary switches, fault signal contacts, shunt trips, undervoltage releases for higher system availability, RC units for personal safety and remote controlled mechanisms for remote switching.	
	**Busbars**	3/44	Busbars in 10 mm^2 and 16 mm^2 save space in the distribution board and time during mounting. Busbars in 18 mm^2 and 25 mm^2 acc. to UL 508 and CSA.	UL 508
	5SJ4 ...-.HG miniature circuit breakers acc. to UL 489 and IEC, and accessories	3/63	Miniature circuit breakers can be used as "branch circuit protection" and are approved for the connection type "same polarity" and "opposite polarity" in the characteristics B, C and D acc. to UL489, from 0.3 to 63 A.	UL 489
	SHU 5SP3 main miniature circuit breakers	3/74	Voltage-independent selective main miniature circuit breakers (SHU) in the precounter area support downstream miniature circuit breakers by providing better current limitation.	DIN VDE 0641-21

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Overview

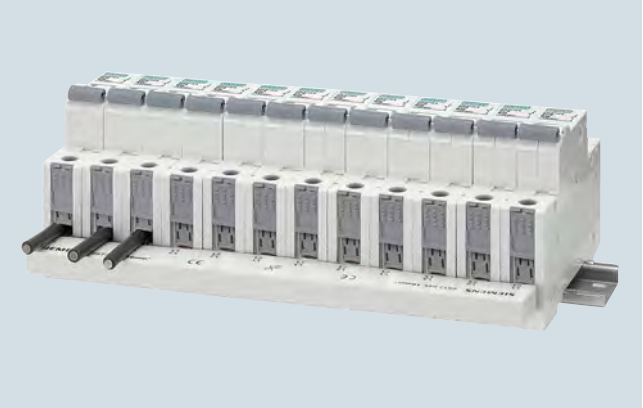
The 5SL miniature circuit breakers are intended for use up to 6 kA/10 kA. These devices have system features that are characteristic of all Siemens miniature circuit breakers.

They are also suitable for the quick and easy mounting of additional components, such as auxiliary switches and fault signal contacts. The 5SL4 miniature circuit breakers can also be combined with shunt trips, undervoltage releases and arc fault detection devices.

To facilitate cable entry, the devices are equipped with rectangular terminals for the accommodation of pin busbars with cables up to 35 mm^2. The rated current range is between 0.3 A and 63 A. The 5SL miniature circuit breakers are available in characteristics B, C and D.

Benefits

- Effective touch protection when grasping and manually operating the latching slide with latch-down option.



- Easy-to-mount busbar assembly.
- Consistent bus mounting concept throughout the Siemens miniature circuit breaker range.

- Individual devices can be removed from the bus-mounted assembly without the use of tools.

- The 5SL4 miniature circuit breakers are suitable for the quick and easy mounting of arc fault detection devices, auxiliary switches, fault signal contacts, shunt trips and undervoltage releases.

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3

Technical specifications

			5SL3	5SL6	5SL4
Standards			EN 60898-1		
Approvals			see chapter "Appendix"		
Tripping characteristic			B, C		B, C, D
Rated voltage U_n		V AC	230/400		
Operational voltage					
• Min.		V AC/DC per pole	24		
• Max.		V AC V DC/pole	250/440 60[1]		60[1)2)]
Rated breaking capacity					
• I_{cn} acc. to IEC/EN 60898-1		kA AC	4.5	6	10
• I_{cu} acc. to IEC/EN 60947-2		kA AC	4.5	6	10
Insulation coordination					
• Rated insulation voltage • Pollution degree for overvoltage category		V AC	250/440 2/III		
Rated frequency		Hz	50/60		
Touch protection	Acc. to EN 50274		Yes		
Handle end position, sealable			Yes		
Degree of protection			IP20 with connected conductors, IP40 in the area of the handle with distribution cover	IP40 with connected conductors	IP20 with connected conductors
CFC and silicone-free			Yes		
Conductor cross-sections					
• 1-wire					
- Solid (≤ 10 mm^2) / stranded (≥ 16 mm^2)		mm^2	0.75 ... 35		
- Finely stranded with non-insulated end sleeve		mm^2	0.75 ... 25		
- Finely stranded with insulated end sleeve		mm^2	0.75 ... 25		
- Finely stranded without end sleeve		mm^2	1 ... 35		
• 2-wire, same cross-section					
- Solid (≤ 10 mm^2) / stranded (≥ 16 mm^2)		mm^2	0.75 ... 10		
- Finely stranded with non-insulated end sleeve		mm^2	0.75 ... 4		
- Finely stranded with insulated end sleeve		mm^2	0.75 ... 4		
- Finely stranded without end sleeve		mm^2	1 ... 4		
• 1-wire + busbar (pin thickness 1.5 mm)					
- Solid (≤ 10 mm^2) / stranded (≥ 16 mm^2)		mm^2	10 ... 25		
- Finely stranded with non-insulated end sleeve		mm^2	6 ... 25		
- Finely stranded with insulated end sleeve		mm^2	6 ... 16		
Terminals	± Screw (Pozidriv)		2		
• Terminal tightening torque		Nm	2.5 ... 3		
Mounting position			Any		
Service life, on average, with rated load			20000 actuations		
Storage temperature		°C	-40 ... +75		
Ambient temperature		°C	-25 ... +45, occasionally +55, max. 95 % humidity		-25 ... +55, max. 95 % humidity
Resistance to climate	Acc. to IEC 60068-2-30		6 cycles		

1) The operational voltage 60 V DC/pole takes into account a battery charging voltage with a peak value of 72 V.

2) Exempt: Characteristic C: 0.3 ... 1 A, characteristic D: 0.3 ... 2 A.

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Overview

The 5SL miniature circuit breakers are particularly suitable for the demands of 4.5 kA and 6 kA applications in infrastructure, such as residential buildings and small commercial buildings.

Selection and ordering data

4500 / 3	I_n	Mounting width	DT	Characteristic B: Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic C: Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
Miniature circuit breakers 4500 A													
	1P, 230/400 V AC												
	0.3	1		--				5SL3114-7		1	1 unit	1AE	0.161
	0.5			--				5SL3105-7		1	1 unit	1AE	0.156
	1			--				5SL3101-7		1	1 unit	1AE	0.158
	1.6			--				5SL3115-7		1	1 unit	1AE	0.160
	2			--				5SL3102-7		1	1 unit	1AE	0.133
	3			--				5SL3103-7		1	1 unit	1AE	0.133
	4			--				5SL3104-7		1	1 unit	1AE	0.133
	6			5SL3106-6		1AE		5SL3106-7		1	1 unit	1AE	0.132
	8			--				5SL3108-7		1	1 unit	1AE	0.132
	10			5SL3110-6		1AE		5SL3110-7		1	1 unit	1AE	0.129
	13			5SL3113-6		1AE		5SL3113-7		1	1 unit	1AE	0.131
	16			5SL3116-6		1AE		5SL3116-7		1	1 unit	1AE	0.120
	20			5SL3120-6		1AE		5SL3120-7		1	1 unit	1AE	0.129
	25			5SL3125-6		1AE		5SL3125-7		1	1 unit	1AE	0.132
	32			5SL3132-6		1AE		5SL3132-7		1	1 unit	1AE	0.160
	40			5SL3140-6		1AE		5SL3140-7		1	1 unit	1AE	0.162
	50			5SL3150-6		1AE		5SL3150-7		1	1 unit	1AE	0.169
	63			5SL3163-6		1AE		5SL3163-7		1	1 unit	1AE	0.169
	1P+N, 230 V AC												
	0.3	2		--				5SL3514-7		1	1 unit	1AE	0.330
	0.5			--				5SL3505-7		1	1 unit	1AE	0.281
	1			--				5SL3501-7		1	1 unit	1AE	0.281
	1.6			--				5SL3515-7		1	1 unit	1AE	0.279
	2			--				5SL3502-7		1	1 unit	1AE	0.234
	3			--				5SL3503-7		1	1 unit	1AE	0.234
	4			--				5SL3504-7		1	1 unit	1AE	0.234
	6			5SL3506-6		1AE		5SL3506-7		1	1 unit	1AE	0.231
	8			--				5SL3508-7		1	1 unit	1AE	0.330
	10			5SL3510-6		1AE		5SL3510-7		1	1/6 units	1AE	0.224
	13			5SL3513-6		1AE		5SL3513-7		1	1 unit	1AE	0.228
	16			5SL3516-6		1AE		5SL3516-7		1	1/6 units	1AE	0.222
	20			5SL3520-6		1AE		5SL3520-7		1	1 unit	1AE	0.230
	25			5SL3525-6		1AE		5SL3525-7		1	1 unit	1AE	0.252
	32			5SL3532-6		1AE		5SL3532-7		1	1 unit	1AE	0.307
	40			5SL3540-6		1AE		5SL3540-7		1	1 unit	1AE	0.288
	50			5SL3550-6		1AE		5SL3550-7		1	1 unit	1AE	0.330
	63			5SL3563-6		1AE		5SL3563-7		1	1 unit	1AE	0.291
	2P, 400 V AC												
	0.3	2		--				5SL3214-7		1	1 unit	1AE	0.312
	0.5			--				5SL3205-7		1	1 unit	1AE	0.308
	1			--				5SL3201-7		1	1 unit	1AE	0.305
	1.6			--				5SL3215-7		1	1 unit	1AE	0.330
	2			--				5SL3202-7		1	1 unit	1AE	0.256
	3			--				5SL3203-7		1	1 unit	1AE	0.254
	4			--				5SL3204-7		1	1 unit	1AE	0.256
	6			5SL3206-6		1AE		5SL3206-7		1	1 unit	1AE	0.250
	8			--				5SL3208-7		1	1 unit	1AE	0.330
	10			5SL3210-6		1AE		5SL3210-7		1	1 unit	1AE	0.250
	13			5SL3213-6		1AE		5SL3213-7		1	1 unit	1AE	0.250
	16			5SL3216-6		1AE		5SL3216-7		1	1 unit	1AE	0.241
	20			5SL3220-6		1AE		5SL3220-7		1	1 unit	1AE	0.239
	25			5SL3225-6		1AE		5SL3225-7		1	1 unit	1AE	0.252
	32			5SL3232-6		1AE		5SL3232-7		1	1 unit	1AE	0.302
	40			5SL3240-6		1AE		5SL3240-7		1	1 unit	1AE	0.314
	50			5SL3250-6		1AE		5SL3250-7		1	1 unit	1AE	0.325
	63			5SL3263-6		1AE		5SL3263-7		1	1 unit	1AE	0.321

[1] 1 MW (modular width) = 18 mm.

*** You can order this quantity or a multiple thereof.**

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5SL3, 4500 A

4500 / 3		Mounting width	DT	Characteristic B Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
Miniature circuit breakers 4500 A													
	3P, 400 V AC												
	1			--				5SL3301-7		1	1 unit	1AE	0.378
	2			--				5SL3302-7		1	1 unit	1AE	0.377
	3			--				5SL3303-7		1	1 unit	1AE	0.373
	4			--				5SL3304-7		1	1 unit	1AE	0.371
	6			5SL3306-6		1AE		5SL3306-7		1	1 unit	1AE	0.370
	10			5SL3310-6		1AE		5SL3310-7		1	1 unit	1AE	0.380
	16			5SL3316-6		1AE		5SL3316-7		1	1 unit	1AE	0.365
	20			5SL3320-6		1AE		5SL3320-7		1	1 unit	1AE	0.362
	25			5SL3325-6		1AE		5SL3325-7		1	1 unit	1AE	0.372
	32			5SL3332-6		1AE		5SL3332-7		1	1 unit	1AE	0.457
	40			5SL3340-6		1AE		5SL3340-7		1	1 unit	1AE	0.468
	50			5SL3350-6		1AE		5SL3350-7		1	1 unit	1AE	0.480
	63			5SL3363-6		1AE		5SL3363-7		1	1 unit	1AE	0.485
	3P+N, 400 V AC												
	1			--				5SL3601-7		1	1 unit	1AE	0.660
	2			--				5SL3602-7		1	1 unit	1AE	0.580
	3			--				5SL3603-7		1	1 unit	1AE	0.660
	4			--				5SL3604-7		1	1 unit	1AE	0.660
	6			5SL3606-6		1AE		5SL3606-7		1	1 unit	1AE	0.660
	8			--				5SL3608-7		1	1 unit	1AE	0.660
	10			5SL3610-6		1AE		5SL3610-7		1	1 unit	1AE	0.558
	13			5SL3613-6		1AE		5SL3613-7			1 unit	1AE	0.660
	16			5SL3616-6		1AE		5SL3616-7		1	1 unit	1AE	0.557
	20			5SL3620-6		1AE		5SL3620-7		1	1 unit	1AE	0.575
	25			5SL3625-6		1AE		5SL3625-7		1	1 unit	1AE	0.567
	32			5SL3632-6		1AE		5SL3632-7		1	1 unit	1AE	0.566
	40			5SL3640-6		1AE		5SL3640-7		1	1 unit	1AE	0.588
	50			5SL3650-6		1AE		5SL3650-7		1	1 unit	1AE	0.607
	63			5SL3663-6		1AE		5SL3663-7		1	1 unit	1AE	0.601
	4P, 400 V AC												
	1			--				5SL3401-7		1	1 unit	1AE	0.660
	2			--				5SL3402-7		1	1 unit	1AE	0.660
	3			--				5SL3403-7		1	1 unit	1AE	0.660
	4			--				5SL3404-7		1	1 unit	1AE	0.660
	6			--				5SL3406-7		1	1 unit	1AE	0.501
	10			--				5SL3410-7		1	1 unit	1AE	0.489
	13			--				5SL3413-7		1	1 unit	1AE	0.490
	16			--				5SL3416-7		1	1 unit	1AE	0.479
	20			--				5SL3420-7		1	1 unit	1AE	0.491
	25			--				5SL3425-7		1	1 unit	1AE	0.500
	32			--				5SL3432-7		1	1 unit	1AE	0.599
	40			--				5SL3440-7		1	1 unit	1AE	0.616
	50			--				5SL3450-7		1	1 unit	1AE	0.640
	63			--				5SL3463-7		1	1 unit	1AE	0.630

[1] 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.

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Selection and ordering data

6000 / 3	I_n	Mounting width	DT	Characteristic B: Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic C: Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
Miniature circuit breakers 6000 A													
	1P, 230/400 V AC												
	0.3	1		--				5SL6114-7		1	1 unit	1AC	0.165
	0.5			--				5SL6105-7		1	1 unit	1AC	0.159
	1			--				5SL6101-7		1	1/12 units	1AC	0.148
	1.6			--				5SL6115-7		1	1 unit	1AC	0.156
	2			--				5SL6102-7		1	1/12 units	1AC	0.124
	3			--				5SL6103-7		1	1 unit	1AC	0.132
	4			--				5SL6104-7		1	1/12 units	1AC	0.123
	6			5SL6106-6		1AB		5SL6106-7		1	1/12 units	1AC	0.122
	8			--				5SL6108-7		1	1 unit	1AC	0.133
	10			5SL6110-6		1AB		5SL6110-7		1	1/12 units	1AC	0.131
	13			5SL6113-6		1AB		5SL6113-7		1	1/12 units	1AC	0.121
	16			5SL6116-6		1AB		5SL6116-7		1	1/12 units	1AC	0.121
	20			5SL6120-6		1AB		5SL6120-7		1	1/12 units	1AC	0.121
	25			5SL6125-6		1AB		5SL6125-7		1	1/12 units	1AC	0.123
	32			5SL6132-6		1AB		5SL6132-7		1	1/12 units	1AC	0.148
	40			5SL6140-6		1AB		5SL6140-7		1	1/12 units	1AC	0.154
	50			5SL6150-6		1AB		5SL6150-7		1	1/12 units	1AC	0.160
	63			5SL6163-6		1AB		5SL6163-7		1	1/12 units	1AC	0.157
	1P+N, 230 V AC												
	0.3	2		--				5SL6514-7		1	1 unit	1AC	0.287
	0.5			--				5SL6505-7		1	1 unit	1AC	0.282
	1			--				5SL6501-7		1	1 unit	1AC	0.280
	1.6			--				5SL6515-7		1	1 unit	1AC	0.279
	2			--				5SL6502-7		1	1 unit	1AC	0.234
	3			--				5SL6503-7		1	1 unit	1AC	0.234
	4			--				5SL6504-7		1	1 unit	1AC	0.235
	6			5SL6506-6		1AB		5SL6506-7		1	1/6 units	1AC	0.226
	8			--				5SL6508-7		1	1 unit	1AC	0.235
	10			5SL6510-6		1AB		5SL6510-7		1	1/6 units	1AC	0.222
	13			5SL6513-6		1AB		5SL6513-7		1	1/6 units	1AC	0.221
	16			5SL6516-6		1AB		5SL6516-7		1	1/6 units	1AC	0.222
	20			5SL6520-6		1AB		5SL6520-7		1	1 unit	1AC	0.230
	25			5SL6525-6		1AB		5SL6525-7		1	1 unit	1AC	0.251
	32			5SL6532-6		1AB		5SL6532-7		1	1 unit	1AC	0.279
	40			5SL6540-6		1AB		5SL6540-7		1	1 unit	1AC	0.314
	50			5SL6550-6		1AB		5SL6550-7		1	1 unit	1AC	0.293
	63			5SL6563-6		1AB		5SL6563-7		1	1 unit	1AC	0.314
	2P, 400 V AC												
	0.3	2		--				5SL6214-7		1	1 unit	1AC	0.309
	0.5			--				5SL6205-7		1	1 unit	1AC	0.307
	1			--				5SL6201-7		1	1 unit	1AC	0.303
	1.6			--				5SL6215-7		1	1 unit	1AC	0.304
	2			--				5SL6202-7		1	1/6 units	1AC	0.248
	3			--				5SL6203-7		1	1/6 units	1AC	0.246
	4			--				5SL6204-7		1	1/6 units	1AC	0.247
	6			5SL6206-6		1AB		5SL6206-7		1	1/6 units	1AC	0.246
	8			--				5SL6208-7		1	1 unit	1AC	0.255
	10			5SL6210-6		1AB		5SL6210-7		1	1/6 units	1AC	0.243
	13			5SL6213-6		1AB		5SL6213-7		1	1 unit	1AC	0.249
	16			5SL6216-6		1AB		5SL6216-7		1	1/6 units	1AC	0.239
	20			5SL6220-6		1AB		5SL6220-7		1	1/6 units	1AC	0.240
	25			5SL6225-6		1AB		5SL6225-7		1	1/6 units	1AC	0.246
	32			5SL6232-6		1AB		5SL6232-7		1	1/6 units	1AC	0.294
	40			5SL6240-6		1AB		5SL6240-7		1	1 unit	1AC	0.314
	50			5SL6250-6		1AB		5SL6250-7		1	1 unit	1AC	0.325
	63			5SL6263-6		1AB		5SL6263-7		1	1 unit	1AC	0.320

[1] 1 MW (modular width) = 18 mm.

*** You can order this quantity or a multiple thereof.**

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5SL6, 6000 A

6000 / 3	I_n	Mounting width DT	Characteristic B Article No. www.siemens.com/product?Article No.	Price per PU	PG DT	Characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]									kg
Miniature circuit breakers 6000 A											
	3P, 400 V AC										
	0.3	3	--			5SL6314-7		1	1 unit	1AC	0.458
	0.5		--			5SL6305-7		1	1 unit	1AC	0.448
	1		--			5SL6301-7		1	1 unit	1AC	0.449
	1.6		--			5SL6315-7		1	1 unit	1AC	0.445
	2		--			5SL6302-7		1	1 unit	1AC	0.377
	3		--			5SL6303-7		1	1 unit	1AC	0.375
	4		--			5SL6304-7		1	1 unit	1AC	0.375
	6		5SL6306-6		1AB	5SL6306-7		1	1/4 units	1AC	0.368
	8		--			5SL6308-7		1	1 unit	1AC	0.376
	10		5SL6310-6		1AB	5SL6310-7		1	1/4 units	1AC	0.364
	13		5SL6313-6		1AB	5SL6313-7		1	1 unit	1AC	0.370
	16		5SL6316-6		1AB	5SL6316-7		1	1/4 units	1AC	0.360
	20		5SL6320-6		1AB	5SL6320-7		1	1/4 units	1AC	0.357
	25		5SL6325-6		1AB	5SL6325-7		1	1/4 units	1AC	0.365
	32		5SL6332-6		1AB	5SL6332-7		1	1/4 units	1AC	0.448
	40		5SL6340-6		1AB	5SL6340-7		1	1/4 units	1AC	0.464
	50		5SL6350-6		1AB	5SL6350-7		1	1/4 units	1AC	0.477
	63		5SL6363-6		1AB	5SL6363-7		1	1/4 units	1AC	0.470
	3P+N, 400 V AC										
	0.3	4	--			5SL6614-7		1	1 unit	1AC	0.585
	0.5		--			5SL6605-7		1	1 unit	1AC	0.576
	1		--			5SL6601-7		1	1 unit	1AC	0.573
	1.6		--			5SL6615-7		1	1 unit	1AC	0.580
	2		--			5SL6602-7		1	1 unit	1AC	0.576
	3		--			5SL6603-7		1	1 unit	1AC	0.566
	4		--			5SL6604-7		1	1 unit	1AC	0.564
	6		5SL6606-6		1AB	5SL6606-7		1	1 unit	1AC	0.604
	8		--			5SL6608-7		1	1 unit	1AC	0.563
	10		5SL6610-6		1AB	5SL6610-7		1	1 unit	1AC	0.557
	13		5SL6613-6		1AB	5SL6613-7		1	1/3 units	1AC	0.598
	16		5SL6616-6		1AB	5SL6616-7		1	1/3 units	1AC	0.560
	20		5SL6620-6		1AB	5SL6620-7		1	1 unit	1AC	0.569
	25		5SL6625-6		1AB	5SL6625-7		1	1 unit	1AC	0.605
	32		5SL6632-6		1AB	5SL6632-7		1	1 unit	1AC	0.606
	40		5SL6640-6		1AB	5SL6640-7		1	1 unit	1AC	0.590
	50		5SL6650-6		1AB	5SL6650-7		1	1 unit	1AC	0.642
	63		5SL6663-6		1AB	5SL6663-7		1	1 unit	1AC	0.600
	4P, 400 V AC										
	0.3	4	--			5SL6414-7		1	1 unit	1AC	0.611
	0.5		--			5SL6405-7		1	1 unit	1AC	0.612
	1		--			5SL6401-7		1	1 unit	1AC	0.594
	1.6		--			5SL6415-7		1	1 unit	1AC	0.660
	2		--			5SL6402-7		1	1 unit	1AC	0.580
	3		--			5SL6403-7		1	1 unit	1AC	0.585
	4		--			5SL6404-7		1	1 unit	1AC	0.492
	6		5SL6406-6		1AB	5SL6406-7		1	1 unit	1AC	0.496
	8		--			5SL6408-7		1	1 unit	1AC	0.499
	10		5SL6410-6		1AB	5SL6410-7		1	1/3 units	1AC	0.488
	13		5SL6413-6		1AB	5SL6413-7		1	1 unit	1AC	0.488
	16		5SL6416-6		1AB	5SL6416-7		1	1 unit	1AC	0.480
	20		5SL6420-6		1AB	5SL6420-7		1	1 unit	1AC	0.478
	25		5SL6425-6		1AB	5SL6425-7		1	1 unit	1AC	0.492
	32		5SL6432-6		1AB	5SL6432-7		1	1 unit	1AC	0.590
	40		5SL6440-6		1AB	5SL6440-7		1	1 unit	1AC	0.614
	50		5SL6450-6		1AB	5SL6450-7		1	1 unit	1AC	0.642
	63		5SL6463-6		1AB	5SL6463-7		1	1 unit	1AC	0.628

[1] 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.

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Selection and ordering data

10000 / 3	I_n	Mounting width	DT	Characteristic B: Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic C: Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
Miniature circuit breakers 10000 A													
	1P, 230/400 V AC												
	0.3	1		--				5SL4114-7		1	1 unit	1AC	0.165
	0.5			--				5SL4105-7		1	1 unit	1AC	0.159
	1			5SL4101-6		1AB		5SL4101-7		1	1/12 units	1AC	0.150
	1.6			--				5SL4115-7		1	1 unit	1AC	0.159
	2			5SL4102-6		1AB		5SL4102-7		1	1/12 units	1AC	0.153
	3			5SL4103-6		1AB		5SL4103-7		1	1 unit	1AC	0.161
	4			5SL4104-6		1AB		5SL4104-7		1	1/12 units	1AC	0.151
	6			5SL4106-6		1AB		5SL4106-7		1	1/12 units	1AC	0.152
	8			5SL4108-6		1AB		5SL4108-7		1	1 unit	1AC	0.161
	10		►	5SL4110-6		1AB		5SL4110-7		1	1/12 units	1AC	0.152
	13			5SL4113-6		1AB		5SL4113-7		1	1/12 units	1AC	0.150
	16		►	5SL4116-6		1AB	►	5SL4116-7		1	1/12 units	1AC	0.153
	20			5SL4120-6		1AB		5SL4120-7		1	1 unit	1AC	0.161
	25			5SL4125-6		1AB		5SL4125-7		1	1 unit	1AC	0.160
	32			5SL4132-6		1AB		5SL4132-7		1	1 unit	1AC	0.161
	40			5SL4140-6		1AB		5SL4140-7		1	1 unit	1AC	0.165
	50			5SL4150-6		1AB		5SL4150-7		1	1 unit	1AC	0.170
	63			5SL4163-6		1AB		5SL4163-7		1	1 unit	1AC	0.170
	1P+N, 230 V AC												
	0.3	2		--				5SL4514-7		1	1 unit	1AC	0.330
	0.5			--				5SL4505-7		1	1 unit	1AC	0.330
	1			5SL4501-6		1AB		5SL4501-7		1	1 unit	1AC	0.305
	1.6			--				5SL4515-7		1	1 unit	1AC	0.330
	2			5SL4502-6		1AB		5SL4502-7		1	1 unit	1AC	0.306
	3			5SL4503-6		1AB		5SL4503-7		1	1 unit	1AC	0.306
	4			5SL4504-6		1AB		5SL4504-7		1	1 unit	1AC	0.306
	6			5SL4506-6		1AB		5SL4506-7		1	1 unit	1AC	0.306
	8			5SL4508-6		1AB		5SL4508-7		1	1 unit	1AC	0.330
	10			5SL4510-6		1AB	►	5SL4510-7		1	1 unit	1AC	0.307
	13			5SL4513-6		1AB		5SL4513-7		1	1 unit	1AC	0.304
	16			5SL4516-6		1AB		5SL4516-7		1	1 unit	1AC	0.310
	20			5SL4520-6		1AB		5SL4520-7		1	1 unit	1AC	0.312
	25			5SL4525-6		1AB		5SL4525-7		1	1 unit	1AC	0.313
	32			5SL4532-6		1AB		5SL4532-7		1	1 unit	1AC	0.311
	40			5SL4540-6		1AB		5SL4540-7		1	1 unit	1AC	0.330
	50			5SL4550-6		1AB		5SL4550-7		1	1 unit	1AC	0.330
	63			5SL4563-6		1AB		5SL4563-7		1	1 unit	1AC	0.330
	2P, 400 V AC												
	0.3	2		--				5SL4214-7		1	1 unit	1AC	0.313
	0.5			--				5SL4205-7		1	1 unit	1AC	0.308
	1			5SL4201-6		1AB		5SL4201-7		1	1 unit	1AC	0.312
	1.6			--				5SL4215-7		1	1 unit	1AC	0.307
	2			5SL4202-6		1AB		5SL4202-7		1	1 unit	1AC	0.311
	3			5SL4203-6		1AB		5SL4203-7		1	1 unit	1AC	0.312
	4			5SL4204-6		1AB		5SL4204-7		1	1 unit	1AC	0.330
	6			5SL4206-6		1AB		5SL4206-7		1	1 unit	1AC	0.313
	8			5SL4208-6		1AB		5SL4208-7		1	1 unit	1AC	0.313
	10			5SL4210-6		1AB		5SL4210-7		1	1 unit	1AC	0.310
	13			5SL4213-6		1AB		5SL4213-7		1	1 unit	1AC	0.305
	16			5SL4216-6		1AB		5SL4216-7		1	1 unit	1AC	0.312
	20			5SL4220-6		1AB		5SL4220-7		1	1 unit	1AC	0.312
	25			5SL4225-6		1AB		5SL4225-7		1	1 unit	1AC	0.313
	32			5SL4232-6		1AB		5SL4232-7		1	1 unit	1AC	0.311
	40			5SL4240-6		1AB		5SL4240-7		1	1 unit	1AC	0.315
	50			5SL4250-6		1AB		5SL4250-7		1	1 unit	1AC	0.330
	63			5SL4263-6		1AB		5SL4263-7		1	1 unit	1AC	0.330

[1] 1 MW (modular width) = 18 mm.

*** You can order this quantity or a multiple thereof.**

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5SL4, 10000 A

10000 / 3		I_n	Mounting width	DT	Characteristic B Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	MW[1]											kg
Miniature circuit breakers 10000 A														
		3P, 400 V AC												
		0.3	3		--				5SL4314-7		1	1 unit	1AC	0.465
		0.5			--				5SL4305-7		1	1 unit	1AC	0.465
		1			5SL4301-6		1AB		5SL4301-7		1	1 unit	1AC	0.465
		1.6			--				5SL4315-7		1	1 unit	1AC	0.465
		2			5SL4302-6		1AB		5SL4302-7		1	1 unit	1AC	0.463
		3			5SL4303-6		1AB		5SL4303-7		1	1 unit	1AC	0.465
		4			5SL4304-6		1AB		5SL4304-7		1	1 unit	1AC	0.465
		6			5SL4306-6		1AB		5SL4306-7		1	1 unit	1AC	0.461
		8			5SL4308-6		1AB		5SL4308-7		1	1 unit	1AC	0.465
		10			5SL4310-6		1AB		5SL4310-7		1	1 unit	1AC	0.463
		13			5SL4313-6		1AB		5SL4313-7		1	1 unit	1AC	0.452
		16			5SL4316-6		1AB	▶	5SL4316-7		1	1/4 units	1AC	0.460
		20			5SL4320-6		1AB		5SL4320-7		1	1 unit	1AC	0.463
		25			5SL4325-6		1AB		5SL4325-7		1	1 unit	1AC	0.463
		32			5SL4332-6		1AB		5SL4332-7		1	1/4 units	1AC	0.455
		40			5SL4340-6		1AB		5SL4340-7		1	1 unit	1AC	0.464
		50			5SL4350-6		1AB		5SL4350-7		1	1 unit	1AC	0.489
		63			5SL4363-6		1AB		5SL4363-7		1	1 unit	1AC	0.489
		3P+N, 400 V AC												
		0.3	4		--				5SL4614-7		1	1 unit	1AC	0.660
		0.5			--				5SL4605-7		1	1 unit	1AC	0.660
		1			5SL4601-6		1AB		5SL4601-7		1	1 unit	1AC	0.660
		1.6			--				5SL4615-7		1	1 unit	1AC	0.660
		2			5SL4602-6		1AB		5SL4602-7		1	1 unit	1AC	0.660
		3			5SL4603-6		1AB		5SL4603-7		1	1 unit	1AC	0.660
		4			5SL4604-6		1AB		5SL4604-7		1	1 unit	1AC	0.660
		6			5SL4606-6		1AB		5SL4606-7		1	1 unit	1AC	0.660
		8			5SL4608-6		1AB		5SL4608-7		1	1 unit	1AC	0.660
		10			5SL4610-6		1AB		5SL4610-7		1	1 unit	1AC	0.607
		13			5SL4613-6		1AB		5SL4613-7		1	1 unit	1AC	0.598
		16			5SL4616-6		1AB		5SL4616-7		1	1 unit	1AC	0.616
		20			5SL4620-6		1AB		5SL4620-7		1	1 unit	1AC	0.614
		25			5SL4625-6		1AB		5SL4625-7		1	1 unit	1AC	0.613
		32			5SL4632-6		1AB		5SL4632-7		1	1 unit	1AC	0.610
		40			5SL4640-6		1AB		5SL4640-7		1	1 unit	1AC	0.616
		50			5SL4650-6		1AB		5SL4650-7		1	1 unit	1AC	0.660
		63			5SL4663-6		1AB		5SL4663-7		1	1 unit	1AC	0.645
		4P, 400 V AC												
		0.3	4		--				5SL4414-7		1	1 unit	1AC	0.660
		0.5			--				5SL4405-7		1	1 unit	1AC	0.660
		1			5SL4401-6		1AB		5SL4401-7		1	1 unit	1AC	0.605
		1.6			--				5SL4415-7		1	1 unit	1AC	0.660
		2			5SL4402-6		1AB		5SL4402-7		1	1 unit	1AC	0.660
		3			5SL4403-6		1AB		5SL4403-7		1	1 unit	1AC	0.660
		4			5SL4404-6		1AB		5SL4404-7		1	1 unit	1AC	0.610
		6			5SL4406-6		1AB		5SL4406-7		1	1 unit	1AC	0.611
		8			5SL4408-6		1AB		5SL4408-7		1	1 unit	1AC	0.660
		10			5SL4410-6		1AB		5SL4410-7		1	1 unit	1AC	0.614
		13			5SL4413-6		1AB		5SL4413-7		1	1 unit	1AC	0.603
		16			5SL4416-6		1AB		5SL4416-7		1	1 unit	1AC	0.614
		20			5SL4420-6		1AB		5SL4420-7		1	1 unit	1AC	0.614
		25			5SL4425-6		1AB		5SL4425-7		1	1 unit	1AC	0.614
		32			5SL4432-6		1AB		5SL4432-7		1	1 unit	1AC	0.605
		40			5SL4440-6		1AB		5SL4440-7		1	1 unit	1AC	0.619
		50			5SL4450-6		1AB		5SL4450-7		1	1 unit	1AC	0.646
		63			5SL4463-6		1AB		5SL4463-7		1	1 unit	1AC	0.650

[1] 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.

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10000 / 3		I_n	Mounting width	DT	Characteristic D Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	MW[1]							kg
Miniature circuit breakers 10000 A										
		1P, 230/400 V AC								
		0.3	1		5SL4114-8		1	1 unit	1AA	0.165
		0.5			5SL4105-8		1	1 unit	1AA	0.165
		1			5SL4101-8		1	1 unit	1AA	0.159
		1.6			5SL4115-8		1	1 unit	1AA	0.165
		2			5SL4102-8		1	1 unit	1AA	0.159
		3			5SL4103-8		1	1 unit	1AA	0.165
		4			5SL4104-8		1	1 unit	1AA	0.160
		6			5SL4106-8		1	1 unit	1AA	0.165
		8			5SL4108-8		1	1 unit	1AA	0.158
		10			5SL4110-8		1	1 unit	1AA	0.157
		13			5SL4113-8		1	1 unit	1AA	0.158
		16			5SL4116-8		1	1 unit	1AA	0.160
		20			5SL4120-8		1	1 unit	1AA	0.160
		25			5SL4125-8		1	1 unit	1AA	0.165
		32			5SL4132-8		1	1 unit	1AA	0.165
		40			5SL4140-8		1	1 unit	1AA	0.165
		50			5SL4150-8		1	1 unit	1AA	0.165
		63			5SL4163-8		1	1 unit	1AA	0.165
		1P+N, 230 V AC								
		0.3	2		5SL4514-8		1	1 unit	1AA	0.330
		0.5			5SL4505-8		1	1 unit	1AA	0.330
		1			5SL4501-8		1	1 unit	1AA	0.303
		1.6			5SL4515-8		1	1 unit	1AA	0.330
		2			5SL4502-8		1	1 unit	1AA	0.306
		3			5SL4503-8		1	1 unit	1AA	0.305
		4			5SL4504-8		1	1 unit	1AA	0.310
		6			5SL4506-8		1	1 unit	1AA	0.308
		8			5SL4508-8		1	1 unit	1AA	0.303
		10			5SL4510-8		1	1 unit	1AA	0.302
		13			5SL4513-8		1	1 unit	1AA	0.330
		16			5SL4516-8		1	1 unit	1AA	0.312
		20			5SL4520-8		1	1 unit	1AA	0.312
		25			5SL4525-8		1	1 unit	1AA	0.311
		32			5SL4532-8		1	1 unit	1AA	0.313
		40			5SL4540-8		1	1 unit	1AA	0.330
		50			5SL4550-8		1	1 unit	1AA	0.329
		63			5SL4563-8		1	1 unit	1AA	0.330
		2P, 400 V AC								
		0.3	2		5SL4214-8		1	1 unit	1AA	0.330
		0.5			5SL4205-8		1	1 unit	1AA	0.296
		1			5SL4201-8		1	1 unit	1AA	0.308
		1.6			5SL4215-8		1	1 unit	1AA	0.330
		2			5SL4202-8		1	1 unit	1AA	0.310
		3			5SL4203-8		1	1/6 units	1AA	0.303
		4			5SL4204-8		1	1 unit	1AA	0.310
		6			5SL4206-8		1	1 unit	1AA	0.313
		8			5SL4208-8		1	1 unit	1AA	0.305
		10			5SL4210-8		1	1 unit	1AA	0.300
		13			5SL4213-8		1	1 unit	1AA	0.330
		16			5SL4216-8		1	1 unit	1AA	0.309
		20			5SL4220-8		1	1 unit	1AA	0.309
		25			5SL4225-8		1	1 unit	1AA	0.310
		32			5SL4232-8		1	1 unit	1AA	0.313
		40			5SL4240-8		1	1 unit	1AA	0.315
		50			5SL4250-8		1	1 unit	1AA	0.330
		63			5SL4263-8		1	1 unit	1AA	0.330

[1] 1 MW (modular width) = 18 mm.

*** You can order this quantity or a multiple thereof.**

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5SL4, 10000 A

10000 / 3		I_n	Mounting width	DT	Characteristic D Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	MW[1]							kg
Miniature circuit breakers 10000 A										
		3P, 400 V AC								
		0.3	3		5SL4314-8		1	1 unit	1AA	0.465
		0.5			5SL4305-8		1	1 unit	1AA	0.465
		1			5SL4301-8		1	1 unit	1AA	0.465
		1.6			5SL4315-8		1	1 unit	1AA	0.465
		2			5SL4302-8		1	1 unit	1AA	0.465
		3			5SL4303-8		1	1 unit	1AA	0.465
		4			5SL4304-8		1	1 unit	1AA	0.465
		6			5SL4306-8		1	1 unit	1AA	0.465
		8			5SL4308-8		1	1 unit	1AA	0.454
		10			5SL4310-8		1	1 unit	1AA	0.449
		13			5SL4313-8		1	1 unit	1AA	0.449
		16			5SL4316-8		1	1 unit	1AA	0.465
		20			5SL4320-8		1	1 unit	1AA	0.465
		25			5SL4325-8		1	1 unit	1AA	0.465
		32			5SL4332-8		1	1 unit	1AA	0.465
		40			5SL4340-8		1	1 unit	1AA	0.465
		50			5SL4350-8		1	1 unit	1AA	0.489
		63			5SL4363-8		1	1 unit	1AA	0.490
		3P+N, 400 V AC								
		0.3	4		5SL4614-8		1	1 unit	1AA	0.660
		0.5			5SL4605-8		1	1 unit	1AA	0.660
		1			5SL4601-8		1	1 unit	1AA	0.660
		1.6			5SL4615-8		1	1 unit	1AA	0.660
		2			5SL4602-8		1	1 unit	1AA	0.660
		3			5SL4603-8		1	1 unit	1AA	0.660
		4			5SL4604-8		1	1 unit	1AA	0.607
		6			5SL4606-8		1	1 unit	1AA	0.660
		8			5SL4608-8		1	1 unit	1AA	0.660
		10			5SL4610-8		1	1 unit	1AA	0.595
		13			5SL4613-8		1	1 unit	1AA	0.660
		16			5SL4616-8		1	1 unit	1AA	0.611
		20			5SL4620-8		1	1 unit	1AA	0.610
		25			5SL4625-8		1	1 unit	1AA	0.612
		32			5SL4632-8		1	1 unit	1AA	0.616
		40			5SL4640-8		1	1 unit	1AA	0.617
		50			5SL4650-8		1	1 unit	1AA	0.660
		63			5SL4663-8		1	1 unit	1AA	0.660
		4P, 400 V AC								
		0.3	4		5SL4414-8		1	1 unit	1AA	0.660
		0.5			5SL4405-8		1	1 unit	1AA	0.660
		1			5SL4401-8		1	1 unit	1AA	0.603
		1.6			5SL4415-8		1	1 unit	1AA	0.660
		2			5SL4402-8		1	1 unit	1AA	0.660
		3			5SL4403-8		1	1 unit	1AA	0.660
		4			5SL4404-8		1	1 unit	1AA	0.611
		6			5SL4406-8		1	1 unit	1AA	0.615
		8			5SL4408-8		1	1 unit	1AA	0.660
		10			5SL4410-8		1	1 unit	1AA	0.596
		13			5SL4413-8		1	1 unit	1AA	0.660
		16			5SL4416-8		1	1 unit	1AA	0.609
		20			5SL4420-8		1	1 unit	1AA	0.610
		25			5SL4425-8		1	1 unit	1AA	0.660
		32			5SL4432-8		1	1 unit	1AA	0.616
		40			5SL4440-8		1	1 unit	1AA	0.618
		50			5SL4450-8		1	1 unit	1AA	0.660
		63			5SL4463-8		1	1 unit	1AA	0.649

[1] 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.

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Overview

Miniature circuit breakers are used to protect systems and installations in buildings and for industrial applications.

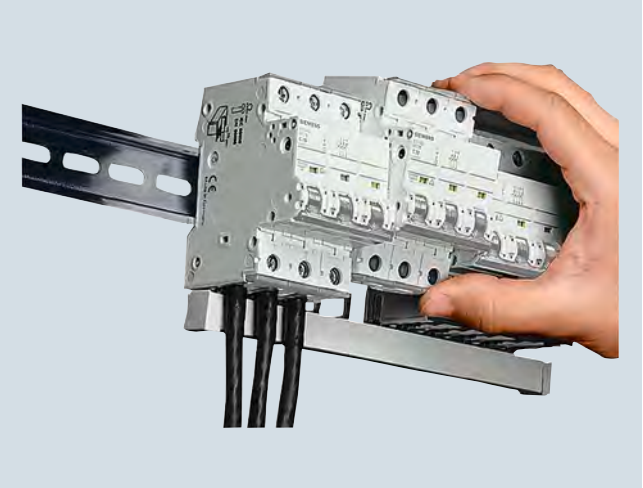
Used in industrial applications and plant engineering, miniature circuit breakers can be supplemented with additional components, such as auxiliary switches, fault signal contacts, shunt trips, undervoltage releases, remote controlled mechanism, RC units, and arc fault detection devices.

The devices are approved for worldwide use according to IEC standards for power supply systems up to 250/440 V AC. 72 V DC per pole is permitted in DC systems.

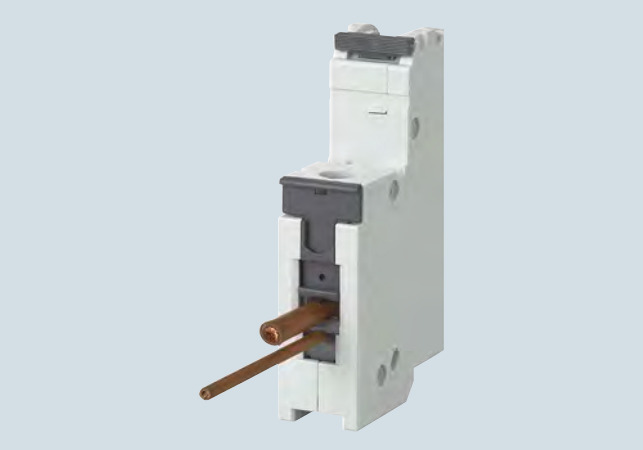
For North America, there is an additional approval according to UL 1077 for use as "supplementary protectors" in systems up to 480/277 V AC. For use in ship building, the devices also have numerous certifications according to shipping classifications; BV, DNV, GL and LRS. References to this can be found in chapter "Appendix", "Standards and approvals".

Benefits

- Optional top or bottom infeed as the terminals are identical
- Clear and visible conductor connection in front of the rear busbar facilitates controls
- The conductor is easily inserted into the terminal thanks to the large and easily accessible wiring space



- Quick and easy manual removal of miniature circuit breakers from the busbar assembly, for example if connections need to be changed
- Time-saving replacement of parts as busbars no longer need to be freed from adjacent devices



- Double terminal chambers permit accommodation of 2 wires of different cross-sections

- The 5SY miniature circuit breakers are ideal for the quick and easy mounting of auxiliary switches and fault signal contacts. Captive metal brackets on the additional components ensure the quick and easy mounting of devices on the miniature circuit breakers without the need for tools

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Technical specifications

			5SY6	5SY4	5SY5	5SY7	5SY8	5SP4
Standards			EN 60898-1	EN 60898-1	EN 60898-2	EN 60898-1	EN 60947-2	EN 60898-1
Approvals			see chapter "Appendix"					
Rated voltage U_n		V AC V DC	230/400 --	230/400 --	230/400 220/440/ 880[5]	230/400 --	230/400 --	230/400 --
Operational voltage								
	Min.	V AC/DC/pole	24	24	24	24	24	24
Acc. to EN 60898-1/-2 and EN 60947-2	Max.	V DC/pole	72[4]	72[4]	250	72[4]	72[4]	72
	Max.	V AC	250/440	250/440	250/440	250/440	250/440	250/440
Acc. to UL 1077 and CSA C22.2 No.235	Max.	V AC	480/277	480/277	--	480/277	480/277	480/277
	Max.	V DC	60	60[6]	--	60[6]	60[6]	60
Breaking capacity[1]								
• I_{cn} acc. to IEC/EN 60898-1		kA AC	6	10	10	15	--	10
• I_{cn} acc. to IEC/EN 60898-2		kA DC	10	10	10	15	--	10
• I_{cu} acc. to IEC/EN 60947-2		kA AC kA DC	30 ... 10[1] 15	35 ... 10[1] 15	35 ... 10[1] 15	50 ... 15[1] 15	70 ... 20[1] 15	10 15
• Acc. to UL1077 and CSA C22.2 No.235		kA AC	5	5	--	5	5	5
Insulation coordination								
• Rated insulation voltage		V AC V DC/pole	250/440 --	--	250	--	--	--
Rated frequency		Hz	50/60					
Pollution degree for overvoltage category			3/III[3]					
Touch protection	Acc. to EN 50274		Yes					
Handle end position, sealable			Yes					
Degree of protection	Acc. to EN 60529		IP20 with connected conductors, IP40 in the area of the handle with distribution cover					
CFC and silicone-free			Yes					
Mounting								
• Snap-on fixing system			Yes					--
• Standard mounting rail and screw fixing			--					Yes
Terminals	± Screw (Pozidriv)		2					
• Tunnel terminals at both ends			--					Yes
• Combined terminals at both ends			Yes					--
• Terminal tightening torque		Nm lbs/in.	2.5 ... 3 22 ... 26					2.5 ... 3.5 22 ... 31
Conductor cross-sections								
• Solid and stranded		mm^2	0.75 ... 35					4 ... 50
• Finely stranded, with end sleeve		mm^2	0.75 ... 25					1.5 ... 35
• AWG conductors (Cu 60/75 °C $I_n \leq 40$ A; 60 °C $I_n > 40$ A)		AWG	14 ... 4					14 ... 2
Mains connection								
• AC			Any					
• DC			Any		[2]	Any		
Mounting position			Any					
Endurance On average, with rated load		Actuations Actuations	20000 10000 for 5SY5 at 40 A, 50 A and 63 A					
Ambient temperature		°C	-25 ... +55, max. 95 % humidity					
Storage temperature		°C	-40 ... +75					
Resistance to climate	Acc. to IEC 60068-2-30		6 cycles					
Shock	Acc. to IEC 60068-2-27	m/s^2	150 at 11 ms half-sine					
Resistance to vibrations	Acc. to IEC 60068-2-6	m/s^2	50 at 25 ... 150 Hz and 60 at 35 Hz (4 s)					

1) For further information see Configuration Manual "Miniature circuit breakers" at: www.siemens.com/lowvoltage/manuals.

2) Ensure compliance with the specified polarity when connecting DC.

3) 5SY54.. 4-pole, degree of pollution 2 at overvoltage category II.

4) Exempt: C/D 0.3 A ... 0.5 A

5) 5SY54.. 4-pole 880 V is not a standardized voltage acc. to EN 60898-1, suitable for max. 1000 V DC, if the four poles are connected in series.

6) Valid for 1-pole switching devices only.

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Selection and ordering data

6000 / 3	I_n	Mounting width	DT	Characteristic B Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
Miniature circuit breakers 6000 A													
	1P, 230/400 V AC												
	0.3	1		--				5SY6114-7		1	1 unit	1AC	0.168
	0.5			--				5SY6105-7		1	1/12 units	1AC	0.157
	1			--				5SY6101-7		1	1/12 units	1AC	0.155
	1.6			--				5SY6115-7		1	1 unit	1AC	0.162
	2			5SY6102-6		1AB	►	5SY6102-7		1	1/12 units	1AC	0.157
	3			--				5SY6103-7		1	1/12 units	1AC	0.152
	4			5SY6104-6		1AB	►	5SY6104-7		1	1/12 units	1AC	0.152
	5			--				5SY6111-7		1	1 unit	1AC	0.161
	6		►	5SY6106-6		1AB	►	5SY6106-7		1	1/12 units	1AC	0.150
	8			--				5SY6108-7		1	1/12 units	1AC	0.150
	10		►	5SY6110-6		1AB	►	5SY6110-7		1	1/12 units	1AC	0.154
	13			5SY6113-6		1AB		5SY6113-7		1	1/12 units	1AC	0.152
	15			--				5SY6118-7		1	1 unit	1AC	0.158
	16		►	5SY6116-6		1AB	►	5SY6116-7		1	1/12 units	1AC	0.155
	20			5SY6120-6		1AB		5SY6120-7		1	1/12 units	1AC	0.154
	25			5SY6125-6		1AB		5SY6125-7		1	1/12 units	1AC	0.153
	30			--				5SY6130-7		1	1 unit	1AC	0.148
	32			5SY6132-6		1AB		5SY6132-7		1	1/12 units	1AC	0.154
	40			5SY6140-6		1AB		5SY6140-7		1	1/12 units	1AC	0.154
	50			5SY6150-6		1AB		5SY6150-7		1	1/12 units	1AC	0.160
	63			5SY6163-6		1AB		5SY6163-7		1	1/12 units	1AC	0.164
	1P+N, 230 V AC												
	0.3	2		--				5SY6514-7		1	1 unit	1AC	0.328
	0.5			--				5SY6505-7		1	1 unit	1AC	0.324
	1			--				5SY6501-7		1	1 unit	1AC	0.319
	1.6			--				5SY6515-7		1	1 unit	1AC	0.311
	2			5SY6506-6		1AB		5SY6502-7		1	1 unit	1AC	0.321
	3			--				5SY6503-7		1	1 unit	1AC	0.311
	4			5SY6510-6		1AB		5SY6504-7		1	1 unit	1AC	0.313
	6			5SY6513-6		1AB		5SY6506-7		1	1/6 units	1AC	0.302
	8			--				5SY6508-7		1	1 unit	1AC	0.313
	10			5SY6510-6		1AB		5SY6510-7		1	1/6 units	1AC	0.302
	13			5SY6513-6		1AB		5SY6513-7		1	1/6 units	1AC	0.309
	16			5SY6516-6		1AB		5SY6516-7		1	1/6 units	1AC	0.302
	20			5SY6520-6		1AB		5SY6520-7		1	1 unit	1AC	0.313
	25			5SY6525-6		1AB		5SY6525-7		1	1 unit	1AC	0.314
	32			5SY6532-6		1AB		5SY6532-7		1	1 unit	1AC	0.317
	40			5SY6540-6		1AB		5SY6540-7		1	1 unit	1AC	0.317
	50			5SY6550-6		1AB		5SY6550-7		1	1 unit	1AC	0.323
	63			5SY6563-6		1AB		5SY6563-7		1	1 unit	1AC	0.344
	2P, 400 V AC												
	0.3	2		--				5SY6214-7		1	1 unit	1AC	0.325
	0.5			--				5SY6205-7		1	1 unit	1AC	0.322
	1			--				5SY6201-7		1	1/6 units	1AC	0.313
	1.6			--				5SY6215-7		1	1 unit	1AC	0.316
	2			--			►	5SY6202-7		1	1/6 units	1AC	0.316
	3			--				5SY6203-7		1	1/6 units	1AC	0.305
	4			--			►	5SY6204-7		1	1/6 units	1AC	0.304
	5			--				5SY6211-7		1	1 unit	1AC	0.297
	6			5SY6206-6		1AB	►	5SY6206-7		1	1/6 units	1AC	0.302
	8			--				5SY6208-7		1	1 unit	1AC	0.309
	10			5SY6210-6		1AB	►	5SY6210-7		1	1/6 units	1AC	0.302
	13			5SY6213-6		1AB		5SY6213-7		1	1 unit	1AC	0.316
	15			--				5SY6218-7		1	1 unit	1AC	0.294
	16			5SY6216-6		1AB	►	5SY6216-7		1	1/6 units	1AC	0.302
	20			5SY6220-6		1AB		5SY6220-7		1	1/6 units	1AC	0.309
	25			5SY6225-6		1AB		5SY6225-7		1	1/6 units	1AC	0.309
	30			--				5SY6230-7		1	1 unit	1AC	0.300
	32			5SY6232-6		1AB		5SY6232-7		1	1/6 units	1AC	0.310
	40			5SY6240-6		1AB		5SY6240-7		1	1 unit	1AC	0.316
	50			5SY6250-6		1AB		5SY6250-7		1	1 unit	1AC	0.328
	63			5SY6263-6		1AB		5SY6263-7		1	1 unit	1AC	0.337

[1] 1 MW (modular width) = 18 mm.

*** You can order this quantity or a multiple thereof.**

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5SY6, 6000 A

6000 / 3	I_n	Mounting width	DT	Characteristic B Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
Miniature circuit breakers 6000 A													
	3P, 400 V AC												
	0.3	3		--				5SY6314-7		1	1 unit	1AC	0.483
	0.5			--				5SY6305-7		1	1 unit	1AC	0.478
	1			--				5SY6301-7		1	1 unit	1AC	0.472
	1.6			--				5SY6315-7		1	1 unit	1AC	0.470
	2			--				5SY6302-7		1	1/4 units	1AC	0.474
	3			--				5SY6303-7		1	1 unit	1AC	0.463
	4			--				5SY6304-7		1	1/4 units	1AC	0.464
	5			--				5SY6311-7		1	1 unit	1AC	0.455
	6			5SY6306-6		1AB	►	5SY6306-7		1	1/4 units	1AC	0.453
	8			--				5SY6308-7		1	1 unit	1AC	0.458
	10			5SY6310-6		1AB	►	5SY6310-7		1	1/4 units	1AC	0.452
	13			5SY6313-6		1AB		5SY6313-7		1	1 unit	1AC	0.469
	15			--				5SY6318-7		1	1 unit	1AC	0.461
	16		►	5SY6316-6		1AB	►	5SY6316-7		1	1/4 units	1AC	0.453
	20			5SY6320-6		1AB		5SY6320-7		1	1/4 units	1AC	0.468
	25			5SY6325-6		1AB		5SY6325-7		1	1/4 units	1AC	0.464
	30			--				5SY6330-7		1	1 unit	1AC	0.451
	32			5SY6332-6		1AB	►	5SY6332-7		1	1/4 units	1AC	0.464
	40			5SY6340-6		1AB		5SY6340-7		1	1/4 units	1AC	0.470
	50			5SY6350-6		1AB		5SY6350-7		1	1/4 units	1AC	0.482
	63			5SY6363-6		1AB		5SY6363-7		1	1/4 units	1AC	0.499
	3P+N, 400 V AC												
	0.3	4		--				5SY6614-7		1	1 unit	1AC	0.631
	0.5			--				5SY6605-7		1	1 unit	1AC	0.636
	1			--				5SY6601-7		1	1 unit	1AC	0.635
	1.6			--				5SY6615-7		1	1 unit	1AC	0.631
	2			--				5SY6602-7		1	1 unit	1AC	0.642
	3			--				5SY6603-7		1	1 unit	1AC	0.617
	4			--				5SY6604-7		1	1 unit	1AC	0.616
	6			5SY6606-6		1AB		5SY6606-7		1	1 unit	1AC	0.610
	8			--				5SY6608-7		1	1 unit	1AC	0.607
	10			5SY6610-6		1AB		5SY6610-7		1	1 unit	1AC	0.608
	13			5SY6613-6		1AB		5SY6613-7		1	1/3 units	1AC	0.620
	16			5SY6616-6		1AB		5SY6616-7		1	1/3 units	1AC	0.604
	20			5SY6620-6		1AB		5SY6620-7		1	1 unit	1AC	0.621
	25			5SY6625-6		1AB		5SY6625-7		1	1 unit	1AC	0.623
	32			5SY6632-6		1AB		5SY6632-7		1	1 unit	1AC	0.627
	40			5SY6640-6		1AB		5SY6640-7		1	1 unit	1AC	0.625
	50			5SY6650-6		1AB		5SY6650-7		1	1 unit	1AC	0.644
	63			5SY6663-6		1AB		5SY6663-7		1	1 unit	1AC	0.673
	4P, 400 V AC												
	0.3	4		--				5SY6414-7		1	1 unit	1AC	0.640
	0.5			--				5SY6405-7		1	1 unit	1AC	0.644
	1			--				5SY6401-7		1	1 unit	1AC	0.626
	1.6			--				5SY6415-7		1	1 unit	1AC	0.621
	2			--				5SY6402-7		1	1 unit	1AC	0.634
	3			--				5SY6403-7		1	1 unit	1AC	0.623
	4			--				5SY6404-7		1	1 unit	1AC	0.615
	6			5SY6406-6		1AB		5SY6406-7		1	1 unit	1AC	0.606
	8			--				5SY6408-7		1	1 unit	1AC	0.608
	10			5SY6410-6		1AB		5SY6410-7		1	1/3 units	1AC	0.604
	13			5SY6413-6		1AB		5SY6413-7		1	1 unit	1AC	0.624
	16			5SY6416-6		1AB		5SY6416-7		1	1/3 units	1AC	0.604
	20			5SY6420-6		1AB		5SY6420-7		1	1/3 units	1AC	0.637
	25			5SY6425-6		1AB		5SY6425-7		1	1/3 units	1AC	0.619
	32			5SY6432-6		1AB		5SY6432-7		1	1/3 units	1AC	0.622
	40			5SY6440-6		1AB		5SY6440-7		1	1/3 units	1AC	0.627
	50			5SY6450-6		1AB		5SY6450-7		1	1 unit	1AC	0.646
	63			5SY6463-6		1AB		5SY6463-7		1	1/3 units	1AC	0.626

[1] 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.

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Selection and ordering data

10000 / 3	I_n	Mounting width	DT	Characteristic A: Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic B: Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
Miniature circuit breakers 10000 A													
	1P, 230/400 V AC												
	0.5	1		5SY4105-5		1AA		--					
	1			5SY4101-5		1AA		--					
	1.6			5SY4115-5		1AA		--					
	2			5SY4102-5		1AA		5SY4102-6		1	1 unit	1AB	0.170
	3			5SY4103-5		1AA		--					
	4			5SY4104-5		1AA		5SY4104-6		1	1 unit	1AB	0.165
	6			5SY4106-5		1AA	►	5SY4106-6		1	1/12 units	1AB	0.161
	8			5SY4108-5		1AA		--					
	10			5SY4110-5		1AA	►	5SY4110-6		1	1/12 units	1AB	0.156
	13			5SY4113-5		1AA		5SY4113-6		1	1 unit	1AB	0.161
	16			5SY4116-5		1AA	►	5SY4116-6		1	1/12 units	1AB	0.157
	20			5SY4120-5		1AA		5SY4120-6		1	1 unit	1AB	0.165
	25			5SY4125-5		1AA		5SY4125-6		1	1 unit	1AB	0.163
	32			5SY4132-5		1AA		5SY4132-6		1	1 unit	1AB	0.166
	40			5SY4140-5		1AA		5SY4140-6		1	1 unit	1AB	0.167
	50			5SY4150-5		1AA		5SY4150-6		1	1 unit	1AB	0.168
	63			5SY4163-5		1AA		5SY4163-6		1	1 unit	1AB	0.175
	80			--				5SY4180-6		1	1 unit	1AB	0.153
	1P+N, 230 V AC												
	1	2		5SY4501-5		1AA		--					
	1.6			5SY4515-5		1AA		--					
	2			5SY4502-5		1AA		--					
	3			5SY4503-5		1AA		--					
	4			5SY4504-5		1AA		--					
	6			5SY4506-5		1AA		5SY4506-6		1	1 unit	1AB	0.313
	8			5SY4508-5		1AA		--					
	10			5SY4510-5		1AA		5SY4510-6		1	1 unit	1AB	0.312
	13			5SY4513-5		1AA		5SY4513-6		1	1/6 units	1AB	0.307
	16			5SY4516-5		1AA		5SY4516-6		1	1/6 units	1AB	0.311
	20			5SY4520-5		1AA		5SY4520-6		1	1 unit	1AB	0.294
	25			5SY4525-5		1AA		5SY4525-6		1	1 unit	1AB	0.320
	32			5SY4532-5		1AA		5SY4532-6		1	1 unit	1AB	0.322
	40			5SY4540-5		1AA		5SY4540-6		1	1 unit	1AB	0.321
	50			5SY4550-5		1AA		5SY4550-6		1	1 unit	1AB	0.319
	63			5SY4563-5		1AA		5SY4563-6		1	1 unit	1AB	0.330
	2P, 400 V AC												
	0.5	2		5SY4205-5		1AA		--					
	1			5SY4201-5		1AA		--					
	1.6			5SY4215-5		1AA		--					
	2			5SY4202-5		1AA		--					
	3			5SY4203-5		1AA		--					
	4			5SY4204-5		1AA		--					
	6			5SY4206-5		1AA		5SY4206-6		1	1 unit	1AB	0.312
	8			5SY4208-5		1AA		--					
	10			5SY4210-5		1AA		5SY4210-6		1	1/6 units	1AB	0.304
	13			5SY4213-5		1AA		5SY4213-6		1	1 unit	1AB	0.314
	16			5SY4216-5		1AA		5SY4216-6		1	1/6 units	1AB	0.309
	20			5SY4220-5		1AA		5SY4220-6		1	1 unit	1AB	0.312
	25			5SY4225-5		1AA		5SY4225-6		1	1 unit	1AB	0.316
	32			5SY4232-5		1AA		5SY4232-6		1	1 unit	1AB	0.322
	40			5SY4240-5		1AA		5SY4240-6		1	1 unit	1AB	0.321
	50			5SY4250-5		1AA		5SY4250-6		1	1 unit	1AB	0.328
	63			5SY4263-5		1AA		5SY4263-6		1	1 unit	1AB	0.339
	80			--				5SY4280-6		1	1 unit	1AB	0.311

[1] 1 MW (modular width) = 18 mm.

*** You can order this quantity or a multiple thereof.**

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5SY4, 10000 A

10000 / 3	I_n	Mounting width	DT	Characteristic A: Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic B: Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
Miniature circuit breakers 10000 A													
	3P, 400 V AC												
	0.5	3		5SY4305-5		1AA		--					
	1			5SY4301-5		1AA		--					
	1.6			5SY4315-5		1AA		--					
	2			5SY4302-5		1AA		--					
	3			5SY4303-5		1AA		--					
	4			5SY4304-5		1AA		--					
	6			5SY4306-5		1AA		5SY4306-6		1	1 unit	1AB	0.467
	8			5SY4308-5		1AA		--					
	10			5SY4310-5		1AA		5SY4310-6		1	1 unit	1AB	0.439
	13			5SY4313-5		1AA		5SY4313-6		1	1 unit	1AB	0.463
	16			5SY4316-5		1AA	►	5SY4316-6		1	1/4 units	1AB	0.462
	20			5SY4320-5		1AA		5SY4320-6		1	1 unit	1AB	0.461
	25			5SY4325-5		1AA		5SY4325-6		1	1 unit	1AB	0.469
	32			5SY4332-5		1AA		5SY4332-6		1	1/4 units	1AB	0.473
	40			5SY4340-5		1AA		5SY4340-6		1	1 unit	1AB	0.478
	50			5SY4350-5		1AA		5SY4350-6		1	1 unit	1AB	0.493
	63			5SY4363-5		1AA		5SY4363-6		1	1 unit	1AB	0.506
	80			--				5SY4380-6		1	1 unit	1AB	0.508
	3P+N, 400 V AC												
	1	4		5SY4601-5		1AA		--					
	1.6			5SY4615-5		1AA		--					
	2			5SY4602-5		1AA		--					
	3			5SY4603-5		1AA		--					
	4			5SY4604-5		1AA		--					
	6			5SY4606-5		1AA		5SY4606-6		1	1 unit	1AB	0.617
	8			5SY4608-5		1AA		--					
	10			5SY4610-5		1AA		5SY4610-6		1	1 unit	1AB	0.612
	13			5SY4613-5		1AA		5SY4613-6		1	1 unit	1AB	0.596
	16			5SY4616-5		1AA		5SY4616-6		1	1 unit	1AB	0.614
	20			5SY4620-5		1AA		5SY4620-6		1	1 unit	1AB	0.612
	25			5SY4625-5		1AA		5SY4625-6		1	1 unit	1AB	0.624
	32			5SY4632-5		1AA		5SY4632-6		1	1 unit	1AB	0.634
	40			5SY4640-5		1AA		5SY4640-6		1	1 unit	1AB	0.616
	50			5SY4650-5		1AA		5SY4650-6		1	1 unit	1AB	0.667
	63			5SY4663-5		1AA		5SY4663-6		1	1 unit	1AB	0.673
	4P, 400 V AC												
	1	4		5SY4401-5		1AA		--					
	1.6			5SY4415-5		1AA		--					
	2			5SY4402-5		1AA		--					
	3			5SY4403-5		1AA		--					
	4			5SY4404-5		1AA		--					
	6			5SY4406-5		1AA		5SY4406-6		1	1 unit	1AB	0.612
	8			5SY4408-5		1AA		--					
	10			5SY4410-5		1AA		5SY4410-6		1	1 unit	1AB	0.613
	13			5SY4413-5		1AA		5SY4413-6		1	1 unit	1AB	0.650
	16			5SY4416-5		1AA		5SY4416-6		1	1 unit	1AB	0.621
	20			5SY4420-5		1AA		5SY4420-6		1	1 unit	1AB	0.610
	25			5SY4425-5		1AA		5SY4425-6		1	1 unit	1AB	0.622
	32			5SY4432-5		1AA		5SY4432-6		1	1 unit	1AB	0.632
	40			5SY4440-5		1AA		5SY4440-6		1	1 unit	1AB	0.627
	50			5SY4450-5		1AA		5SY4450-6		1	1 unit	1AB	0.650
	63			5SY4463-5		1AA		5SY4463-6		1	1 unit	1AB	0.660
	80			--				5SY4480-6		1	1 unit	1AB	0.692

[1] 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.

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10000 / 3		I_n	Mounting width	DT	Characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic D Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	MW[1]											kg
Miniature circuit breakers 10000 A														
		1P, 230/400 V AC												
		0.3	1		5SY4114-7		1AC		5SY4114-8		1	1 unit	1AA	0.166
		0.5			5SY4105-7		1AC		5SY4105-8		1	1 unit	1AA	0.166
		1			5SY4101-7		1AC		5SY4101-8		1	1 unit	1AA	0.165
		1.6			5SY4115-7		1AC		5SY4115-8		1	1 unit	1AA	0.164
		2		▶	5SY4102-7		1AC		5SY4102-8		1	1/12 units	1AA	0.155
		3			5SY4103-7		1AC		5SY4103-8		1	1 unit	1AA	0.161
		4		▶	5SY4104-7		1AC		5SY4104-8		1	1/12 units	1AA	0.150
		5			5SY4111-7		1AC		--					
		6		▶	5SY4106-7		1AC		5SY4106-8		1	1 unit	1AA	0.160
		8			5SY4108-7		1AC		5SY4108-8		1	1 unit	1AA	0.155
		10		▶	5SY4110-7		1AC		5SY4110-8		1	1/12 units	1AA	0.147
		13			5SY4113-7		1AC		5SY4113-8		1	1 unit	1AA	0.157
		15			5SY4118-7		1AC		--					
		16		▶	5SY4116-7		1AC		5SY4116-8		1	1 unit	1AA	0.157
		20			5SY4120-7		1AC		5SY4120-8		1	1 unit	1AA	0.162
		25			5SY4125-7		1AC		5SY4125-8		1	1 unit	1AA	0.160
		30			5SY4130-7		1AC		--					
		32			5SY4132-7		1AC		5SY4132-8		1	1 unit	1AA	0.167
		35			5SY4135-7		1AC		--					
		40			5SY4140-7		1AC		5SY4140-8		1	1 unit	1AA	0.166
		45			5SY4145-7		1AC		--					
		50			5SY4150-7		1AC		5SY4150-8		1	1 unit	1AA	0.164
		60			5SY4160-7		1AC		--					
		63			5SY4163-7		1AC		5SY4163-8		1	1 unit	1AA	0.167
		80			5SY4180-7		1AC		--					
		1P+N, 230 V AC												
		0.3	2		5SY4514-7		1AC		5SY4514-8		1	1 unit	1AA	0.324
		0.5			5SY4505-7		1AC		5SY4505-8		1	1 unit	1AA	0.323
		1			5SY4501-7		1AC		5SY4501-8		1	1 unit	1AA	0.320
		1.6			5SY4515-7		1AC		5SY4515-8		1	1 unit	1AA	0.321
		2			5SY4502-7		1AC		5SY4502-8		1	1 unit	1AA	0.317
		3			5SY4503-7		1AC		5SY4503-8		1	1 unit	1AA	0.312
		4			5SY4504-7		1AC		5SY4504-8		1	1 unit	1AA	0.308
		6			5SY4506-7		1AC		5SY4506-8		1	1 unit	1AA	0.311
		8			5SY4508-7		1AC		5SY4508-8		1	1 unit	1AA	0.307
		10			5SY4510-7		1AC		5SY4510-8		1	1 unit	1AA	0.301
		13			5SY4513-7		1AC		5SY4513-8		1	1 unit	1AA	0.301
		16			5SY4516-7		1AC		5SY4516-8		1	1 unit	1AA	0.304
		20			5SY4520-7		1AC		5SY4520-8		1	1 unit	1AA	0.317
		25			5SY4525-7		1AC		5SY4525-8		1	1 unit	1AA	0.313
		32			5SY4532-7		1AC		5SY4532-8		1	1 unit	1AA	0.323
		40			5SY4540-7		1AC		5SY4540-8		1	1 unit	1AA	0.326
		50			5SY4550-7		1AC		5SY4550-8		1	1 unit	1AA	0.322
		63			5SY4563-7		1AC		5SY4563-8		1	1 unit	1AA	0.324
		80			5SY4580-7		1AC		--					
		2P, 400 V AC												
		0.3	2		5SY4214-7		1AC		5SY4214-8		1	1 unit	1AA	0.322
		0.5			5SY4205-7		1AC		5SY4205-8		1	1 unit	1AA	0.326
		1			5SY4201-7		1AC		5SY4201-8		1	1 unit	1AA	0.322
		1.6			5SY4215-7		1AC		5SY4215-8		1	1 unit	1AA	0.316
		2		▶	5SY4202-7		1AC		5SY4202-8		1	1 unit	1AA	0.319
		3			5SY4203-7		1AC		5SY4203-8		1	1 unit	1AA	0.312
		4			5SY4204-7		1AC		5SY4204-8		1	1 unit	1AA	0.309
		5			5SY4211-7		1AC		--					
		6		▶	5SY4206-7		1AC		5SY4206-8		1	1 unit	1AA	0.310
		8			5SY4208-7		1AC		5SY4208-8		1	1 unit	1AA	0.303
		10		▶	5SY4210-7		1AC		5SY4210-8		1	1 unit	1AA	0.304
		13			5SY4213-7		1AC		5SY4213-8		1	1 unit	1AA	0.307
		15			5SY4218-7		1AC		--					
		16		▶	5SY4216-7		1AC		5SY4216-8		1	1 unit	1AA	0.303
		20			5SY4220-7		1AC		5SY4220-8		1	1 unit	1AA	0.315
		25			5SY4225-7		1AC		5SY4225-8		1	1 unit	1AA	0.315
		30			5SY4230-7		1AC		--					
		32			5SY4232-7		1AC		5SY4232-8		1	1 unit	1AA	0.322
		35			5SY4235-7		1AC		--					
		40			5SY4240-7		1AC		5SY4240-8		1	1 unit	1AA	0.321
		45			5SY4245-7		1AC		--					
		50			5SY4250-7		1AC		5SY4250-8		1	1 unit	1AA	0.328
		60			5SY4260-7		1AC		--					
		63			5SY4263-7		1AC		5SY4263-8		1	1 unit	1AA	0.325
		80			5SY4280-7		1AC		--					

*** You can order this quantity or a multiple thereof.**

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5SY4, 10000 A

10000 / 3	I_n	Mounting width	DT	Characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic D Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
Miniature circuit breakers 10000 A													
	3P, 400 V AC												
	0.3	3		5SY4314-7		1AC		5SY4314-8		1	1 unit	1AA	0.481
	0.5			5SY4305-7		1AC		5SY4305-8		1	1 unit	1AA	0.484
	1			5SY4301-7		1AC		5SY4301-8		1	1 unit	1AA	0.474
	1.6			5SY4315-7		1AC		5SY4315-8		1	1 unit	1AA	0.471
	2			5SY4302-7		1AC		5SY4302-8		1	1 unit	1AA	0.469
	3			5SY4303-7		1AC		5SY4303-8		1	1 unit	1AA	0.467
	4			5SY4304-7		1AC		5SY4304-8		1	1 unit	1AA	0.456
	5			5SY4311-7		1AC		--					
	6			5SY4306-7		1AC		5SY4306-8		1	1 unit	1AA	0.461
	8			5SY4308-7		1AC		5SY4308-8		1	1 unit	1AA	0.443
	10		►	5SY4310-7		1AC		5SY4310-8		1	1 unit	1AA	0.449
	13			5SY4313-7		1AC		5SY4313-8		1	1 unit	1AA	0.450
	15			5SY4318-7		1AC		--					
	16		►	5SY4316-7		1AC		5SY4316-8		1	1/4 units	1AA	0.449
	20			5SY4320-7		1AC		5SY4320-8		1	1 unit	1AA	0.467
	25			5SY4325-7		1AC		5SY4325-8		1	1 unit	1AA	0.469
	30			5SY4330-7		1AC		--					
	32		►	5SY4332-7		1AC		5SY4332-8		1	1 unit	1AA	0.478
	35			5SY4335-7		1AC		--					
	40			5SY4340-7		1AC		5SY4340-8		1	1 unit	1AA	0.482
	45			5SY4345-7		1AC		--					
	50			5SY4350-7		1AC		5SY4350-8		1	1 unit	1AA	0.480
	60			5SY4360-7		1AC		--					
	63			5SY4363-7		1AC		5SY4363-8		1	1 unit	1AA	0.484
	80			5SY4380-7		1AC		--					
	3P+N, 400 V AC												
	0.3	4		5SY4614-7		1AC		5SY4614-8		1	1 unit	1AA	0.634
	0.5			5SY4605-7		1AC		5SY4605-8		1	1 unit	1AA	0.660
	1			5SY4601-7		1AC		5SY4601-8		1	1 unit	1AA	0.632
	1.6			5SY4615-7		1AC		5SY4615-8		1	1 unit	1AA	0.621
	2			5SY4602-7		1AC		5SY4602-8		1	1 unit	1AA	0.608
	3			5SY4603-7		1AC		5SY4603-8		1	1 unit	1AA	0.619
	4			5SY4604-7		1AC		5SY4604-8		1	1 unit	1AA	0.587
	6			5SY4606-7		1AC		5SY4606-8		1	1 unit	1AA	0.617
	8			5SY4608-7		1AC		5SY4608-8		1	1 unit	1AA	0.595
	10			5SY4610-7		1AC		5SY4610-8		1	1 unit	1AA	0.599
	13			5SY4613-7		1AC		5SY4613-8		1	1 unit	1AA	0.600
	16			5SY4616-7		1AC		5SY4616-8		1	1 unit	1AA	0.597
	20			5SY4620-7		1AC		5SY4620-8		1	1 unit	1AA	0.622
	25			5SY4625-7		1AC		5SY4625-8		1	1 unit	1AA	0.629
	32			5SY4632-7		1AC		5SY4632-8		1	1 unit	1AA	0.642
	40			5SY4640-7		1AC		5SY4640-8		1	1 unit	1AA	0.645
	50			5SY4650-7		1AC		5SY4650-8		1	1 unit	1AA	0.623
	63			5SY4663-7		1AC		5SY4663-8		1	1 unit	1AA	0.642
	80			5SY4680-7		1AC		--					
	4P, 400 V AC												
	0.3	4		5SY4414-7		1AC		5SY4414-8		1	1 unit	1AA	0.632
	0.5			5SY4405-7		1AC		5SY4405-8		1	1 unit	1AA	0.633
	1			5SY4401-7		1AC		5SY4401-8		1	1 unit	1AA	0.632
	1.6			5SY4415-7		1AC		5SY4415-8		1	1 unit	1AA	0.623
	2			5SY4402-7		1AC		5SY4402-8		1	1 unit	1AA	0.631
	3			5SY4403-7		1AC		5SY4403-8		1	1 unit	1AA	0.616
	4			5SY4404-7		1AC		5SY4404-8		1	1 unit	1AA	0.610
	6			5SY4406-7		1AC		5SY4406-8		1	1 unit	1AA	0.605
	8			5SY4408-7		1AC		5SY4408-8		1	1 unit	1AA	0.594
	10			5SY4410-7		1AC		5SY4410-8		1	1 unit	1AA	0.595
	13			5SY4413-7		1AC		5SY4413-8		1	1 unit	1AA	0.598
	16			5SY4416-7		1AC		5SY4416-8		1	1 unit	1AA	0.596
	20			5SY4420-7		1AC		5SY4420-8		1	1 unit	1AA	0.621
	25			5SY4425-7		1AC		5SY4425-8		1	1 unit	1AA	0.620
	32			5SY4432-7		1AC		5SY4432-8		1	1 unit	1AA	0.634
	40			5SY4440-7		1AC		5SY4440-8		1	1 unit	1AA	0.634
	50			5SY4450-7		1AC		5SY4450-8		1	1 unit	1AA	0.637
	63			5SY4463-7		1AC		5SY4463-8		1	1 unit	1AA	0.647
	80			5SY4480-7		1AC		--					

[1] 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.

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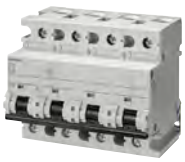
Selection and ordering data

10000

	I_n	Mounting width	DT	Characteristic B Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]							kg
Miniature circuit breakers 10000 A, high-current									
	1P, 230/400 V AC								
	80	1.5		5SP4180-6		1	1 unit	1AB	0.271
	100			5SP4191-6		1	1 unit	1AB	0.269
	125			5SP4192-6		1	1 unit	1AB	0.248
	2P, 400 V AC								
	80	3		5SP4280-6		1	1 unit	1AB	0.533
	100			5SP4291-6		1	1 unit	1AB	0.529
	125			5SP4292-6		1	1 unit	1AB	0.516
	3P, 400 V AC								
	80	4.5		5SP4380-6		1	1 unit	1AB	0.785
	100			5SP4391-6		1	1 unit	1AB	0.789
	125			5SP4392-6		1	1 unit	1AB	0.795
	4P, 400 V AC								
	80	6		5SP4480-6		1	1 unit	1AB	1.032
	100			5SP4491-6		1	1 unit	1AB	1.034
	125			5SP4492-6		1	1 unit	1AB	1.066

10000

	I_n	Mounting width	DT	Characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic D Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
Miniature circuit breakers 10000 A, high-current													
	1P, 230/400 V AC												
	80	1.5		5SP4180-7		1AC		5SP4180-8		1	1 unit	1AA	0.268
	100			5SP4191-7		1AC		5SP4191-8		1	1 unit	1AA	0.266
	125			5SP4192-7		1AC		--					
	2P, 400 V AC												
	80	3		5SP4280-7		1AC		5SP4280-8		1	1 unit	1AA	0.526
	100			5SP4291-7		1AC		5SP4291-8		1	1 unit	1AA	0.523
	125			5SP4292-7		1AC		--					
	3P, 400 V AC												
	80	4.5	▶	5SP4380-7		1AC		5SP4380-8		1	1 unit	1AA	0.772
	100		▶	5SP4391-7		1AC		5SP4391-8		1	1 unit	1AA	0.771
	125			5SP4392-7		1AC		--					
	**4P, 400 V AC**												
	80	6		5SP4480-7		1AC		5SP4480-8		1	1 unit	1AA	1.031
	100			5SP4491-7		1AC		5SP4491-8		1	1 unit	1AA	1.030
	125			5SP4492-7		1AC		--					

[1] 1 MW (modular width) = 18 mm.

*** You can order this quantity or a multiple thereof.**

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5SY5, universal current, 10000 A

Selection and ordering data

10000 / 3	VDE I_n	Mounting width	DT	Characteristic B Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
Miniature circuit breakers 10000 A, universal current													
	1P, 230/400 V AC, 220 V DC												
	0.3	1		--				5SY5114-7		1	1 unit	1AC	0.174
	0.5			--				5SY5105-7		1	1 unit	1AC	0.171
	1			--				5SY5101-7		1	1 unit	1AC	0.169
	1.6			--				5SY5115-7		1	1 unit	1AC	0.167
	2			5SY5102-6		1AB		5SY5102-7		1	1 unit	1AC	0.171
	3			--				5SY5103-7		1	1 unit	1AC	0.165
	4			5SY5104-6		1AB		5SY5104-7		1	1 unit	1AC	0.164
	6			5SY5106-6		1AB		5SY5106-7		1	1 unit	1AC	0.166
	8			--				5SY5108-7		1	1 unit	1AC	0.168
	10			5SY5110-6		1AB		5SY5110-7		1	1 unit	1AC	0.164
	13			5SY5113-6		1AB		5SY5113-7		1	1 unit	1AC	0.168
	16			5SY5116-6		1AB		5SY5116-7		1	1 unit	1AC	0.164
	20			5SY5120-6		1AB		5SY5120-7		1	1 unit	1AC	0.167
	25			5SY5125-6		1AB		5SY5125-7		1	1 unit	1AC	0.167
	32			5SY5132-6		1AB		5SY5132-7		1	1 unit	1AC	0.168
	40			5SY5140-6		1AB		5SY5140-7		1	1 unit	1AC	0.164
	50			5SY5150-6		1AB		5SY5150-7		1	1 unit	1AC	0.172
	63			5SY5163-6		1AB		5SY5163-7		1	1 unit	1AC	0.176
	2P, 400 V AC, 440 V DC												
	0.3	2		--				5SY5214-7		1	1 unit	1AC	0.330
	0.5			--				5SY5205-7		1	1 unit	1AC	0.329
	1			--				5SY5201-7		1	1 unit	1AC	0.325
	1.6			--				5SY5215-7		1	1 unit	1AC	0.321
	2			--				5SY5202-7		1	1 unit	1AC	0.328
	3			--				5SY5203-7		1	1 unit	1AC	0.318
	4			--				5SY5204-7		1	1 unit	1AC	0.318
	6			5SY5206-6		1AB	►	5SY5206-7		1	1/6 units	1AC	0.309
	8			--				5SY5208-7		1	1 unit	1AC	0.314
	10			5SY5210-6		1AB		5SY5210-7		1	1 unit	1AC	0.315
	13			5SY5213-6		1AB		5SY5213-7		1	1 unit	1AC	0.321
	16			5SY5216-6		1AB		5SY5216-7		1	1 unit	1AC	0.314
	20			5SY5220-6		1AB		5SY5220-7		1	1 unit	1AC	0.324
	25			5SY5225-6		1AB		5SY5225-7		1	1 unit	1AC	0.320
	32			5SY5232-6		1AB		5SY5232-7		1	1 unit	1AC	0.323
	40			5SY5240-6		1AB		5SY5240-7		1	1 unit	1AC	0.322
	50			5SY5250-6		1AB		5SY5250-7		1	1 unit	1AC	0.337
	63			5SY5263-6		1AB		5SY5263-7		1	1 unit	1AC	0.350

[1] 1 MW (modular width) = 18 mm.

For application examples, see Configuration Manual "Miniature Circuit Breakers" at: www.siemens.com/lowvoltage/manuals.

* You can order this quantity or a multiple thereof.

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10000 / 3		I_n	Mounting width	DT	Characteristic B Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	MW[1]											kg
Miniature circuit breakers 10000 A, universal current														
	4P, 400 V AC, 880 V DC (max. 1000 V DC)													
		0.3	1		--				5SY5414-7		1	1 unit	1AC	0.653
		0.5			--				5SY5405-7		1	1 unit	1AC	0.646
		1			--				5SY5401-7		1	1 unit	1AC	0.634
		1.6			--				5SY5415-7		1	1 unit	1AC	0.625
		2			--				5SY5402-7		1	1 unit	1AC	0.648
		3			--				5SY5403-7		1	1 unit	1AC	0.625
		4			--				5SY5404-7		1	1 unit	1AC	0.623
		6			5SY5406-6		1AB		5SY5406-7		1	1 unit	1AC	0.625
		8			--				5SY5408-7		1	1 unit	1AC	0.614
		10			5SY5410-6		1AB		5SY5410-7		1	1 unit	1AC	0.617
		13			5SY5413-6		1AB		5SY5413-7		1	1 unit	1AC	0.630
		16			5SY5416-6		1AB		5SY5416-7		1	1 unit	1AC	0.610
		20			5SY5420-6		1AB		5SY5420-7		1	1 unit	1AC	0.627
		25			5SY5425-6		1AB		5SY5425-7		1	1 unit	1AC	0.626
		32			5SY5432-6		1AB		5SY5432-7		1	1 unit	1AC	0.629
		40			5SY5440-6		1AB		5SY5440-7		1	1 unit	1AC	0.631
		50			5SY5450-6		1AB		5SY5450-7		1	1 unit	1AC	0.651
		63			5SY5463-6		1AB		5SY5463-7		1	1 unit	1AC	0.667

[1] 1 MW (modular width) = 18 mm.

Note:

The 5ST3600 and 5ST3630 busbars enable simple wiring of 4-pole miniature circuit breakers, see page 3/46.

For application examples, see Configuration Manual "Miniature Circuit Breakers" at: www.siemens.com/lowvoltage/manuals.

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5SY7, 15000 A

Selection and ordering data

15000	I_n	Mounting width	DT	Characteristic B Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]							kg
Miniature circuit breakers 15000 A									
	1P, 230/400 V AC								
	6	1		5SY7106-6		1	1 unit	1AB	0.161
	10			5SY7110-6		1	1 unit	1AB	0.160
	13			5SY7113-6		1	1 unit	1AB	0.162
	16			5SY7116-6		1	1 unit	1AB	0.162
	20			5SY7120-6		1	1 unit	1AB	0.161
	25			5SY7125-6		1	1 unit	1AB	0.163
	32			5SY7132-6		1	1 unit	1AB	0.165
	40			5SY7140-6		1	1 unit	1AB	0.212
	50			5SY7150-6		1	1 unit	1AB	0.170
	63			5SY7163-6		1	1 unit	1AB	0.173
	1P+N, 230 V AC								
	6	2		5SY7506-6		1	1 unit	1AB	0.314
	10			5SY7510-6		1	1 unit	1AB	0.313
	13			5SY7513-6		1	1 unit	1AB	0.318
	16			5SY7516-6		1	1 unit	1AB	0.315
	20			5SY7520-6		1	1 unit	1AB	0.311
	25			5SY7525-6		1	1 unit	1AB	0.309
	32			5SY7532-6		1	1 unit	1AB	0.321
	40			5SY7540-6		1	1 unit	1AB	0.322
	50			5SY7550-6		1	1 unit	1AB	0.330
	63			5SY7563-6		1	1 unit	1AB	0.340
	2P, 400 V AC								
	6	2		5SY7206-6		1	1 unit	1AB	0.314
	10			5SY7210-6		1	1 unit	1AB	0.310
	13			5SY7213-6		1	1 unit	1AB	0.296
	16			5SY7216-6		1	1 unit	1AB	0.317
	20			5SY7220-6		1	1 unit	1AB	0.291
	25			5SY7225-6		1	1 unit	1AB	0.317
	32			5SY7232-6		1	1 unit	1AB	0.344
	40			5SY7240-6		1	1 unit	1AB	0.324
	50			5SY7250-6		1	1 unit	1AB	0.328
	63			5SY7263-6		1	1 unit	1AB	0.339
	3P, 400 V AC								
	6	3		5SY7306-6		1	1 unit	1AB	0.463
	10			5SY7310-6		1	1 unit	1AB	0.458
	13			5SY7313-6		1	1 unit	1AB	0.467
	16			5SY7316-6		1	1 unit	1AB	0.462
	20			5SY7320-6		1	1 unit	1AB	0.460
	25			5SY7325-6		1	1 unit	1AB	0.474
	32			5SY7332-6		1	1 unit	1AB	0.476
	40			5SY7340-6		1	1 unit	1AB	0.474
	50			5SY7350-6		1	1 unit	1AB	0.486
	63			5SY7363-6		1	1 unit	1AB	0.506
	3P+N, 400 V AC								
	6	4		5SY7606-6		1	1 unit	1AB	0.632
	10			5SY7610-6		1	1 unit	1AB	0.591
	13			5SY7613-6		1	1 unit	1AB	0.622
	16			5SY7616-6		1	1 unit	1AB	0.624
	20			5SY7620-6		1	1 unit	1AB	0.614
	25			5SY7625-6		1	1 unit	1AB	0.617
	32			5SY7632-6		1	1 unit	1AB	0.634
	40			5SY7640-6		1	1 unit	1AB	0.637
	50			5SY7650-6		1	1 unit	1AB	0.648
	63			5SY7663-6		1	1 unit	1AB	0.660
	4P, 400 V AC								
	6	4		5SY7406-6		1	1 unit	1AB	0.621
	10			5SY7410-6		1	1 unit	1AB	0.610
	13			5SY7413-6		1	1 unit	1AB	0.633
	16			5SY7416-6		1	1 unit	1AB	0.601
	20			5SY7420-6		1	1 unit	1AB	0.613
	25			5SY7425-6		1	1 unit	1AB	0.630
	32			5SY7432-6		1	1 unit	1AB	0.652
	40			5SY7440-6		1	1 unit	1AB	0.611
	50			5SY7450-6		1	1 unit	1AB	0.647
	63			5SY7463-6		1	1 unit	1AB	0.671

[1] 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.

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3

15000	I_n	Mounting width	DT	Characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic D Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
Miniature circuit breakers 15000 A													
	1P, 230/400 V AC												
	0.3	1		5SY7114-7		1AC		5SY7114-8		1	1 unit	1AA	0.160
	0.5			5SY7105-7		1AC		5SY7105-8		1	1 unit	1AA	0.153
	1			5SY7101-7		1AC		5SY7101-8		1	1 unit	1AA	0.164
	1.6			5SY7115-7		1AC		5SY7115-8		1	1 unit	1AA	0.163
	2			5SY7102-7		1AC		5SY7102-8		1	1 unit	1AA	0.162
	3			5SY7103-7		1AC		5SY7103-8		1	1 unit	1AA	0.161
	4			5SY7104-7		1AC		5SY7104-8		1	1 unit	1AA	0.159
	6			5SY7106-7		1AC		5SY7106-8		1	1 unit	1AA	0.160
	8			5SY7108-7		1AC		5SY7108-8		1	1 unit	1AA	0.154
	10			5SY7110-7		1AC		5SY7110-8		1	1 unit	1AA	0.157
	13			5SY7113-7		1AC		5SY7113-8		1	1 unit	1AA	0.159
	16			5SY7116-7		1AC		5SY7116-8		1	1 unit	1AA	0.156
	20			5SY7120-7		1AC		5SY7120-8		1	1 unit	1AA	0.165
	25			5SY7125-7		1AC		5SY7125-8		1	1 unit	1AA	0.163
	32			5SY7132-7		1AC		5SY7132-8		1	1 unit	1AA	0.165
	40			5SY7140-7		1AC		5SY7140-8		1	1 unit	1AA	0.166
	50			5SY7150-7		1AC		5SY7150-8		1	1 unit	1AA	0.172
	63			5SY7163-7		1AC		5SY7163-8		1	1 unit	1AA	0.165
	1P+N, 230 V AC												
	0.3	2		5SY7514-7		1AC		5SY7514-8		1	1 unit	1AA	0.323
	0.5			5SY7505-7		1AC		5SY7505-8		1	1 unit	1AA	0.312
	1			5SY7501-7		1AC		5SY7501-8		1	1 unit	1AA	0.319
	1.6			5SY7515-7		1AC		5SY7515-8		1	1 unit	1AA	0.319
	2			5SY7502-7		1AC		5SY7502-8		1	1 unit	1AA	0.319
	3			5SY7503-7		1AC		5SY7503-8		1	1 unit	1AA	0.298
	4			5SY7504-7		1AC		5SY7504-8		1	1 unit	1AA	0.308
	6			5SY7506-7		1AC		5SY7506-8		1	1 unit	1AA	0.310
	8			5SY7508-7		1AC		5SY7508-8		1	1 unit	1AA	0.286
	10			5SY7510-7		1AC		5SY7510-8		1	1 unit	1AA	0.304
	13			5SY7513-7		1AC		5SY7513-8		1	1 unit	1AA	0.304
	16			5SY7516-7		1AC		5SY7516-8		1	1 unit	1AA	0.307
	20			5SY7520-7		1AC		5SY7520-8		1	1 unit	1AA	0.320
	25			5SY7525-7		1AC		5SY7525-8		1	1 unit	1AA	0.313
	32			5SY7532-7		1AC		5SY7532-8		1	1 unit	1AA	0.326
	40			5SY7540-7		1AC		5SY7540-8		1	1 unit	1AA	0.308
	50			5SY7550-7		1AC		5SY7550-8		1	1 unit	1AA	0.323
	63			5SY7563-7		1AC		5SY7563-8		1	1 unit	1AA	0.308
	2P, 400 V AC												
	0.3	2		5SY7214-7		1AC		5SY7214-8		1	1 unit	1AA	0.322
	0.5			5SY7205-7		1AC		5SY7205-8		1	1 unit	1AA	0.325
	1			5SY7201-7		1AC		5SY7201-8		1	1 unit	1AA	0.321
	1.6			5SY7215-7		1AC		5SY7215-8		1	1 unit	1AA	0.330
	2			5SY7202-7		1AC		5SY7202-8		1	1 unit	1AA	0.318
	3			5SY7203-7		1AC		5SY7203-8		1	1 unit	1AA	0.318
	4			5SY7204-7		1AC		5SY7204-8		1	1 unit	1AA	0.308
	6			5SY7206-7		1AC		5SY7206-8		1	1 unit	1AA	0.313
	8			5SY7208-7		1AC		5SY7208-8		1	1 unit	1AA	0.302
	10			5SY7210-7		1AC		5SY7210-8		1	1 unit	1AA	0.305
	13			5SY7213-7		1AC		5SY7213-8		1	1 unit	1AA	0.320
	16			5SY7216-7		1AC		5SY7216-8		1	1 unit	1AA	0.304
	20			5SY7220-7		1AC		5SY7220-8		1	1 unit	1AA	0.316
	25			5SY7225-7		1AC		5SY7225-8		1	1 unit	1AA	0.318
	32			5SY7232-7		1AC		5SY7232-8		1	1 unit	1AA	0.309
	40			5SY7240-7		1AC		5SY7240-8		1	1 unit	1AA	0.330
	50			5SY7250-7		1AC		5SY7250-8		1	1 unit	1AA	0.308
	63			5SY7263-7		1AC		5SY7263-8		1	1 unit	1AA	0.332

[1] 1 MW (modular width) = 18 mm.

*** You can order this quantity or a multiple thereof.**

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5SY7, 15000 A

15000	I_n	Mounting width	DT	Characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic D Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
Miniature circuit breakers 15000 A													
	3P, 400 V AC												
	0.3	3		5SY7314-7		1AC		5SY7314-8		1	1 unit	1AA	0.480
	0.5			5SY7305-7		1AC		5SY7305-8		1	1 unit	1AA	0.480
	1			5SY7301-7		1AC		5SY7301-8		1	1 unit	1AA	0.458
	1.6			5SY7315-7		1AC		5SY7315-8		1	1 unit	1AA	0.470
	2			5SY7302-7		1AC		5SY7302-8		1	1 unit	1AA	0.451
	3			5SY7303-7		1AC		5SY7303-8		1	1 unit	1AA	0.460
	4			5SY7104-7		1AC		5SY7304-8		1	1 unit	1AA	0.452
	6			5SY7306-7		1AC		5SY7306-8		1	1 unit	1AA	0.470
	8			5SY7308-7		1AC		5SY7308-8		1	1 unit	1AA	0.457
	10			5SY7310-7		1AC		5SY7310-8		1	1 unit	1AA	0.450
	13			5SY7313-7		1AC		5SY7313-8		1	1 unit	1AA	0.445
	16			5SY7316-7		1AC		5SY7316-8		1	1 unit	1AA	0.451
	20			5SY7320-7		1AC		5SY7320-8		1	1 unit	1AA	0.473
	25			5SY7325-7		1AC		5SY7325-8		1	1 unit	1AA	0.469
	32			5SY7332-7		1AC		5SY7332-8		1	1 unit	1AA	0.480
	40			5SY7340-7		1AC		5SY7340-8		1	1 unit	1AA	0.478
	50			5SY7350-7		1AC		5SY7350-8		1	1 unit	1AA	0.484
	63			5SY7363-7		1AC		5SY7363-8		1	1 unit	1AA	0.492
	3P+N, 400 V AC												
	0.3	4		5SY7614-7		1AC		5SY7614-8		1	1 unit	1AA	0.660
	0.5			5SY7605-7		1AC		5SY7605-8		1	1 unit	1AA	0.660
	1			5SY7601-7		1AC		5SY7601-8		1	1 unit	1AA	0.660
	1.6			5SY7615-7		1AC		5SY7615-8		1	1 unit	1AA	0.660
	2			5SY7602-7		1AC		5SY7602-8		1	1 unit	1AA	0.624
	3			5SY7603-7		1AC		5SY7603-8		1	1 unit	1AA	0.660
	4			5SY7604-7		1AC		5SY7604-8		1	1 unit	1AA	0.608
	6			5SY7606-7		1AC		5SY7606-8		1	1 unit	1AA	0.590
	8			5SY7608-7		1AC		5SY7608-8		1	1 unit	1AA	0.600
	10			5SY7610-7		1AC		5SY7610-8		1	1 unit	1AA	0.593
	13			5SY7613-7		1AC		5SY7613-8		1	1 unit	1AA	0.599
	16			5SY7616-7		1AC		5SY7616-8		1	1 unit	1AA	0.585
	20			5SY7620-7		1AC		5SY7620-8		1	1 unit	1AA	0.617
	25			5SY7625-7		1AC		5SY7625-8		1	1 unit	1AA	0.621
	32			5SY7632-7		1AC		5SY7632-8		1	1 unit	1AA	0.634
	40			5SY7640-7		1AC		5SY7640-8		1	1 unit	1AA	0.645
	50			5SY7650-7		1AC		5SY7650-8		1	1 unit	1AA	0.660
	63			5SY7663-7		1AC		5SY7663-8		1	1 unit	1AA	0.643
	4P, 400 V AC												
	0.3	4		5SY7414-7		1AC		5SY7414-8		1	1 unit	1AA	0.635
	0.5			5SY7405-7		1AC		5SY7405-8		1	1 unit	1AA	0.655
	1			5SY7401-7		1AC		5SY7401-8		1	1 unit	1AA	0.630
	1.6			5SY7415-7		1AC		5SY7415-8		1	1 unit	1AA	0.660
	2			5SY7402-7		1AC		5SY7402-8		1	1 unit	1AA	0.624
	3			5SY7403-7		1AC		5SY7403-8		1	1 unit	1AA	0.616
	4			5SY7404-7		1AC		5SY7404-8		1	1 unit	1AA	0.624
	6			5SY7406-7		1AC		5SY7406-8		1	1 unit	1AA	0.615
	8			5SY7408-7		1AC		5SY7408-8		1	1 unit	1AA	0.603
	10			5SY7410-7		1AC		5SY7410-8		1	1 unit	1AA	0.602
	13			5SY7413-7		1AC		5SY7413-8		1	1 unit	1AA	0.608
	16			5SY7416-7		1AC		5SY7416-8		1	1 unit	1AA	0.598
	20			5SY7420-7		1AC		5SY7420-8		1	1 unit	1AA	0.624
	25			5SY7425-7		1AC		5SY7425-8		1	1 unit	1AA	0.622
	32			5SY7432-7		1AC		5SY7432-8		1	1 unit	1AA	0.638
	40			5SY7440-7		1AC		5SY7440-8		1	1 unit	1AA	0.636
	50			5SY7450-7		1AC		5SY7450-8		1	1 unit	1AA	0.658
	63			5SY7463-7		1AC		5SY7463-8		1	1 unit	1AA	0.654

[1] 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.

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Selection and ordering data

	I_n	Mounting width	DT	Characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic D Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
Miniature circuit breakers 25000 A													
	1P, 230/400 V AC												
	0.3	1		5SY8114-7		1AC		5SY8114-8		1	1 unit	1AA	0.165
	0.5			5SY8105-7		1AC		5SY8105-8		1	1 unit	1AA	0.165
	1			5SY8101-7		1AC		5SY8101-8		1	1 unit	1AA	0.172
	1.6			5SY8115-7		1AC		5SY8115-8		1	1 unit	1AA	0.162
	2			5SY8102-7		1AC		5SY8102-8		1	1 unit	1AA	0.162
	3			5SY8103-7		1AC		5SY8103-8		1	1 unit	1AA	0.161
	4			5SY8104-7		1AC		5SY8104-8		1	1 unit	1AA	0.158
	6			5SY8106-7		1AC		5SY8106-8		1	1 unit	1AA	0.158
	8			5SY8108-7		1AC		5SY8108-8		1	1 unit	1AA	0.156
	10			5SY8110-7		1AC		5SY8110-8		1	1 unit	1AA	0.157
	13			5SY8113-7		1AC		5SY8113-8		1	1 unit	1AA	0.154
	16			5SY8116-7		1AC		5SY8116-8		1	1 unit	1AA	0.147
	20			5SY8120-7		1AC		5SY8120-8		1	1 unit	1AA	0.165
	25			5SY8125-7		1AC		5SY8125-8		1	1 unit	1AA	0.162
	32			5SY8132-7		1AC		5SY8132-8		1	1 unit	1AA	0.165
	40			5SY8140-7		1AC		5SY8140-8		1	1 unit	1AA	0.155
	50			5SY8150-7		1AC		5SY8150-8		1	1 unit	1AA	0.170
	63			5SY8163-7		1AC		5SY8163-8		1	1 unit	1AA	0.160
	1P+N, 230 V AC												
	0.3	2		5SY8514-7		1AC		5SY8514-8		1	1 unit	1AA	0.322
	0.5			5SY8505-7		1AC		5SY8505-8		1	1 unit	1AA	0.323
	1			5SY8501-7		1AC		5SY8501-8		1	1 unit	1AA	0.330
	1.6			5SY8515-7		1AC		5SY8515-8		1	1 unit	1AA	0.324
	2			5SY8502-7		1AC		5SY8502-8		1	1 unit	1AA	0.317
	3			5SY8503-7		1AC		5SY8503-8		1	1 unit	1AA	0.318
	4			5SY8504-7		1AC		5SY8504-8		1	1 unit	1AA	0.307
	6			5SY8506-7		1AC		5SY8506-8		1	1 unit	1AA	0.319
	8			5SY8508-7		1AC		5SY8508-8		1	1 unit	1AA	0.313
	10			5SY8510-7		1AC		5SY8510-8		1	1 unit	1AA	0.320
	13			5SY8513-7		1AC		5SY8513-8		1	1 unit	1AA	0.305
	16			5SY8516-7		1AC		5SY8516-8		1	1 unit	1AA	0.297
	20			5SY8520-7		1AC		5SY8520-8		1	1 unit	1AA	0.313
	25			5SY8525-7		1AC		5SY8525-8		1	1 unit	1AA	0.312
	32			5SY8532-7		1AC		5SY8532-8		1	1 unit	1AA	0.323
	40			5SY8540-7		1AC		5SY8540-8		1	1 unit	1AA	0.325
	50			5SY8550-7		1AC		5SY8550-8		1	1 unit	1AA	0.326
	63			5SY8563-7		1AC		5SY8563-8		1	1 unit	1AA	0.336
	2P, 400 V AC												
	0.3	2		5SY8214-7		1AC		5SY8214-8		1	1 unit	1AA	0.330
	0.5			5SY8205-7		1AC		5SY8205-8		1	1 unit	1AA	0.325
	1			5SY8201-7		1AC		5SY8201-8		1	1 unit	1AA	0.313
	1.6			5SY8215-7		1AC		5SY8215-8		1	1 unit	1AA	0.316
	2			5SY8202-7		1AC		5SY8202-8		1	1 unit	1AA	0.318
	3			5SY8203-7		1AC		5SY8203-8		1	1 unit	1AA	0.346
	4			5SY8204-7		1AC		5SY8204-8		1	1 unit	1AA	0.310
	6			5SY8206-7		1AC		5SY8206-8		1	1 unit	1AA	0.309
	8			5SY8208-7		1AC		5SY8208-8		1	1 unit	1AA	0.306
	10			5SY8210-7		1AC		5SY8210-8		1	1 unit	1AA	0.301
	13			5SY8213-7		1AC		5SY8213-8		1	1 unit	1AA	0.305
	16			5SY8216-7		1AC		5SY8216-8		1	1 unit	1AA	0.304
	20			5SY8220-7		1AC		5SY8220-8		1	1 unit	1AA	0.305
	25			5SY8225-7		1AC		5SY8225-8		1	1 unit	1AA	0.332
	32			5SY8232-7		1AC		5SY8232-8		1	1 unit	1AA	0.340
	40			5SY8240-7		1AC		5SY8240-8		1	1 unit	1AA	0.332
	50			5SY8250-7		1AC		5SY8250-8		1	1 unit	1AA	0.330
	63			5SY8263-7		1AC		5SY8263-8		1	1 unit	1AA	0.330

[1] 1 MW (modular width) = 18 mm.

*** You can order this quantity or a multiple thereof.**

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5SY8, 25000 A

	I_n	Mounting width	DT	Characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic D Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
Miniature circuit breakers 25000 A													
	3P, 400 V AC												
	0.3	3		5SY8314-7		1AC		5SY8314-8		1	1 unit	1AA	0.477
	0.5			5SY8305-7		1AC		5SY8305-8		1	1 unit	1AA	0.482
	1			5SY8301-7		1AC		5SY8301-8		1	1 unit	1AA	0.480
	1.6			5SY8315-7		1AC		5SY8315-8		1	1 unit	1AA	0.466
	2			5SY8302-7		1AC		5SY8302-8		1	1 unit	1AA	0.471
	3			5SY8303-7		1AC		5SY8303-8		1	1 unit	1AA	0.467
	4			5SY8304-7		1AC		5SY8304-8		1	1 unit	1AA	0.473
	6			5SY8306-7		1AC		5SY8306-8		1	1 unit	1AA	0.459
	8			5SY8308-7		1AC		5SY8308-8		1	1 unit	1AA	0.451
	10			5SY8310-7		1AC		5SY8310-8		1	1 unit	1AA	0.444
	13			5SY8313-7		1AC		5SY8313-8		1	1 unit	1AA	0.453
	16			5SY8316-7		1AC		5SY8316-8		1	1 unit	1AA	0.446
	20			5SY8320-7		1AC		5SY8320-8		1	1 unit	1AA	0.476
	25			5SY8325-7		1AC		5SY8325-8		1	1 unit	1AA	0.469
	32			5SY8332-7		1AC		5SY8332-8		1	1 unit	1AA	0.486
	40			5SY8340-7		1AC		5SY8340-8		1	1 unit	1AA	0.464
	50			5SY8350-7		1AC		5SY8350-8		1	1 unit	1AA	0.491
	63			5SY8363-7		1AC		5SY8363-8		1	1 unit	1AA	0.498
	3P+N, 400 V AC												
	0.3	4		5SY8614-7		1AC		5SY8614-8		1	1 unit	1AA	0.660
	0.5			5SY8605-7		1AC		5SY8605-8		1	1 unit	1AA	0.660
	1			5SY8601-7		1AC		5SY8601-8		1	1 unit	1AA	0.660
	1.6			5SY8615-7		1AC		5SY8615-8		1	1 unit	1AA	0.624
	2			5SY8602-7		1AC		5SY8602-8		1	1 unit	1AA	0.631
	3			5SY8603-7		1AC		5SY8603-8		1	1 unit	1AA	0.621
	4			5SY8604-7		1AC		5SY8604-8		1	1 unit	1AA	0.609
	6			5SY8606-7		1AC		5SY8606-8		1	1 unit	1AA	0.611
	8			5SY8608-7		1AC		5SY8608-8		1	1 unit	1AA	0.660
	10			5SY8610-7		1AC		5SY8610-8		1	1 unit	1AA	0.596
	13			5SY8613-7		1AC		5SY8613-8		1	1 unit	1AA	0.609
	16			5SY8616-7		1AC		5SY8616-8		1	1 unit	1AA	0.601
	20			5SY8620-7		1AC		5SY8620-8		1	1 unit	1AA	0.612
	25			5SY8625-7		1AC		5SY8625-8		1	1 unit	1AA	0.601
	32			5SY8632-7		1AC		5SY8632-8		1	1 unit	1AA	0.627
	40			5SY8640-7		1AC		5SY8640-8		1	1 unit	1AA	0.652
	50			5SY8650-7		1AC		5SY8650-8		1	1 unit	1AA	0.652
	63			5SY8663-7		1AC		5SY8663-8		1	1 unit	1AA	0.651
	4P, 400 V AC												
	0.3	4		5SY8414-7		1AC		5SY8414-8		1	1 unit	1AA	0.637
	0.5			5SY8405-7		1AC		5SY8405-8		1	1 unit	1AA	0.660
	1			5SY8401-7		1AC		5SY8401-8		1	1 unit	1AA	0.636
	1.6			5SY8415-7		1AC		5SY8415-8		1	1 unit	1AA	0.624
	2			5SY8402-7		1AC		5SY8402-8		1	1 unit	1AA	0.660
	3			5SY8403-7		1AC		5SY8403-8		1	1 unit	1AA	0.638
	4			5SY8404-7		1AC		5SY8404-8		1	1 unit	1AA	0.604
	6			5SY8406-7		1AC		5SY8406-8		1	1 unit	1AA	0.622
	8			5SY8408-7		1AC		5SY8408-8		1	1 unit	1AA	0.598
	10			5SY8410-7		1AC		5SY8410-8		1	1 unit	1AA	0.589
	13			5SY8413-7		1AC		5SY8413-8		1	1 unit	1AA	0.600
	16			5SY8416-7		1AC		5SY8416-8		1	1 unit	1AA	0.594
	20			5SY8420-7		1AC		5SY8420-8		1	1 unit	1AA	0.624
	25			5SY8425-7		1AC		5SY8425-8		1	1 unit	1AA	0.627
	32			5SY8432-7		1AC		5SY8432-8		1	1 unit	1AA	0.640
	40			5SY8440-7		1AC		5SY8440-8		1	1 unit	1AA	0.655
	50			5SY8450-7		1AC		5SY8450-8		1	1 unit	1AA	0.634
	63			5SY8463-7		1AC		5SY8463-8		1	1 unit	1AA	0.658

[1] 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.

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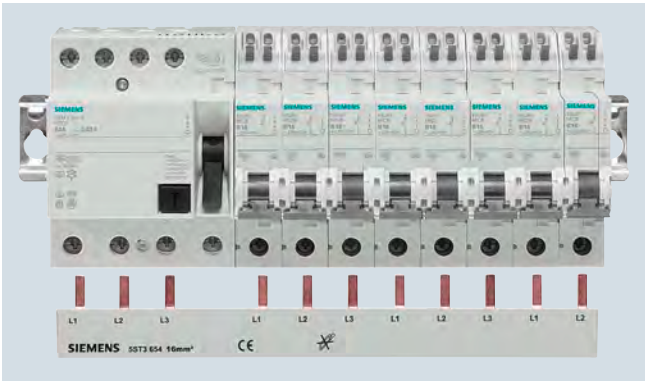
Overview

Miniature circuit breakers with plug-in terminals are used for the protection of socket outlets and lighting circuits with the most common rated currents of 10 to 20 A.

Benefits

- Double, self-contained, screwless outgoing terminals for fast connection of conductors.

- Removal of individual conductors requires no tools and ensures high operating reliability.
- No end sleeves required for finely stranded conductors. This saves mounting time.



- Conventional pin busbars are used for the incoming terminal. This ensures clear, manageable and convenient access to all terminals as part of the uniform Siemens connection concept.

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Technical specifications

			5SJ6...-.KS
Standards			EN 60898-1
Approvals			see chapter "Appendix"
Rated voltage U_n		V AC	230/400
Operational voltage			
• Min.		V AC/DC/pole	24
• Max.		V AC V DC/pole	250/440 60[1]
Rated breaking capacity	Acc. to EN 60898-1	kA AC	6
Insulation coordination			
• Rated insulation voltage • Pollution degree for overvoltage category		V AC	250/440 2/III
Rated frequency		Hz	50/60
Touch protection	Acc. to EN 50274		Yes
Handle end position, sealable			Yes
Degree of protection	Acc. to EN 60529		IP20 with connected conductors, IP40 in the area of the handle with distribution cover
CFC and silicone-free			Yes
Terminals			Screwless terminals on the outgoing terminals for 1.5 ... 4 mm^2
Conductor cross-sections			
• Top, plug-in terminals - Solid, stranded and finely stranded, without end sleeve - Finely stranded, with end sleeve		 mm^2 mm^2	 1.5 ... 4 1.5 ... 2.5
• Bottom, tunnel terminal - Solid, stranded or finely stranded, with end sleeve	± Screw (Pozidriv)	 mm^2	2 0.75 ... 25
Mounting position			Any
Service life On average, with rated load			20000 actuations
Ambient temperature		°C	-25 ... +45, occasionally +55, max. 95 % humidity
Storage temperature		°C	-40 ... +75
Resistance to climate	Acc. to IEC 60068-2-30		6 cycles

[1] The operational voltage 60 V DC/pole takes into account a battery charging voltage with a peak value of 72 V.

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Selection and ordering data

6000 / 3	I_n	Mounting width	DT	Characteristic B: Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic C: Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
Miniature circuit breakers with plug-in terminal													
	1P												
	10	1		5SJ6110-6KS		1AB		5SJ6110-7KS		1	1 unit	1AC	0.115
	13			5SJ6113-6KS		1AB		5SJ6113-7KS		1	1 unit	1AC	0.124
	16			5SJ6116-6KS		1AB		5SJ6116-7KS		1	1/12 units	1AC	0.113
	20			5SJ6120-6KS		1AB		5SJ6120-7KS		1	1 unit	1AC	0.122
	1P+N												
	10	2		5SJ6510-6KS		1AB		5SJ6510-7KS		1	1 unit	1AC	0.220
	13			5SJ6513-6KS		1AB		5SJ6513-7KS		1	1 unit	1AC	0.218
	16			5SJ6516-6KS		1AB		5SJ6516-7KS		1	1 unit	1AC	0.218
	20			5SJ6520-6KS		1AB		5SJ6520-7KS		1	1 unit	1AC	0.218
	2P												
	10	2		5SJ6210-6KS		1AB		5SJ6210-7KS		1	1 unit	1AC	0.239
	13			5SJ6213-6KS		1AB		5SJ6213-7KS		1	1 unit	1AC	0.226
	16			5SJ6216-6KS		1AB		5SJ6216-7KS		1	1 unit	1AC	0.239
	20			5SJ6220-6KS		1AB		5SJ6220-7KS		1	1 unit	1AC	0.239
	3P												
	10	3		5SJ6310-6KS		1AB		5SJ6310-7KS		1	1/4 units	1AC	0.356
	13			5SJ6313-6KS		1AB		5SJ6313-7KS		1	1/4 units	1AC	0.353
	16			5SJ6316-6KS		1AB		5SJ6316-7KS		1	1/4 units	1AC	0.351
	20			5SJ6320-6KS		1AB		5SJ6320-7KS		1	1/4 units	1AC	0.350

[1] 1 MW (modular width) = 18 mm.

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Introduction

Overview

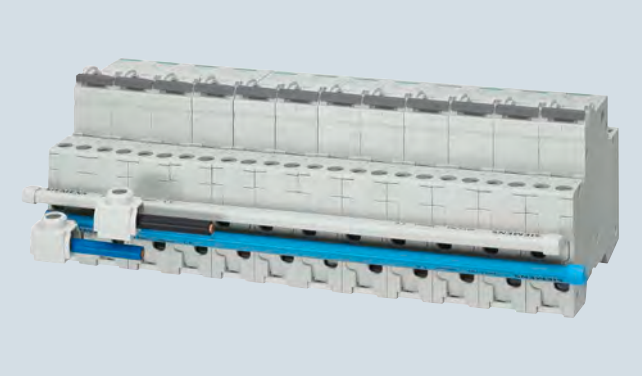
These miniature circuit breakers are used for the protection of systems and installations with switched neutral conductors in distribution boards with little space. They are just a single modular width.

Compact busbars facilitate installation in space-saving distribution boards.

3

Benefits

- Auxiliary switches and fault signal contacts from the high-capacity range can be freely mounted on these miniature circuit breakers. This increases availability and cuts down on logistics.



- The infeed can be implemented either from the top or the bottom. Additional terminals with lateral cable entry facilitate mounting when using large conductor cross-sections.

Technical specifications

			5SY30..	5SY60..
Standards			EN 60898-1	
Approvals			see chapter "Appendix"	
Rated voltage U_n		V AC	230	
Operational voltage				
• Min.		V AC/DC	24	
• Max.		V AC V DC/pole	250 72	
Rated making and breaking capacity I_{cn}		kA AC	4.5	6
Insulation coordination • Rated insulation voltage • Pollution degree for overvoltage category		V AC	250 2/III	
Rated frequency		Hz	50/60	
Touch protection	Acc. to EN 50274		Yes	
Handle end position, sealable			Yes	
Degree of protection	Acc. to EN 60259		IP20 with connected conductors, IP40 in the area of the handle with distribution cover	
CFC and silicone-free			Yes	
Terminals	± Screw (Pozidriv)		2	
• Solid and stranded, top and bottom terminal		mm^2	0.75 ... 16	
• Finely stranded, with end sleeve, top and bottom terminal		mm^2	0.75 ... 10	
• Terminal tightening torque		Nm	2.0 ... 2.5	
Mounting position			Any	
Service life On average, with rated load			20000 actuations at 2 A/4 A and 40 A: 8000 actuations	
Ambient temperature		°C	-25 ... +45, occasionally +55, max. 95 % humidity	
Storage temperature		°C	-40 ... +75	
Resistance to climate	Acc. to IEC 60068-2-30		6 cycles	
Resistance to vibrations	Acc. to IEC 60068-2-6	m/s^2	50 at 25 ... 150 Hz and 60 at 35 Hz (4 sec)	

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Selection and ordering data

4 500 / 3	I_n	Mounting width	DT	Characteristic B: Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic C: Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
Miniature circuit breakers 4500 A													
	1P+N, 230 V AC												
	N connection, right												
	2			--				5SY3002-7		1	1 unit	1AE	0.121
	4			--				5SY3004-7		1	1 unit	1AE	0.121
	6			5SY3006-6		1AE		5SY3006-7		1	1 unit	1AE	0.108
	8			--				5SY3008-7		1	1 unit	1AE	0.107
	10			5SY3010-6		1AE		5SY3010-7		1	1 unit	1AE	0.110
	13			5SY3013-6		1AE		5SY3013-7		1	1 unit	1AE	0.118
	16			5SY3016-6		1AE		5SY3016-7		1	1 unit	1AE	0.108
	20			5SY3020-6		1AE		5SY3020-7		1	1 unit	1AE	0.110
	25			5SY3025-6		1AE		5SY3025-7		1	1 unit	1AE	0.116
	32			5SY3032-6		1AE		5SY3032-7		1	1 unit	1AE	0.126
	40			5SY3040-6		1AE		5SY3040-7		1	1 unit	1AE	0.127
	N connection, left												
	2			--				5SY3002-7KL		1	1 unit	1AE	0.112
	4			--				5SY3004-7KL		1	1 unit	1AE	0.120
	6			5SY3006-6KL		1AE		5SY3006-7KL		1	1 unit	1AE	0.117
	8			--				5SY3008-7KL		1	1 unit	1AE	0.121
	10			5SY3010-6KL		1AE		5SY3010-7KL		1	1 unit	1AE	0.110
	13			5SY3013-6KL		1AE		5SY3013-7KL		1	1 unit	1AE	0.120
	16			5SY3016-6KL		1AE		5SY3016-7KL		1	1 unit	1AE	0.108
	20			5SY3020-6KL		1AE		5SY3020-7KL		1	1 unit	1AE	0.115
	25			5SY3025-6KL		1AE		5SY3025-7KL		1	1 unit	1AE	0.126
	32			5SY3032-6KL		1AE		5SY3032-7KL		1	1 unit	1AE	0.117
	40			5SY3040-6KL		1AE		5SY3040-7KL		1	1 unit	1AE	0.125

[1] 1 MW (modular width) = 18 mm.

*** You can order this quantity or a multiple thereof.**

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Selection and ordering data

6000 / 3	I_n	Mounting width	DT	Characteristic B: Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic C: Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
Miniature circuit breakers, compact, 1+N (1P+N), 230 V AC													
	N pole, right												
	2	1		--				5SY6002-7		1	1 unit	1AC	0.121
	4			--				5SY6004-7		1	1 unit	1AC	0.120
	6			5SY6006-6		1AB		5SY6006-7		1	1 unit	1AC	0.108
	8			--				5SY6008-7		1	1 unit	1AC	0.120
	10			5SY6010-6		1AB		5SY6010-7		1	1 unit	1AC	0.109
	13			5SY6013-6		1AB		5SY6013-7		1	1 unit	1AC	0.109
	16			5SY6016-6		1AB		5SY6016-7		1	1 unit	1AC	0.108
	20			5SY6020-6		1AB		5SY6020-7		1	1 unit	1AC	0.110
	25			5SY6025-6		1AB		5SY6025-7		1	1 unit	1AC	0.117
	32			5SY6032-6		1AB		5SY6032-7		1	1 unit	1AC	0.126
	40			5SY6040-6		1AB		5SY6040-7		1	1 unit	1AC	0.127
	N pole, left												
	2	1		--				5SY6002-7KL		1	1 unit	1AC	0.101
	4			--				5SY6004-7KL		1	1 unit	1AC	0.122
	6			5SY6006-6KL		1AB		5SY6006-7KL		1	1 unit	1AC	0.126
	8			--				5SY6008-7KL		1	1 unit	1AC	0.122
	10			5SY6010-6KL		1AB		5SY6010-7KL		1	1 unit	1AC	0.118
	13			5SY6013-6KL		1AB		5SY6013-7KL		1	1 unit	1AC	0.111
	16			5SY6016-6KL		1AB		5SY6016-7KL		1	1 unit	1AC	0.103
	20			5SY6020-6KL		1AB		5SY6020-7KL		1	1 unit	1AC	0.122
	25			5SY6025-6KL		1AB		5SY6025-7KL		1	1 unit	1AC	0.126
	32			5SY6032-6KL		1AB		5SY6032-7KL		1	1 unit	1AC	0.133
	40			5SY6040-6KL		1AB		5SY6040-7KL		1	1 unit	1AC	0.100

* You can order this quantity or a multiple thereof.

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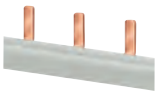
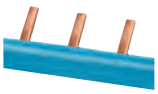
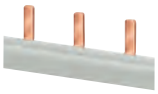
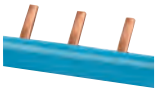
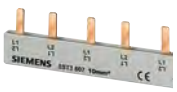
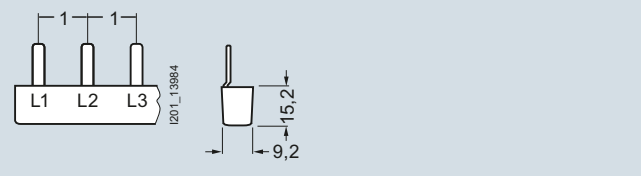
	Pin spacing	Length	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	MW[1]	mm							kg
5ST37 busbar system, 10 mm², for 1+N miniature circuit breakers in 1 MW of the compact range, can be cut, with end caps									
Single-phase, 12 MW									
 For 12 MCBs 1+N, gray	1	216		5ST3762		1	10 units	1AD	0.034
 For 12 MCBs 1+N, blue		216		5ST3763		1	10 units	1AD	0.034
Single-phase									
 For MCBs 1+N, gray	1	1016		5ST3764		1	10 units	1AD	0.134
 For MCBs 1+N, blue		1016		5ST3765		1	10 units	1AD	0.134
End caps for 5ST376 busbars									
1 set comprises a right and a left cap									
Gray				5ST3766		1	10 sets	1AD	0.001
Blue				5ST3767		1	10 sets	1AD	0.001
5ST36 busbar systems, 10 mm², for miniature circuit breakers, fixed lengths, cannot be cut, fully insulated									
Three-phase									
 For 6 MCBs 1+N	1	102		5ST3613		1	10 units	1AD	0.033
For 9 MCBs 1+N		257.5		5ST3614		1	10 units	1AD	0.055
For 12 MCBs 1+N		210	▶	5ST3615		1	10 units	1AD	0.079
Terminals for 5ST376									
Side terminal version For conductors up to 25 mm²			▶	5ST3768		1	25 units	1AD	0.012

[1] 1 MW (modular width) = 18 mm.

Dimensional drawings

5ST36
Pin spacing in MW

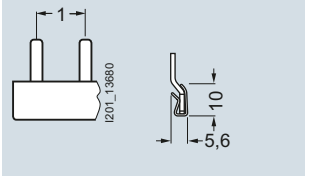
Dimensions of side view in mm (approx.).



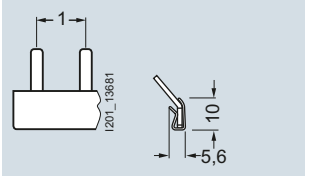
5ST3613
5ST3614
5ST3615

5ST37
Pin spacing in MW

Dimensions of side view in mm (approx.).



5ST3762
5ST3764



5ST3763
5ST3765

* You can order this quantity or a multiple thereof.

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Overview

The Siemens mounting concept supports the combination of all 5ST3 additional components with 5SY and 5SP miniature circuit breakers and with 5SU1 RCBOs.

5SL and 5SY60.. miniature circuit breakers are suitable for mounting auxiliary switches and fault signal contacts. Auxiliary switches can also be mounted on 5TE8 flush-mounting circuit breakers and 5SG71 MINIZED switch disconnectors.

Auxiliary switches (AS)

The auxiliary switch (AS) always signals the contact position of the miniature circuit breaker, regardless of whether the miniature circuit breaker was tripped manually or as the result of a fault. An additional version is also available for the switching of small currents and voltages for the control of programmable control systems (PLCs) acc. to EN 61131-2. The auxiliary switch with test button enables the testing of control circuits without the need to switch the miniature circuit breaker.

Fault signal contacts (FC)

The fault signal contact (FC) signals the automatic tripping of the miniature circuit breaker in the event of a fault, such as an overload or a short circuit. If the fault signal contact is activated, the contact position does not change if the miniature circuit breaker is tripped manually. Fault signal contacts with TEST and RESET buttons enable the testing of control circuits without the need to trip the miniature circuit breaker. The red RESET button integrated in the handle also indicates the automatic tripping of the MCB. The signal can be acknowledged manually using the RESET button.

Shunt trips (ST)

Shunt trips are used for remote tripping of miniature circuit breakers.

Undervoltage releases (UR)

Undervoltage releases are integrated (e.g. in EMERGENCY-STOP loops), thus ensuring that the miniature circuit breaker trips in the event of an emergency, which, in turn, ensures disconnection of the control circuit according to EN 60204. In the event that the voltage is interrupted or too low, it also trips, i.e. prevents activation of the miniature circuit breaker.

Remote controlled mechanisms (RC)

Remote controlled mechanisms are used for the remote ON/OFF switching of miniature circuit breakers and the remote ON switching of RC units, as well as the local manual switching of these devices. A blocking function permits maintenance work. In the event that a miniature circuit breaker or RC unit is tripped, an acknowledgment must be carried out prior to switching back on. The remote controlled mechanism has an operating mode selector switch with the functions: "Locked", "Manual" and "Remote Switching".

Selector switch position:
OFF: The remote controlled mechanism is switched off, blocked mechanically and can be sealed and/or locked.
RC OFF: Only manual operation is possible.
RC ON: Both manual and remote operation are possible.

In the event that a device is tripped by a fault (RC units, miniature circuit breakers), the handle of the basic device and remote controlled mechanism switches to the OFF position. The operator must then acknowledge the tripping by resetting the remote controlled mechanism (OFF command) before it can be reactivated. This serves the safety of the installation or to protect personnel during maintenance work.

In an RC unit/miniature circuit breaker combination, the RC unit is switched on asynchronously, i.e. before switching on the miniature circuit breaker. The RC units for 5SY and 5SP4 can be switched ON via the MCB handle jumper using the supplied actuator attachment. There is no need to switch off the RC unit via the remote controlled mechanism as the MCB contacts ensure disconnection of the electrical circuit.

The switching frequency is max. 2 actuations per minute. If this actuation frequency is exceeded it may cause internal tripping of the remote controlled mechanism as a protection against possible overload. In this case, the remote controlled mechanism must be switched OFF at the function selector switch and not switched back on again for at least 5 minutes. More additional 5ST3 ... components, such as AS, FC, ST and UR, can be added to the right-hand side of the remote controlled mechanism in line with the Siemens mounting concept.

RC units

RC units can be combined with miniature circuit breakers of characteristics A, B, C and D. They then form a combination of RCCB and miniature circuit breakers for personnel, fire and line protection. The combinations can be tailored to meet individual requirements.

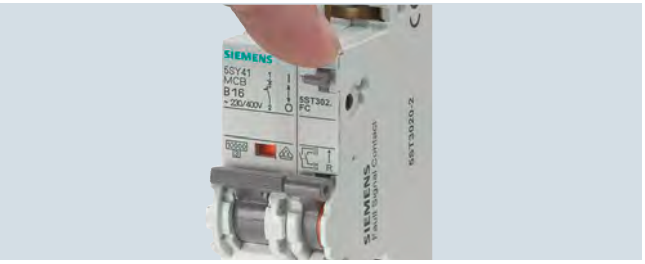
For information on RC units, see chapter "Residual Current Protective Devices / Arc Fault Detection Devices (AFDDs)".

Benefits

Can be universally retrofitted with all additional components

- The 5SL, 5SY and 5SP miniature circuit breakers are ideal for the quick and easy mounting of auxiliary switches and fault signal contacts.
  Captive metal brackets on the additional components ensure the quick and easy mounting of devices on the miniature circuit breakers without the need for tools.

- Fault signal contacts with TEST and RESET button enable the simple testing of auxiliary circuits and, in the event of a fault, acknowledgement of the fault over the RESET button, without the need to switch the miniature circuit breakers.



- The auxiliary switches with TEST button enable the simple manual testing of control circuits during operation of the entire installation without the need to switch the miniature circuit breakers.

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Technical specifications

			Auxiliary switches (AS)		Fault signal contacts (FC)
			5ST3010, 5ST3010-2 5ST3011, 5ST3011-2 5ST3012, 5ST3012-2	5ST3013[1], 5ST3013-2[2] 5ST3014[1], 5ST3014-2[2] 5ST3015[1], 5ST3015-2[2]	5ST3020, 5ST3020-2 5ST3021, 5ST3021-2 5ST3022, 5ST3022-2
Standards			EN 62019; IEC/EN 60947-5-1; UL 1077; CSA C22.2 No. 235		
Approvals			see chapter "Appendix"		
Short-circuit protection			Miniature circuit breaker or gG 6 A fuse		
Contact load					
• Min.			50 mA, 24 V	1 mA/5 V DC	50 mA, 24 V
• Max.			--	[1] = 100 mA/30 V DC [2] = 50 mA/30 V DC	--
• 400 V AC, AC-14, NO		A	2	--	2
• 230 V AC, AC-14, NO		A	6	--	6
• 400 V AC, AC-13, NC		A	2	--	2
• 230 V AC, AC-13, NC		A	6	--	6
• 220 V DC, DC-13, NO+NC		A	1	--	1
• 110 V DC, DC-13, NO+NC		A	1	--	1
• 60 V DC, DC-13, NO+NC		A	3	--	3
• 24 V DC, DC-13, NO+NC		A	6	--	6
Service life, on average, with rated load			20000 actuations	20000 actuations	20000 actuations
Conductor cross-sections		mm^2	0.5 ... 2.5	0.5 ... 2.5	0.5 ... 2.5
		AWG	22 ... 14	22 ... 14	22 ... 14
Terminals					
• Terminal tightening torque		Nm	0.5	0.5	0.5
		lbs/in.	4.5	4.5	4.5
Rated frequency		Hz	50/60		
Mounting position			Any	Any	Any
Ambient temperature		°C	-25 ... +55	-25 ... +55	-25 ... +55
Storage temperature		°C	-40 ... +75	-40 ... +75	-40 ... +75
Resistance to climate	Acc. to IEC 60068-2-30	Cycles	28		
Shock	Acc. to IEC 60068-2-27	m/s	50 at 11 ms half-sine		
Resistance to vibrations	Acc. to IEC 60068-2-6	m/s^2	50 at 10 ... 150 Hz		

		Undervoltage releases (UR)	Shunt trips (ST)		Remote controlled mechanisms (RC)
		5ST304.	5ST3030	5ST3031	5ST3050, 5ST3052
Standards		EN 60947-1			
Rated voltages U_n	V AC	230	110 ... 415	24 ... 48	230
	V DC	24, 110	110	24 ... 48	--
• Operating range U_n		0.85 ... 1.1 x U_n	0.7 ... 1.1 x U_n		0.9 ... 1.15 x U_n
• Rated frequency f_n	Hz	--	50 ... 60		50 ... 60
Response limits					
• Tripping		< 0.35 ... 0.7 × U_n	--		--
Short-circuit protection		Miniature circuit breakers B/C 6 A or fuse gG 6 A			
Minimum contact load		50 mA, 24 V	50 mA, 24 V		--
Tripping operations		max. 2000	max. 2000		--
Service life, on average, with rated load		20000 actuations	20000 actuations		20000 actuations 5000 at RC unit
Conductor cross-sections	mm^2	0.5 ... 2.5	0.5 ... 2.5		0.5 ... 2.5
	AWG	22 ... 14	22 ... 14		22 ... 14
Terminals					
• Terminal tightening torque	Nm	0.8	0.8		0,4 ... 0.5
	lbs/in.	6.8	6.8		4.5
Mounting position		Any	Any		Any
Ambient temperature	°C	-25 ... +55	-25 ... +55		-20 ... +55
Storage temperature	°C	-40 ... +75	-40 ... +75		-40 ... +75
Resistance to climate	Acc. to IEC 60068-2-30 Cycles	28			
Shock	Acc. to IEC 60068-2-27 m/s	50 at 11 ms half-sine			
Resistance to vibrations	Acc. to IEC 60068-2-6 m/s^2	50 at 10 ... 150 Hz			
Switching frequency		--			2 actuations per minute
Switching duration	s	--			< 2
Minimum command duration	s	--			0.2 continuous command possible
Rated power dissipation	VA	--			No power consumption, in switching operation 26
Rated frequency	Hz	50/60			
Behavior in the event of control voltage failure		--			No change

For technical specifications of RC units, see chapter "Residual Current Protective Devices / Arc Fault Detection Devices (AFDDs)".

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Selection and ordering data

	Rated voltage U_n V	Mounting width MW[1]	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Auxiliary switches (AS)								
	For 5SL, 5SY, 5SP and 5TL1 miniature circuit breakers, 5SU1 RCBOs, for 5SV residual current protective device and 5TE8 switches								
	1 NO + 1 NC	0.5	▶	5ST3010		1	1 unit	1AD	0.055
	For low power		▶	5ST3013		1	1 unit	1AD	0.064
	2 NO			5ST3011		1	1 unit	1AD	0.066
	For low power			5ST3014		1	1 unit	1AD	0.067
	2 NC			5ST3012		1	1 unit	1AD	0.067
	For low power			5ST3015		1	1 unit	1AD	0.064
	Auxiliary switches (AS) with TEST button								
	For 5SL, 5SY, 5SP and 5TL1 miniature circuit breakers, 5SU1, 5TL1 RCBOs, for 5SV residual current protective device and 5TE8 switches								
	1 NO + 1 NC	0.5		5ST3010-2		1	1 unit	1AD	0.071
	For low power			5ST3013-2		1	1 unit	1AD	0.067
	2 NO			5ST3011-2		1	1 unit	1AD	0.068
	For low power			5ST3014-2		1	1 unit	1AD	0.045
	2 NC			5ST3012-2		1	1 unit	1AD	0.071
	For low power			5ST3015-2		1	1 unit	1AD	0.063
	Fault signal contacts (FC)								
	For 5SL, 5SY, 5SP miniature circuit breakers, 5SU1 RCBOs, for 5SV residual current protective device								
	1 NO + 1 NC	0.5	▶	5ST3020		1	1 unit	1AD	0.066
	2 NO			5ST3021		1	1 unit	1AD	0.068
	2 NC			5ST3022		1	1 unit	1AD	0.069
	Fault signal contacts (FC) with TEST and ACKNOWLEDGE button								
	For 5SL, 5SY, 5SP miniature circuit breakers, 5SU1 RCBOs, for 5SV residual current protective device								
	1 NO + 1 NC	0.5	▶	5ST3020-2		1	1 unit	1AD	0.072
	2 NO			5ST3021-2		1	1 unit	1AD	0.048
	2 NC			5ST3022-2		1	1 unit	1AD	0.048
	Undervoltage releases (UR)								
	For 5SL4, 5SY, 5SP miniature circuit breakers, 5SU1 RCBOs, for 5SV residual current protective device, but not for 5SY60.. and 5SL6 miniature circuit breakers								
	With integrated auxiliary switch								
	230 AC	1	▶	5ST3040		1	1 unit	1AD	0.114
	110 DC			5ST3041		1	1 unit	1AD	0.112
	24 DC			5ST3042		1	1 unit	1AD	0.111
	Without integrated auxiliary switch								
	230 AC	1	▶	5ST3043		1	1 unit	1AD	0.102
	110 DC			5ST3044		1	1 unit	1AD	0.089
	24 DC			5ST3045		1	1 unit	1AD	0.097
	Shunt trips (ST)								
	For 5SL4, 5SY, 5SP miniature circuit breakers, 5SU1 RCBOs, for 5SV residual current protective device, but not for 5SY60.. and 5SL6 miniature circuit breakers								
	110 ... 415 V AC	1	▶	5ST3030		1	1 unit	1AD	0.102
	24 ... 48 V AC/DC	1	▶	5ST3031		1	1 unit	1AD	0.102
	Remote controlled mechanisms (RC)								
	For 5SY and 5SP miniature circuit breakers and 5SU1 RCBOs, but not for 5SL3, 5SL6, 5TE8...CC miniature circuit breakers 230 AC	3.5	▶	5ST3050		1	1 unit	1AD	0.447
	For 5SL4 miniature circuit breakers only 230 AC NEW	3.5		5ST3052		1	1 unit	1AD	0.447

[1] 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.

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	Rated residual current	Rated current	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	$I_{\Delta n}$	I_n								
	mA	A	MW[1]							kg
RC units, type A, instantaneous tripping										
	For 5SY miniature circuit breakers, but not for 5SY5, 5SY8, 5SY60.. and 5SL miniature circuit breakers									
	2P, 230 ... 400 V AC, 50 ... 60 Hz									
	10	0.3 ... 16	2		5SM2121-6		1	1 unit	1AH	0.203
	30	0.3 ... 40		▶	5SM2322-6		1	1 unit	1AH	0.201
	300				5SM2622-6		1	1 unit	1AH	0.194
	30	0.3 ... 63			5SM2325-6		1	1 unit	1AH	0.212
	100				5SM2425-6		1	1 unit	1AH	0.207
	300				5SM2625-6		1	1 unit	1AH	0.194
	500				5SM2725-6		1	1 unit	1AH	0.197
	For 5SY miniature circuit breakers, but not for 5SY5, 5SY8, 5SY60.. and 5SL miniature circuit breakers									
	3P; 230 ... 400 V AC; 50 ... 60 Hz									
	30	0.3 ... 40	3		5SM2332-6		1	1 unit	1AH	0.300
	300				5SM2632-6		1	1 unit	1AH	0.288
	30	0.3 ... 63			5SM2335-6		1	1 unit	1AH	0.338
	100				5SM2435-6		1	1 unit	1AH	0.312
	300				5SM2635-6		1	1 unit	1AH	0.289
	500				5SM2735-6		1	1 unit	1AH	0.294
	For 5SY miniature circuit breakers, but not for 5SY5, 5SY8, 5SY60.. and 5SL miniature circuit breakers									
	4P, 230 ... 400 V AC, 50 ... 60 Hz									
	30	0.3 ... 40	3	▶	5SM2342-6		1	1 unit	1AH	0.327
	300			▶	5SM2642-6		1	1 unit	1AH	0.322
	30	0.3 ... 63			5SM2345-6		1	1 unit	1AH	0.375
	100				5SM2445-6		1	1 unit	1AH	0.338
	300				5SM2645-6		1	1 unit	1AH	0.319
	500				5SM2745-6		1	1 unit	1AH	0.319
	For 5SP4 miniature circuit breakers (B and C characteristics)									
	2P, 125 ... 230 V AC, 50 ... 60 Hz									
	30	80 ... 100	3.5		5SM2327-6		1	1 unit	1AH	0.516
	300				5SM2627-6		1	1 unit	1AH	0.467
	For 5SP4 miniature circuit breakers (B and C characteristics)									
	4P, 230 ... 400 V AC, 50 ... 60 Hz									
	30	80 ... 100	5		5SM2347-6		1	1 unit	1AH	0.899
	300				5SM2647-6		1	1 unit	1AH	0.682

[1] 1 MW (modular width) = 18 mm.

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Electrical components

	Rated residual current	Rated current	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	$I_{\Delta n}$	I_n								
	mA	A	MW[1]							kg
RC units, type A, super resistant K										
	For 5SY miniature circuit breakers, but not for 5SY5, 5SY8, 5SY60.. and 5SL miniature circuit breakers									
	2P, 230 ... 400 V AC, 50 ... 60 Hz									
	30	0.3 ... 40	2		5SM2322-6KK01		1	1 unit	1AH	0.211
	30	0.3 ... 63			5SM2325-6KK01		1	1 unit	1AH	0.215
	For 5SY miniature circuit breakers, but not for 5SY5, 5SY8, 5SY60.. and 5SL miniature circuit breakers									
	3P; 230 ... 400 V AC; 50 ... 60 Hz									
	30	0.3 ... 40	3		5SM2332-6KK01		1	1 unit	1AH	0.351
	30	0.3 ... 63			5SM2335-6KK01		1	1 unit	1AH	0.338
	For 5SY miniature circuit breakers, but not for 5SY5, 5SY8, 5SY60.. and 5SL miniature circuit breakers									
	4P, 230 ... 400 V AC, 50 ... 60 Hz									
	30	0.3 ... 40	3		5SM2342-6KK01		1	1 unit	1AH	0.381
	30	0.3 ... 63			5SM2345-6KK01		1	1 unit	1AH	0.386
RC units, type A, selective S										
	For 5SY miniature circuit breakers, but not for 5SY5, 5SY8, 5SY60.. and 5SL miniature circuit breakers									
	2P, 230 ... 400 V AC, 50 ... 60 Hz									
	300	0.3 ... 40	2		5SM2622-8		1	1 unit	1AH	0.207
	300	0.3 ... 63			5SM2625-8		1	1 unit	1AH	0.205
	For 5SY miniature circuit breakers, but not for 5SY5, 5SY8, 5SY60.. and 5SL miniature circuit breakers									
	3P; 230 ... 400 V AC; 50 ... 60 Hz									
	300	0.3 ... 63	3		5SM2635-8		1	1 unit	1AH	0.338
	500				5SM2735-8		1	1 unit	1AH	0.301
	1000				5SM2835-8		1	1 unit	1AH	0.295
	For 5SY miniature circuit breakers, but not for 5SY5, 5SY8, 5SY60.. and 5SL miniature circuit breakers									
	4P, 230 ... 400 V AC, 50 ... 60 Hz									
	300	0.3 ... 63	3		5SM2645-8		1	1 unit	1AH	0.366
	500				5SM2745-8		1	1 unit	1AH	0.333
	1000				5SM2845-8		1	1 unit	1AH	0.327
	For 5SP4 miniature circuit breakers (B and C characteristics)									
	2P, 125 ... 230 V AC, 50 ... 60 Hz									
	300	80 ... 100	3.5		5SM2627-8		1	1 unit	1AH	0.514
	For 5SP4 miniature circuit breakers (B and C characteristics)									
	4P, 230 ... 400 V AC, 50 ... 60 Hz									
	300	80 ... 100	5		5SM2647-8		1	1 unit	1AH	0.798
	1000				5SM2847-8		1	1 unit	1AH	0.703

[1] 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.

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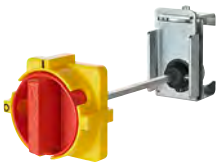
Selection and ordering data

	Version	Mounting width MW[1]	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	**Mechanical rotary operating mechanism complete with handle** NEW • For 5SY, but not for 5SYx0 1+N in 1 MW • For 5SP4, 5SL, 5TL1, 5TE2, 5TE8, 5SU1								
	Versions								
	• Handle black			5ST3060		1	1 unit	1AD	0.244
	• Handle red/yellow			5ST3061		1	1 unit	1AD	0.242
	Terminal covers For miniature circuit breakers, but not for 5SY60. ., For additional covering of the screw openings per pole, sealable. In the case of 5SY, also prevents removal of device from the standard mounting rail.		►	5ST3800		1	10 units	1AD	0.002
	Handle locking devices Sealable to prevent undesired mechanical ON/OFF switching For 5SP and 5SY miniature circuit breakers For padlock with max. 3 mm shackle			5ST3801		1	1 unit	1AD	0.012
	For 5SL, 5SV, 5TL1 miniature circuit breakers For padlock with 3 ... 6 mm shackle			5ST3806		1	5 units	1AD	0.003
	Padlocks For 5ST3801 and 5ST3806 handle locking device			5ST3802		1	1 unit	1AD	0.033
	Locking devices For 5SP and 5SY miniature circuit breakers comprising 5ST3801 handle locking device and 5ST3802 padlock			5ST3803		1	1 set	1AD	0.044
	Locking devices For 5SL, 5SV, 5TL1 miniature circuit breakers, comprising 5ST3806 handle locking device and 5ST3802 padlock			5ST3807		1	1 set	1AD	0.024
	Spacers Can be placed on either side of the standard mounting rail. Two spacers allow for convenient cable routing	0.5		5TG8240		1	2 units	1BK	0.017
	Fixing parts Made of plastic, for use on a mounting plate			5ST2201		1	1 unit	1AD	0.012
	Device labels NEW Adhesive, for modular installation devices, e.g. 5SY, 5SL, 5TL1, etc.								
	Versions								
	• 15 mm x 6 mm, white (WIN 098)			8WH8210-0AA35		100	3740 units	1BT	0.010
	• 15 mm x 6 mm, yellow (WIN 099)			8WH8210-0AA36		100	3740 units	1BT	0.010

* You can order this quantity or a multiple thereof.

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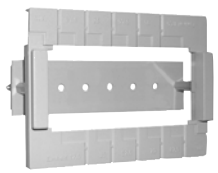
Mechanical components

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Labeling system							
	Available from:		Murrplastik Systemtechnik GmbH Postfach 1143 71570 Oppenweiler, Germany Telephone: +49 7191-482-0 e-mail: info@murrplastik.de					
	Terminal covers, gray For surface mounting, degree of protection IP40, sealable, with 35 mm standard mounting rail							
	• Up to 2.5 MW		5SW3004		1	1 unit	1BE	0.089
	• Up to 4.5 MW		5SW3005		1	1 unit	1BE	0.185
	Wall enclosures, gray For flush mounting, degree of protection IP40 with 35 mm standard mounting rail							
	• Up to 2.5 MW		5SW3006		1	1/4 units	1BE	0.131
	• Up to 4.5 MW		5SW3007		1	1 unit	1BE	0.162
	Molded-plastic enclosures, gray For surface mounting, degree of protection IP54, with 35 mm standard mounting rail, sealable with transparent hinged lid							
	For 4.5 MW		5SW1200		1	1 unit	1BE	0.476
	Covers Can be assembled as mini distribution board, suitable for all devices, cover parts prepared for rail mounting of conventional label caps, comprising:							
	• End plates (for snapping onto standard mounting rail)	►	5ST2134		1	10 units	1AD	0.026
	• Angled profile (approx. 1 m long)		5ST2135		1	5 units	1AD	0.288
	• Alternative flat profiles (as a cover between the rows of devices length approx. 1 m)		5ST2136		1	5 units	1AD	0.239
	**Holders for front panel installation** Universal use for devices from 1 to 6 MW Cutout dimensions: Height $45^{+0.5}$ mm Width: 23, 41, 59, 77, 95 or 113 mm		7LF9006		1	1 unit	1BK	0.070
	Intermediate frames for 70 mm devices in 55 mm ALPHA SIMBOX small distribution boards Versions							
	• 1-tier		8GB4561		1	1 unit	1BO	0.795
	• 2-tier		8GB4562		1	1 unit	1BO	0.911
	• 3-tier		8GB4563		1	1 unit	1BO	1.111
	• 4-tier		8GB4564		1	1 unit	1BO	1.238

For further information on ALPHA distribution boards, ALPHA SIMBOX small distribution boards and intermediate frames, see chapter "Distribution Boards / Power Distribution Boards".

*** You can order this quantity or a multiple thereof.**

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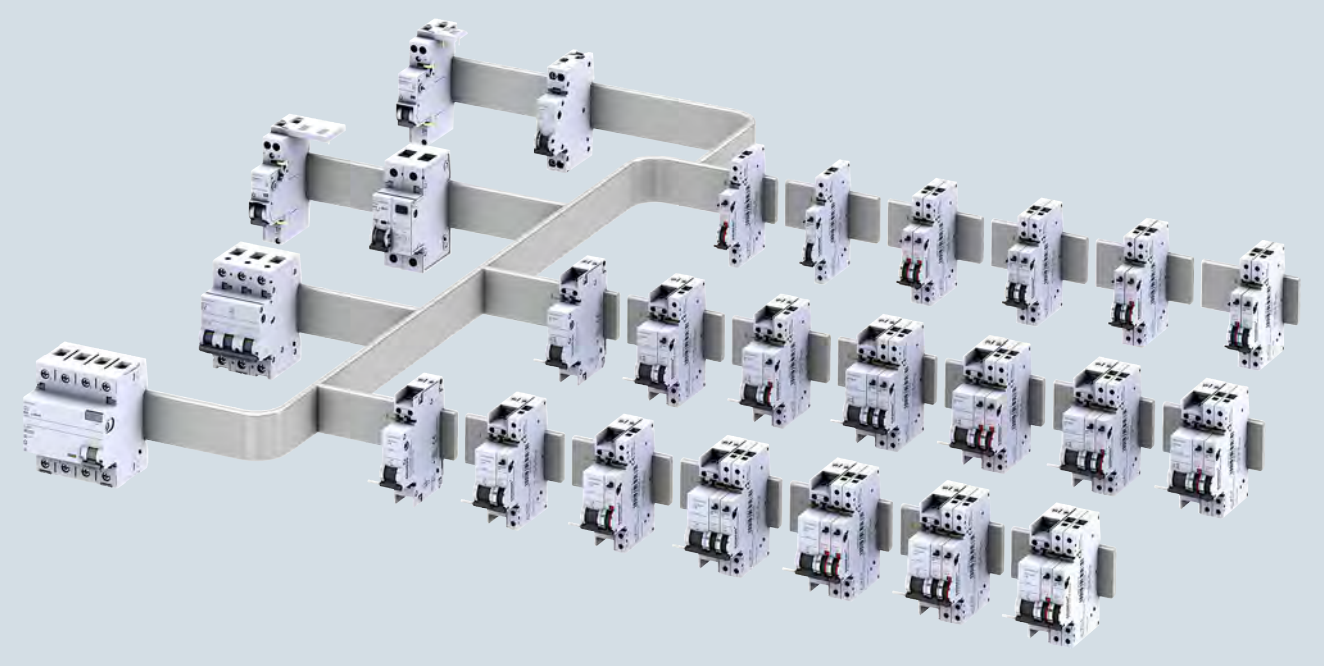
More information

The Siemens mounting concept supports the combination of all 5ST3 additional components with miniature circuit breakers of the 5SY and 5SP series and RCBOs of the 5SU1 series.

5SL and 5SY60.. miniature circuit breakers are suitable for mounting auxiliary switches and fault signal contacts. Auxiliary switches can also be mounted on 5TE8 flush-mounting circuit breakers and 5SG71 MINIZED switch disconnectors. In the case of the 5SY6 miniature circuit breaker and in the case of the RCBO, the arc fault detection device can be mounted on the left-hand side.



For further information on the mounting concept for RCBOs, see chapter "Residual Current Protective Devices / Arc Fault Detection Devices (AFDDs)".

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5ST standard busbars

Overview

The busbar system with pin-type connections can be used for all 5SL6 and 5SJ6 miniature circuit breakers ...-.KS and 5SY miniature circuit breakers with or without mounted auxiliary switch (AS) or fault signal contact (FC).

Busbars in 10 mm^2 and 16 mm^2 versions are available.

With bars that can be cut to length, the 5ST37 busbar system can be tailored to any requirements.

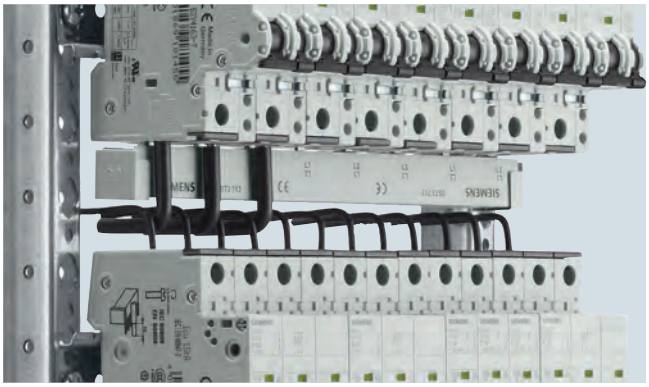
The extremely flexible 5ST36 busbar system with fixed lengths also enables installation in any length as the busbars can be overlapped.

No further need for time-consuming tasks, such as cutting, cutting to length, deburring, cleaning of cut surfaces and mounting of end caps.

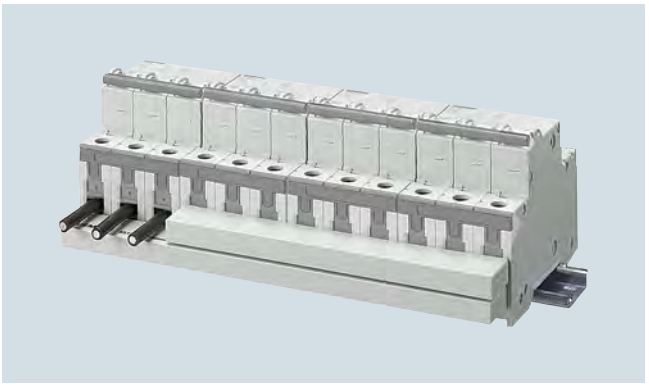
Any free pins on the busbars can be made safe by covering with touch protection.

For further information on the bus-mounting of miniature circuit breakers with residual current operated circuit breakers, please refer to the chapter "Residual Current Protective Devices/ Arc Fault Detection Devices (AFDDs)".

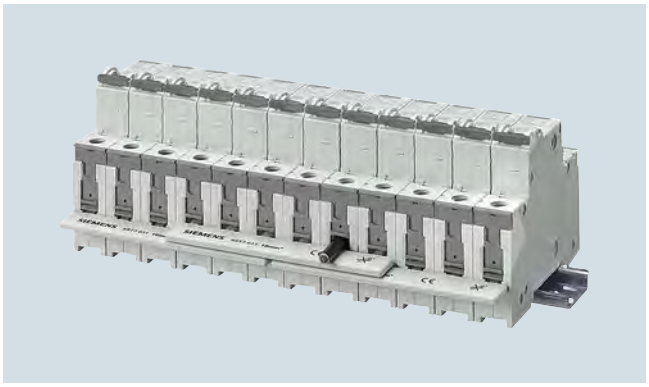
Benefits



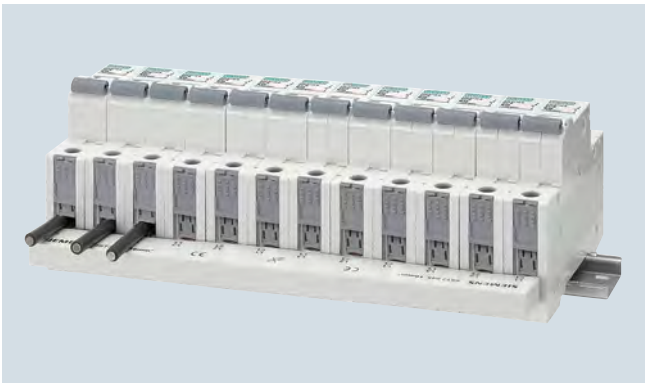
- Between the rows of devices, the busbar, that is located at the bottom and behind the conductor, provides an optimum wiring space with easy view of the inserted conductor. This enables easy control of connections.



- The ability to overlap when mounting the busbars enables a cross-section enlargement of up to 32 mm^2 using the respective components, 10 mm^2 and 16 mm^2



- By overlapping the busbars with fixed lengths, it is possible to achieve device combinations with any number of devices



- The fact that the connection of the conductor is always clearly visible facilitates cable entry of all pole types and considerably reduces mounting times

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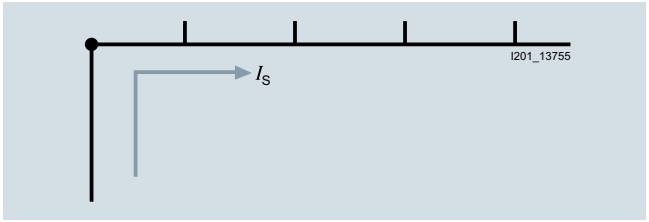
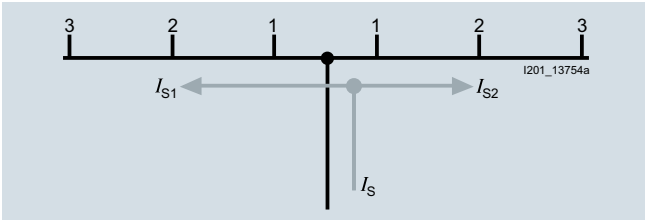
Technical specifications

			5ST3
Standards			EN 60439-1 (VDE 0660-500): 2005-01
Busbar material			SF-Cu F 24
Partition material			Plastic, Cycoloy 3600 heat-resistant over 90 °C flame-retardant and self-extinguishing, dioxin and halogen-free
Rated operational voltage U_c		V AC	400
Rated current I_n			
• Cross-section 10 mm^2		A	63
• Cross-section 16 mm^2		A	80
Rated impulse withstand voltage U_{imp}		kV	4
Test pulse voltage (1.2/50)		kV	6.2
Rated conditional short-circuit current I_{cc}		kA	25
Resistance to climate			
• Constant atmosphere	Acc. to DIN 50015		23/83; 40/92; 55/20
• Humid heat	Acc. to IEC 60068-2-30		28 cycles
Insulation coordination			
• Overvoltage category			III
• Pollution degree			2
Maximum busbar current I_S/phase			
• Infeed at the start of the busbar			
- Cross-section 10 mm^2		A	63
- Cross-section 16 mm^2		A	80
• Infeed at the center of the busbar			
- Cross-section 10 mm^2		A	100
- Cross-section 16 mm^2		A	130

Infeed at the start or end of the busbar



Infeed along the busbar or midpoint infeed



The sum of the outgoing current per branch (1, 2, 3 ... n) must not be greater than the max. busbar current I_S/phase.

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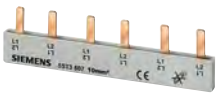
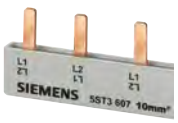
5ST standard busbars

Selection and ordering data

	Pin spacing	Length	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	MW[1]	mm							kg
5ST36 busbar systems, 10 mm², for miniature circuit breakers, fixed lengths, cannot be cut, fully insulated									
Single-phase									
For 2 MCBs 1P	1	33		5ST3600		1	10 units	1AD	0.008
For 6 MCBs 1P		105		5ST3601		1	10 units	1AD	0.024
For 12 MCBs 1P		210		5ST3602		1	10 units	1AD	0.047
Single-phase, for MCBs with AS or FC									
For 2 MCBs 1P	1.5	40		5ST3603		1	10 units	1AD	0.010
For 6 MCBs 1P		156.5		5ST3604		1	10 units	1AD	0.033
For 9 MCBs 1P		237		5ST3605		1	10 units	1AD	0.050
 **Two-phase**									
For 2 MCBs 2P	1	75.5		5ST3606		1	10 units	1AD	0.018
For 3 MCBs 2P		105		5ST3607		1	10 units	1AD	0.028
For 6 MCBs 2P		210		5ST3608		1	10 units	1AD	0.063
Three-phase									
For 2 MCBs 3P	1	102		5ST3613		1	10 units	1AD	0.033
For 3 MCBs 3P		157.5		5ST3614		1	10 units	1AD	0.055
For 4 MCBs 3P		210	▶	5ST3615		1	10 units	1AD	0.079
Three-phase, for MCBs with AS or FC									
For 2 MCBs 3P	1+1+1.5	115		5ST3616		1	10 units	1AD	0.037
For 4 MCBs 3P		237		5ST3617		1	10 units	1AD	0.090
For 6 MCBs 1P	1.5	125		5ST3618		1	10 units	1AD	0.046
For 9 MCBs 1P		229		5ST3620		1	10 units	1AD	0.079
Three-phase									
For 1 RCCB 4P N right and 8 MCBs 1P	1	210		5ST3624		1	10 units	1AD	0.078
For 1 RCCB 4P N left and 8 MCBs 1P	1	192		5ST3667		1	10 units	1AD	0.070
Four-phase									
For 2 MCBs 4P or 3P+N	1	145		5ST3621		1	10 units	1AD	0.054
For 3 MCBs 4P or 3P+N		215		5ST3622		1	10 units	1AD	0.092
For 6 MCBs 2P or 1P+N		215		5ST3623		1	10 units	1AD	0.087
5ST36 busbars, 16 mm², for miniature circuit breakers, fixed lengths, cannot be cut, fully insulated									
Single-phase									
For 2 MCBs 1P	1	33		5ST3630		1	10 units	1AD	0.009
For 6 MCBs 1P		105		5ST3631		1	10 units	1AD	0.026
For 12 MCBs 1P		210		5ST3632		1	10 units	1AD	0.052
Single-phase, for MCBs with AS or FC									
For 2 MCBs 1P	1.5	40		5ST3633		1	10 units	1AD	0.011
For 6 MCBs 1P		156.5		5ST3634		1	10 units	1AD	0.036
For 9 MCBs 1P		237		5ST3635		1	10 units	1AD	0.055
 **Two-phase**									
For 2 MCBs 2P	1	75.5		5ST3636		1	10 units	1AD	0.026
For 3 MCBs 2P		105		5ST3637		1	10 units	1AD	0.042
For 6 MCBs 2P		210		5ST3638		1	10 units	1AD	0.089
Two-phase For MCBs with AS or FC									
For 2 MCBs 2P	1 + 1.5	75.5		5ST3640		1	10 units	1AD	0.029
For 3 MCBs 2P		120.5		5ST3641		1	10 units	1AD	0.048
For 5 MCBs 2P		210		5ST3642		1	10 units	1AD	0.086

[1] 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.

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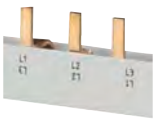
		Pin spacing	Length	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		MW[1]	mm							kg
5ST36 busbars, 16 mm², for miniature circuit breakers, fixed lengths, cannot be cut, fully insulated										
	Three-phase									
	For 2 MCBs 3P	1	102.5		5ST3643		1	10 units	1AD	0.048
	For 3 MCBs 3P		157.5		5ST3644		1	10 units	1AD	0.082
	For 4 MCBs 3P		210	▶	5ST3645		1	10 units	1AD	0.114
	Three-phase, for MCBs with AS or FC									
	For 2 MCBs 3P	1+1+1.5	115		5ST3646		1	10 units	1AD	0.051
	For 4 MCBs 3P		237		5ST3647		1	10 units	1AD	0.132
	For 6 MCBs 1P	1.5	156		5ST3648		1	10 units	1AD	0.067
	For 9 MCBs 1P		245		5ST3650		1	10 units	1AD	0.110
	Three-phase,									
	For 1 RCCB 4P N right and 8 MCBs 1P	1	210		5ST3654		1	10 units	1AD	0.113
	For 1 RCCB 4P N left and 8 MCBs 1P	1	210		5ST3668		1	10 units	1AD	0.100
	Four-phase									
	For 2 MCBs 4P or 3P+N	1			5ST3651		1	10 units	1AD	0.080
	For 3 MCBs 4P or 3P+N				5ST3652		1	10 units	1AD	0.137
	For 6 MCBs 2P or 1P+N				5ST3653		1	10 units	1AD	0.126
Touch protection										
	For free connections, yellow (RAL 1004) 5 x 1 pin			▶	5ST3655		1	10 units	1AD	0.008
	10 mm²									
	20 × 5ST3613 + 10 × 5ST3614 + 50 × 5ST3615 + 50 × 5ST3655				5ST3656		1	1 set	1AD	5.348
	16 mm²									
	20 × 5ST3643 + 10 × 5ST3644 + 50 × 5ST3645 + 50 × 5ST3655				5ST3657		1	1 set	1AD	7.765
5ST37 busbar system, 10 mm² ,12 MW for miniature circuit breakers, can be cut, with end caps										
	Single-phase, angled									
	For 12 MCBs 1P	1	214		5ST3730		1	1 unit	1AD	0.033
	For 9 MCBs 1P with AS or FC	1.5			5ST3732		1	1 unit	1AD	0.030
	Two-phase									
	For 6 MCBs 2P	1			5ST3734		1	1 unit	1AD	0.072
	For 4 MCBs 2P with AS or FC	1+1.5			5ST3736		1	1 unit	1AD	0.071
	Three-phase									
	For 4 MCBs 3P	1		▶	5ST3738		1	1 unit	1AD	0.086
	For 3 MCBs 3P with AS or FC	1+1+1.5			5ST3741		1	1 unit	1AD	0.074
	For 3 MCBs 1P with AS or FC	1.5			5ST3743		1	1 unit	1AD	0.075
	Four-phase									
	For 3 MCBs 4P or 3P+N	1			5ST3745		1	1 unit	1AD	0.108
5ST37 busbar system, 10 mm² , 56 MW for miniature circuit breakers, can be cut, without end caps										
	**Single-phase, angled**									
	For MCBs 1P	1	1016		5ST3731		1	1 unit	1AD	0.153
	For MCBs 1P with AS or FC	1.5			5ST3733		1	1 unit	1AD	0.157
	Two-phase									
	For MCBs 1P and UR or AR	2			5ST3735-2		1	1 unit	1AD	0.505
	For MCBs 2P	1			5ST3735		1	1 unit	1AD	0.343
	For MCBs 2P with AS or FC	1+1.5			5ST3737		1	1 unit	1AD	0.327
	Three-phase									
	For MCBs 3P	1		▶	5ST3740		1	1 unit	1AD	0.430
	For MCBs 3P with AS or FC	1+1+1.5			5ST3742		1	1 unit	1AD	0.421
	For MCBs 1P with AS or FC	1.5			5ST3744		1	1 unit	1AD	0.420
	Four-phase									
	For MCBs 4P or 3P+N	1			5ST3746		1	1 unit	1AD	0.600
	For MCBs 2P with AS or FC and RCBOs 1P+N with AS or FC	1+1.5			5ST3746-2		1	1 unit	1AD	0.505

[1] 1 MW (modular width) = 18 mm.

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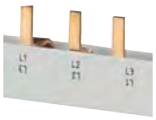
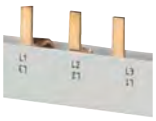
5ST standard busbars

		Pin spacing	Length	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		MW[1]	mm							kg
5ST37 busbar system, 16 mm², 12 MW for miniature circuit breakers, can be cut, with end caps										
	**Single-phase, angled**									
	For MCBs 1P	1	214	▶	5ST3700		1	1 unit	1AD	0.042
	For MCBs 1P with AS or FC	1.5			5ST3702		1	1 unit	1AD	0.040
	Two-phase									
	For MCBs 2P	1		▶	5ST3704		1	1 unit	1AD	0.097
	For MCBs 2P with AS or FC	1+1.5			5ST3706		1	1 unit	1AD	0.090
	Three-phase									
	For MCBs 3P	1		▶	5ST3708		1	1 unit	1AD	0.116
	For MCBs 3P with AS or FC	1+1+1.5			5ST3711		1	1 unit	1AD	0.100
	For MCBs 1P with AS or FC	1.5			5ST3713		1	1 unit	1AD	0.102
	Four-phase									
	For MCBs 4P or 3P+N	1			5ST3715		1	1 unit	1AD	0.152
5ST37 busbar system, 16 mm², 56 MW for miniature circuit breakers, can be cut, without end caps										
	Single-phase, angled									
	For MCBs 1P	1	1016	▶	5ST3701		1	1 unit	1AD	0.190
	For MCBs 1P with AS or FC	1.5		▶	5ST3703		1	1 unit	1AD	0.185
	**Two-phase**									
	For MCBs 2P	1		▶	5ST3705		1	1 unit	1AD	0.452
	For MCBs 2P with AS or FC	1+1.5			5ST3707		1	1 unit	1AD	0.446
	Three-phase									
	For MCBs 3P	1		▶	5ST3710		1	1 unit	1AD	0.610
	For MCBs 3P with AS or FC	1+1+1.5		▶	5ST3712		1	1 unit	1AD	0.580
	For MCBs 1P with AS or FC	1.5			5ST3714		1	1 unit	1AD	0.540
	Four-phase									
	For MCBs 4P or 3P+N	1			5ST3716		1	1 unit	1AD	0.798
5ST37 busbar system, 10 mm², 56 MW, can be cut, without end caps, with touch protection										
	Four-phase									
	For MCBs 2P and RCBOs 1P+N	1	1000		5ST3770-2		1	10 units	1AD	0.578
5ST37 busbar system, 16 mm², 56 MW, can be cut, without end caps, with touch protection										
	Four-phase									
	For MCBs 2P and RCBOs 1P+N	1	1000		5ST3770-3		1	10 units	1AD	0.779
5ST37 busbar system, 10 mm², 16 MW, can be cut, with end caps, with touch protection										
	Four-phase									
	For RCCBs 4P, N right and 6 MCBs 1P+N	1	292		5ST3770-4		1	10 units	1AD	0.153
5ST37 busbar system, 16 mm², 16 MW, can be cut, with end caps, with touch protection										
	Four-phase									
	For RCCBs 4P, N right and 6 MCBs 1P+N	1	292		5ST3770-5		1	10 units	1AD	0.203
End caps for 5ST37, can be cut										
	For single-phase busbars			▶	5ST3748		1	10 units	1AD	0.001
	For two-phase and three-phase busbars			▶	5ST3750		1	10 units	1AD	0.002
	For four-phase busbars			▶	5ST3718		1	10 units	1AD	0.001

[1] 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.

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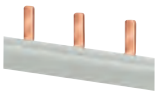
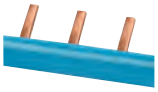
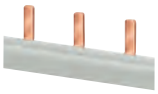
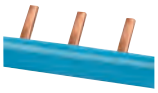
		Pin spacing	Length	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		MW[1]	mm							kg
5ST37 busbar system, 10 mm², 12 MW for 1+N miniature circuit breakers in 1 MW of the compact range, can be cut, with end caps										
	Single-phase									
	For 12 MCBs 1+N, gray	1	216		5ST3762		1	10 units	1AD	0.034
	For 12 MCBs 1+N, blue	1			5ST3763		1	10 units	1AD	0.034
5ST37 busbar system, 10 mm², 56 MW for 1+N miniature circuit breakers in 1 MW of the compact range, can be cut, without end caps										
	Single-phase									
	For MCBs 1+N, gray	1	1016		5ST3764		1	10 units	1AD	0.134
	For MCBs 1+N, blue	1			5ST3765		1	10 units	1AD	0.134
End caps for 5ST376										
	1 set comprises a right and a left cap									
	Gray				5ST3766		1	10 sets	1AD	0.001
	Blue				5ST3767		1	10 sets	1AD	0.001
Terminals for 5ST376										
	Terminal version S For conductors up to 25 mm²			►	5ST3768		1	25 units	1AD	0.012

[1] 1 MW (modular width) = 18 mm.

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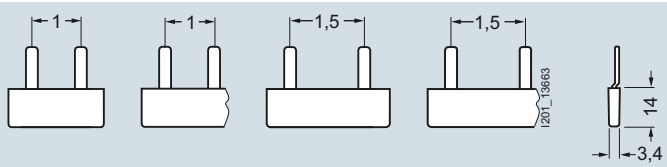
Dimensional drawings

5ST36
Pin spacing in MW (modular width; 1 MW = 18 mm)

Dimensions of side view in mm (approx.)

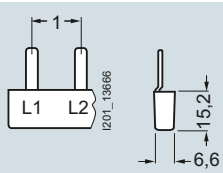


5ST3600
5ST3630

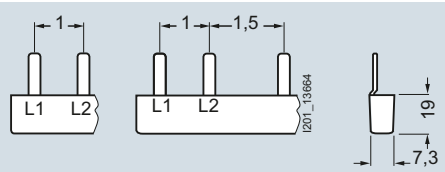
5ST3601
5ST3602
5ST3631
5ST3632

5ST3603
5ST3633

5ST3604
5ST3605
5ST3634
5ST3635

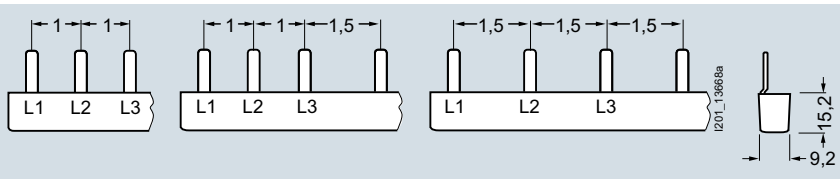


5ST3606
5ST3607
5ST3608



5ST3636
5ST3637
5ST3638

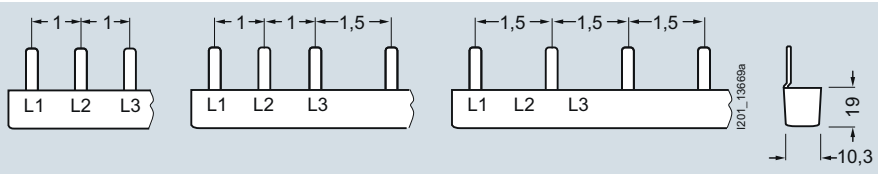
5ST3640
5ST3641
5ST3642



5ST3613
5ST3614
5ST3615
5ST3667

5ST3616
5ST3617

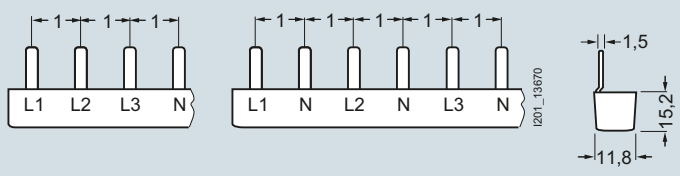
5ST3618
5ST3620



5ST3643
5ST3644
5ST3645
5ST3668

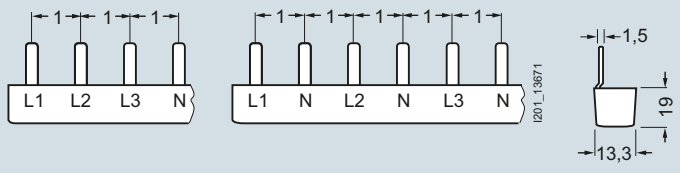
5ST3646
5ST3647

5ST3648
5ST3650



5ST3621
5ST3622

5ST3623



5ST3651
5ST3652

5ST3653

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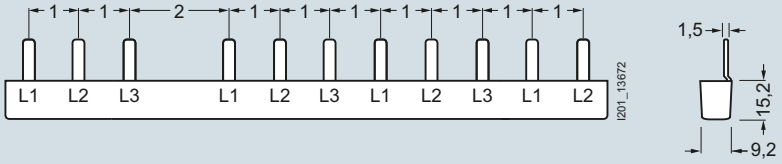
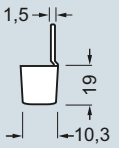
5ST36
Pin spacing in MW (modular width; 1 MW = 18 mm)

Dimensions of side view in mm (approx.)



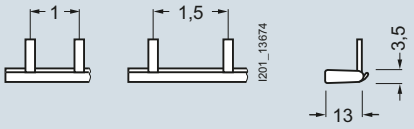
5ST3624



5ST3654

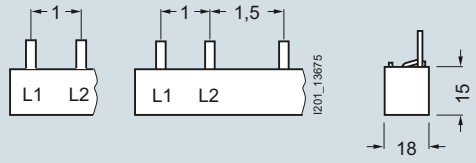
5ST37
Pin spacing in MW (modular width; 1 MW = 18 mm)

Dimensions of side view in mm (approx.)



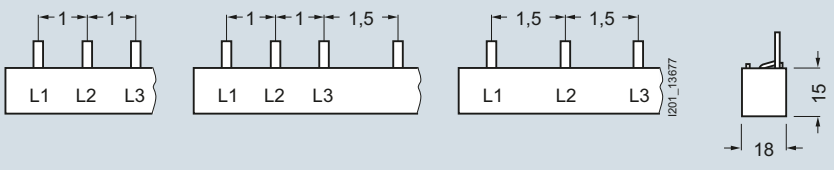
5ST3700
5ST3701
5ST3730
5ST3731
Single-phase

5ST3702
5ST3703
5ST3732
5ST3733
Single-phase



5ST3704
5ST3705
5ST3734
5ST3735
Two-phase

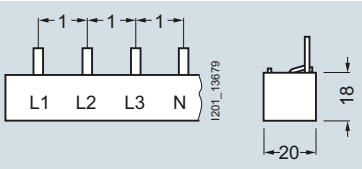
5ST3706
5ST3707
5ST3736
5ST3737
Two-phase



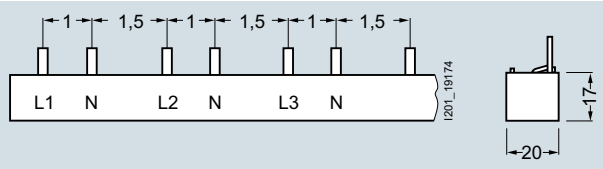
5ST3708
5ST3710
5ST3738
5ST3740

5ST3711
5ST3712
5ST3741
5ST3742

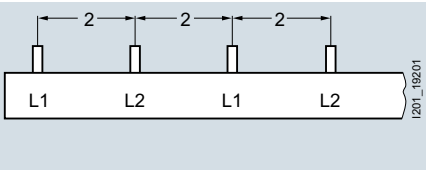
5ST3713
5ST3714
5ST3743
5ST3744



5ST3715
5ST3716
5ST3745
5ST3746



5ST3746-2



5ST3735-2

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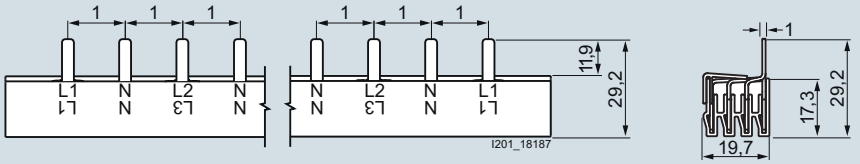
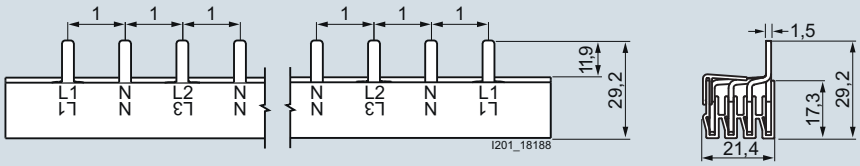
5ST standard busbars

5ST37
Pin spacing in MW (modular width; 1 MW = 18 mm)

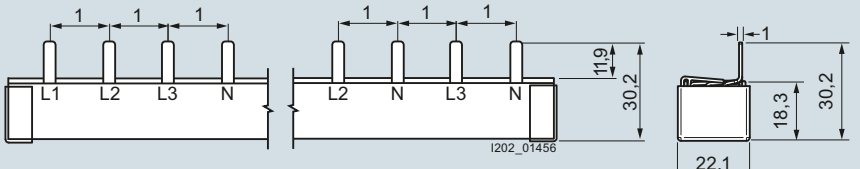
Dimensions of side view in mm (approx.)



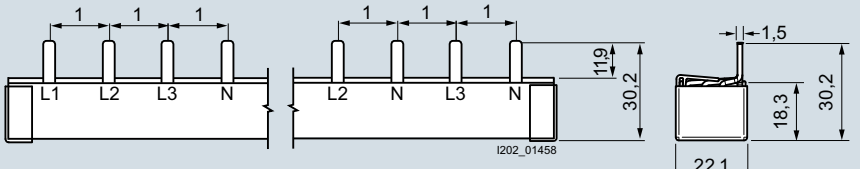
5ST3770-2



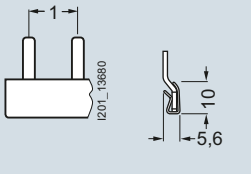
5ST3770-3



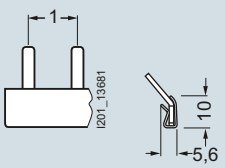
5ST3770-4



5ST3770-5



5ST3762
5ST3764



5ST3763
5ST3765

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Overview

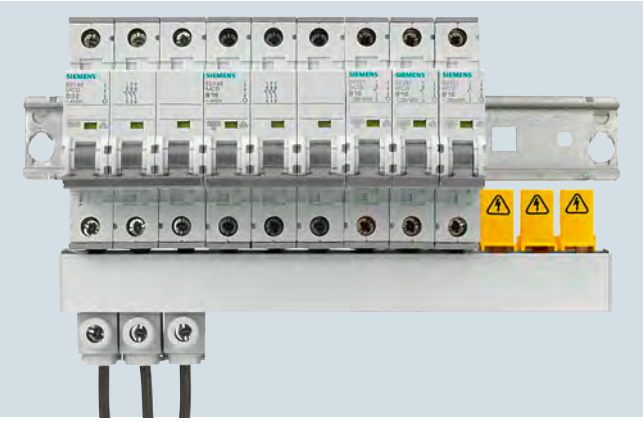
Products according to UL standards are used in North America, but also in several other countries. This is important in particular for exporting machines or electrical switchboard assemblies and equipment to the USA. Acceptance and delivery are possible only if the relevant UL standards are satisfied.

The 5ST37 busbar system according to UL 508 and CSA is suitable for both universal use worldwide with all 5SY and 5SP miniature circuit breakers for "Supplementary Protection" certified according to UL 1077 and for 3NW and 3NC fuse holders certified according to UL 512. Not approved for use in feeder circuits.

The busbars are available in single-, two- and three-phase versions with different pin spacings and with two cross-sections 18 mm^2 and 25 mm^2. Infeed can be directly into the terminals of the miniature circuit breaker or through connection terminals.

The connection terminals are available in two versions – for direct infeed at the busbar or for infeed directly at the miniature circuit breaker/fuse holder. Pins that are not required can be covered with touch protection covers.

Benefits



- Busbar with infeed through a connection terminal directly on the miniature circuit breaker up to a conductor cross-section of 35 mm^2

- Bus mounting with infeed at the fuse holder for conductor cross-sections up to 35 mm^2

- Infeed directly on the miniature circuit breaker up to a cross-section of 35 mm^2 and connection terminal for connection directly on the busbar up to conductor cross-sections of 50 mm^2
- Suitable for universal use according to both IEC and UL standards
- Can be used for 5SY, 5SP miniature circuit breakers and for Class CC, SITOR cylindrical and semiconductor fuse holders
- UL-tested combination – device and busbar
- Different cross-sections 18 mm^2 and 25 mm^2

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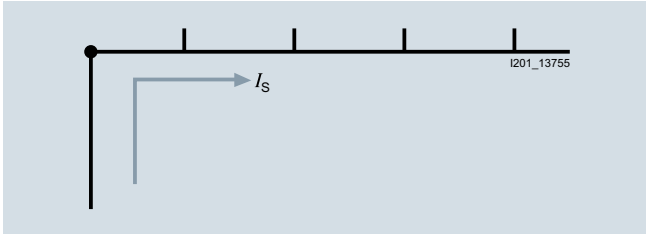
5ST3 busbars acc. to UL 508

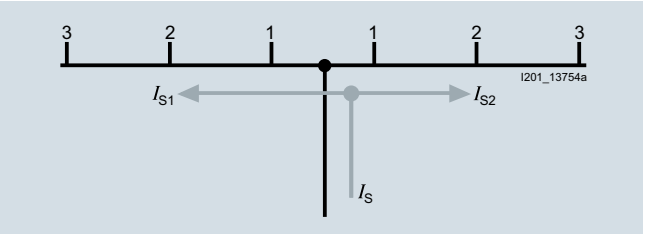
Technical specifications

			5ST37..-0HG	5ST37..-2HG	5ST3770-0HG	5ST3770-1HG
Standards			UL 508, CSA C22.2 No. 14-M 95 / IEC 60999			
Approvals			UL 508 File No. E328403 CSA			
Operational voltage						
• Acc. to IEC		V AC	690			
• Acc. to UL 508		V AC	600			
Rated conditional short-circuit current		kA	10			
• Dielectric strength		kV/mm	25			
• Surge strength		kV	> 9.5			
Max.current	UL	A	--	--	115	
	IEC	A	--	--	160	
Maximum busbar current I_S/phase						
• Infeed at the start of the busbar		A	80	100	--	--
• Infeed at the center of the busbar		A	160	200	--	--
Insulation coordination						
• Overvoltage category			III			
• Pollution degree			2			
Short-circuit current load capability			10000 A RMS sym. 600 V for three connections			
	18 mm^2		100000 A RMS sym. for protection with Class J 175 A			
	25 mm^2		100000 A RMS sym. for protection with Class J 200 A			
Busbar cross-section		mm^2 Cu	18	25	--	--
Infeed			Any			
Conductor cross-sections	Solid	AWG	--	--	10 ... 1/0	10 ... 1
		mm^2	--	--	6 ... 35 (Cu 60 °C)	6 ... 50 (Cu 75 °C)
	Stranded	AWG	--	--	10 ... 2	
		mm^2	--	--	6 ... 35	
Terminals	± Screw (Pozidriv)		--	--	2	2
• Terminal tightening torque		Nm	--	--	5	3.5
		lbs/in.	--	--	50	35

Infeed at the start or end of the busbar



Infeed along the busbar or midpoint infeed



The sum of the outgoing current per branch (1, 2, 3 ... n) must not be greater than the max. busbar current I_S/phase.

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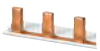
Selection and ordering data

	Pin spacing	Length	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	MW[1]	mm							kg
5ST37..-.HG busbars acc. to UL 508, 18 mm², can be cut, without end caps									
 **Single-phase**									
• For MCBs 1P (5SY) or fuse holders 10 x 38 mm/class CC (3NC1091, 3NW7513-0HG)	1	1000		5ST3701-0HG		1	1 unit	1AE	0.320
• For MCBs 1P (5SY, 5SP) with AS or FC or fuse holders 14 x 51 mm (3NC1491, 3NW7111)	1.5	1000		5ST3703-0HG		1	1 unit	1AE	0.277
Two-phase									
• For MCBs 2P (5SY) or fuse holders 10 x 38 mm/class CC (3NC1092, 3NW7523-0HG)	1	1000		5ST3705-0HG		1	1 unit	1AE	0.640
• For MCBs 2P (5SY) with AS or FC	1+1.5	1000		5ST3707-0HG		1	1 unit	1AE	0.690
Three-phase									
• For MCBs 3P (5SY) or fuse holders 10 x 38 mm/class CC (3NC1093, 3NW7533-0HG)	1	1000		5ST3710-0HG		1	1 unit	1AE	0.820
• For MCBs 3P (5SY) with AS or FC	1+1+1.5	1000		5ST3712-0HG		1	1 unit	1AE	0.800
• For MCBs 1P (5SY, 5SP) with AS or FC or fuse holders 14 x 51 mm (3NC1493, 3NW7131)	1.5	1000		5ST3714-0HG		1	1 unit	1AE	0.780
5ST37..-.HG busbars acc. to UL 508, 25 mm², can be cut, without end caps									
Single-phase									
For MCBs 1P (5SP) or fuse holders 14 x 51 mm (3NC1491, 3NW7111)	1.5	1000		5ST3701-2HG		1	1 unit	1AE	0.340
Two-phase									
For MCBs 2P (5SP) or fuse holders 14 x 51 mm (3NC1492, 3NW7121)	1.5	1000		5ST3705-2HG		1	1 unit	1AE	0.770
Three-phase									
For MCBs 3P (5SP) or fuse holders 14 x 51 mm (3NC1493, 3NW7131)	1.5	1000		5ST3710-2HG		1	1 unit	1AE	1.090
End caps for 5ST37..-.HG									
• For single-phase busbars				5ST3748-0HG		1	10 units	1AE	0.001
• For two- and three-phase busbars				5ST3750-0HG		1	10 units	1AE	0.002
Terminals according to UL 508									
Infeed to device									
35 mm²				5ST3770-0HG		1	10 units	1AE	0.033
Infeed to busbar									
50 mm²				5ST3770-1HG		1	10 units	1AE	0.033
Touch protection cover for busbars according to UL 508									
5 x 1 pin				5ST3655-0HG		1	10 units	1AE	0.011

[1] 1 MW (modular width) = 18 mm.

*** You can order this quantity or a multiple thereof.**

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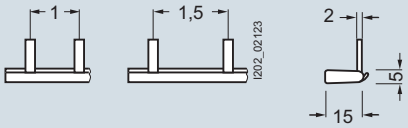
5ST3 busbars acc. to UL 508

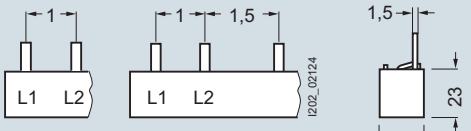
Dimensional drawings

5ST37 busbars
Pin spacing in MW (modular width; 1 MW = 18 mm)

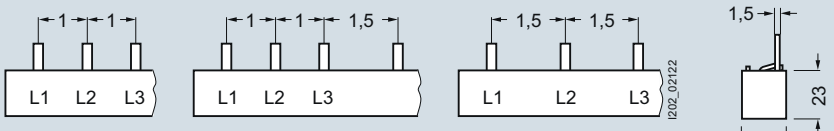
Dimensions of side view in mm (approx.)



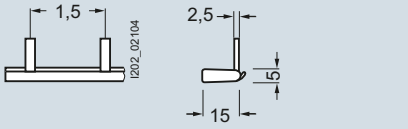
5ST3701-0HG 5ST3703-0HG



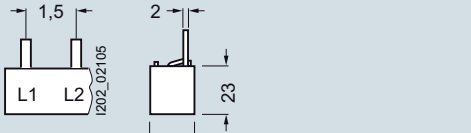
5ST3705-0HG 5ST3707-0HG



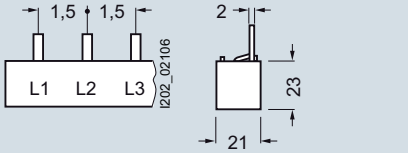
5ST3710-0HG 5ST3712-0HG 5ST3714-0HG



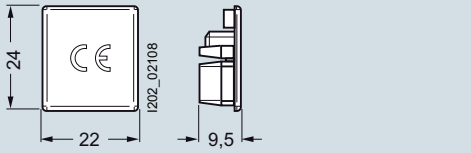
5ST3701-2HG



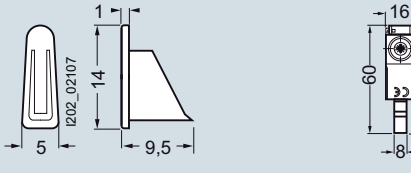
5ST3705-2HG



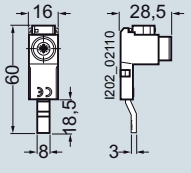
5ST3710-2HG



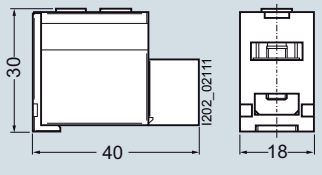
5ST3750-0HG



5ST3748-0HG



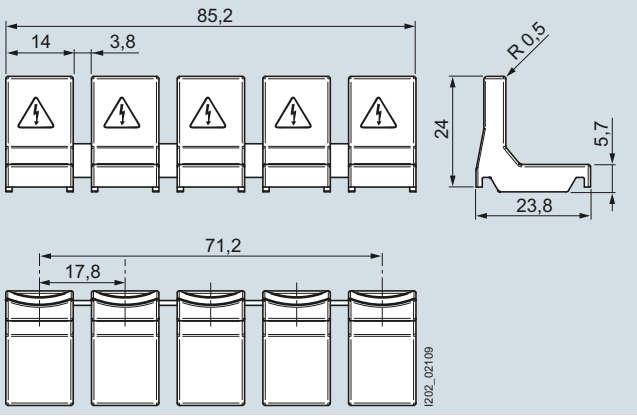
5ST3770-0HG



5ST3770-1HG

5ST36 touch protection covers
Pin spacing in MW (modular width; 1 MW = 18 mm)

Dimensions of side view in mm (approx.)



5ST3655-0HG

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Overview

Distribution blocks for standard rail mounting

Using distribution blocks it is possible to implement one, two, three and four-phase systems with a rated current of up to 400 A. This allows supply terminals to be divided into several load circuits with different cable cross-sections.

The distribution blocks are made of thermoplastic with electrical and mechanical components, which enables their use under high thermal and mechanical load acc. to IEC 60947-7-1.

Technical specifications

				5ST2501	5ST2502	5ST2503
Standards, certifications				IEC 60947-7-1		
Degree of protection				IP 20		
Poles				4		
Approved cable				Copper		
Conductor cross-section						
• Inputs per pole						
- Solid/stranded conductor acc. to IEC			mm²	1 x 2.5 … 16	1 x 6 … 35	1 x 10 … 35
	Neutral conductor		mm²	--	1 x 6 … 35	--
- Finely stranded with end sleeve			mm²	1 x 2.5 … 10	1 x 6 … 25	1 x 10 … 25
	Neutral conductor		mm²	--	1 x 6 … 25	--
• Outputs per pole						
- Solid/stranded conductor acc. to IEC		Large	mm²	8 x 1.5 … 10	2 x 4 … 16	3 x 6 … 25
		Small	mm²	--	5 x 1.5 … 6	8 x 2.5 … 16
	Neutral conductor	Large	mm²	--	6 x 4 … 16	--
		Small	mm²	--	4 x 1.5 … 10	--
- Finely stranded with end sleeve		Large	mm²	8 x 1.5 … 10	2 x 4 … 10	3 x 6 … 16
		Small		--	5 x 1.5 ... 6	8 x 2.5 ... 10
	Neutral conductor	Large	mm²	--	6 x 4 … 10	--
		Small		--	4 x 1.5 ... 6	--
Tightening torque						
• Inputs			lbs/in.	13.5	13.5	3.5 ... 5
			Nm	1.5	1.5	2
	Plug-in connection			PZ2	PZ2	PZ2
• Outputs	Large		lbs/in.	13.5	13.5	13.5
			Nm	1.5	1.5	1.5
	Plug-in connection			PZ1	PZ2	PZ2
	Small		lbs/in.	--	7.2	13.5
			Nm	--	0.8	1.5
	Plug-in connection			--	PZ1	PZ2
Operational voltage						
• IEC, max.			V	690	690	1000 V AC 1500 V DC
Overcurrent protection						
• Max. rated current			A	80	125	175
• Rated peak withstand current (I_{pk})			kA	21.6	24	20
• Rated short-time withstand current	(I_{cw} 1 s)		kA	3	4.2	6.2
Block dimensions (D x H x W)			mm	88 x 49 x 85	75 x 45 x 98	102 x 47 x 87

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5ST2 distribution blocks

UL types

				5ST2504	5ST2505	5ST2507	5ST2508	5ST2511
Standards, certifications				UL 1059 / UL 486E / IEC 60947-7-1 UL File No. E80027 / XCFR2 C22.2 No. 158 -1987 / XCFR8			UL 1059 / UL 486E / IEC 60947-7-1 UL File No. E80027 / XCFR2	
Degree of protection				IP 20				
Poles				1				
Approved cable				Copper				
Wiring type **• Front/back**				Factory and field wiring Pressure wire connector				
Conductor cross-section								
• Inputs								
- Solid and stranded conductor acc. to UL		Large	AWG	1 x 14 … 4	1 x 8 … 2	1 x 8 … 2 / 0	1 x 2 … 4 / 0	1 x 3 / 0 … 350 MCM
- Solid and stranded acc. to IEC			mm^2	2.5 … 16	10 … 35	10 … 70	35 … 120	95 … 185
- Solid and stranded conductor acc. to UL		Small	AWG	--	1 x 14 ... 6	--		
- Solid and stranded acc. to IEC			mm^2	--	6 ... 16	--		
- Finely stranded with end sleeve acc. to UL		Large	AWG	1 x 14 … 4	1 x 8 … 2	1 x 8 … 1	1 x 2 … 3 / 0	3 / 0 … 5 / 0
- Finely stranded with end sleeve acc. to IEC			mm^2	2.5 … 16	10 … 35	10 … 50	35 … 95	95 … 150
- Finely stranded with end sleeve acc. to UL		Small	AWG	--	1 x 14 ... 6	--		
- Finely stranded with end sleeve acc. to IEC			mm^2	--	6 ... 16	--		
• Outputs								
- Solid and stranded conductor acc. to UL		Top	AWG	4 x 14 … 10	6 x 14 … 6	6 x 14 … 6	4 x 16 … 8	--
- Solid and stranded acc. to IEC			mm^2	2.5 … 6	2.5 … 16	2.5 … 16	1.5 … 10	--
- Solid and stranded conductor acc. to UL		Medium	AWG	--			5 x 16 … 6	
- Solid and stranded acc. to IEC			mm^2	--			1.5 … 16	
- Solid and stranded conductor acc. to UL		Bottom	AWG	2 x 14 … 6	--		2 x 14 … 2	
- Solid and stranded acc. to IEC			mm^2	2.5 … 16	--		2 x 2.5 … 35	
- Finely stranded with end sleeve acc. to UL		Top	AWG	4 x 14 … 10	6 x 14 … 6	6 x 14 … 6	2 x 14 … 4	
- Finely stranded with end sleeve acc. to IEC			mm^2	2.5 … 6	2.5 … 16	2.5 … 16	2 x 2.5 ... 25	
- Finely stranded with end sleeve acc. to UL		Bottom	AWG	2 x 14 … 6	--		2 x 14 … 4	--
- Finely stranded with end sleeve acc. to IEC			mm^2	2.5 … 16	--		2 x 2.5 … 25	--
Tightening torque								
• Inputs			lbs/in. Nm	13.2 ... 26.5 1.5 ... 3	31 ... 44 3.5 ... 5	44 ... 53 5 ... 6	170 ... 186 19 ... 21	222 25
	Plug-in connection				Allen key (4 mm)	Allen key (5 mm)	Allen key (6 mm)	Allen key (8 mm)
• Outputs	Large		lbs/in. Nm	13.2 ... 26.5 1.5 ... 3	17.7 ... 26.5 2 ... 3	13.2 ... 26.5 1.5 ... 3	31 ... 62 3.5 ... 7	
	Plug-in connection			PZ2			Standard screwdriver	
	Small		lbs/in. Nm	7 ... 13.2 0.8 ... 1.5	-- --		18 ... 27 2 ... 3	
	Plug-in connection			PZ1	--		Standard screwdriver	
Ampere per pole, max. (UL/IEC)			A	80/80	115/125	160/160	230/250	310/400
Operational voltage								
• UL, max. (AC)			V	600				
• IEC, max. (AC/DC)			V	1000/1500				
Overcurrent protection								
• Required Class				J				
• Max. rated current (UL/IEC)			A	80/80	115/125	160/160	230/250	310/400
• SCCR RMS Sym A			kA	100				
• Rated peak withstand current (I_{pk})			kA	2.7	30		51	
• Rated short-time withstand current	(I_{cw} 1 s)		kA	1.9	4.2	11	21	
Clearance								
• Air			inches (mm)	3 / 8 (9.5)				
• Creepage distance			inches (mm)	1 / 2 (12.7)				
Fire class				UL 94V-0				
Block dimensions (D x H x W)			mm	66 x 47 x 27	74 x 47 x 27	92 x 49 x 35	96 x 49 x 45	96 x 49 x 45
Connections				With cable up to 16 mm^2	With connector or cable up to 16 mm^2 [1]	Lateral incoming feeder for parallel connection with copper bar (max. 16 x 5 mm)	--	--

[1] Copper jumper is tested for a rated current of 100 A

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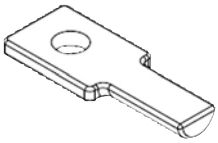
Selection and ordering data

	Version	Standard	*I*	*U*	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
			A	V	MW							kg
Distribution blocks												
5ST2504	**1-pole**	UL 1059 / UL 486E / IEC 60947-7-1	80	600	1.5		**5ST2504**		1	1 unit	1AD	0.076
			125	600	1.5		**5ST2505**		1	1 unit	1AD	0.149
		UL File No. E80027 / XCFR2 C22.2 No158 -1987 / XCFR8	160	600	2	►	**5ST2507**		1	1 unit	1AD	0.259
		UL 486E / IEC 60947-7-1	250	600	2.5	►	**5ST2508**		1	1 unit	1AD	0.430
		UL File No. E80027 / XCFR2	350	600	2.5	►	**5ST2511**		1	1 unit	1AD	0.407
5ST2501	**4-pole**	IEC 60947-7-1	80	500	5		**5ST2501**		1	1 unit	1AD	0.224
5ST2502		IEC 60947-7-1	125	690	5.5		**5ST2502**		1	1 unit	1AD	0.337
5ST2503		IEC 60947-7-1	160	500	9		**5ST2503**		1	1 unit	1AD	0.716
Accessories												
5ST2506	**Connector for 5ST2505 distribution board** • With touch protection • 20 mm² • Single-phase • 32 mm		--	--	--		**5ST2506**		1	10 units	1AD	0.015
	**Terminal lug ring terminal end for distribution block** NEW											
	Versions											
	• For 5ST2508 distribution block						**5ST2510**		1	10 units	1AD	0.057
	• For 5ST2511 distribution block						**5ST2512**		1	10 units	1AD	0.086

* You can order this quantity or a multiple thereof.

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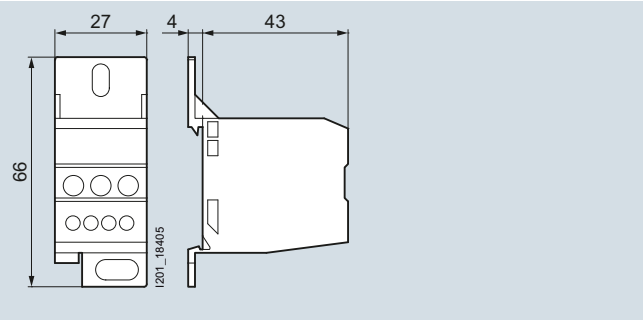
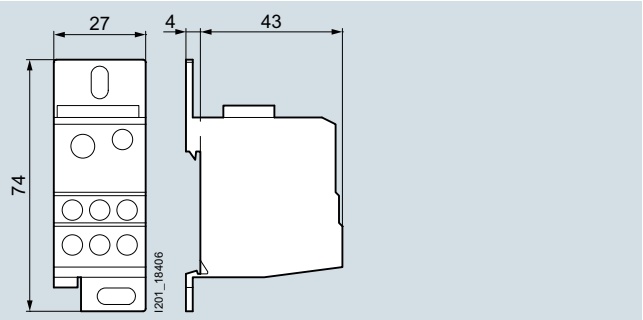
5ST2 distribution blocks

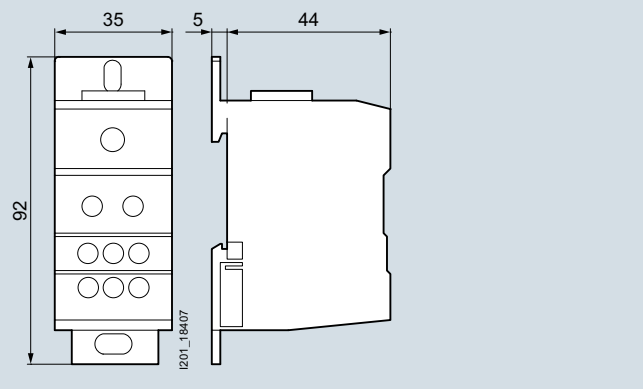
Dimensional drawings



5ST2504



5ST2505



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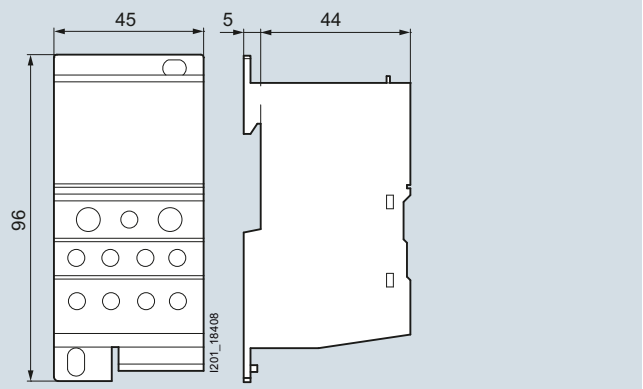
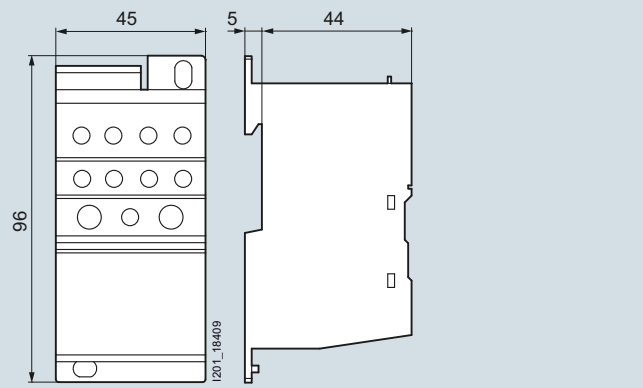
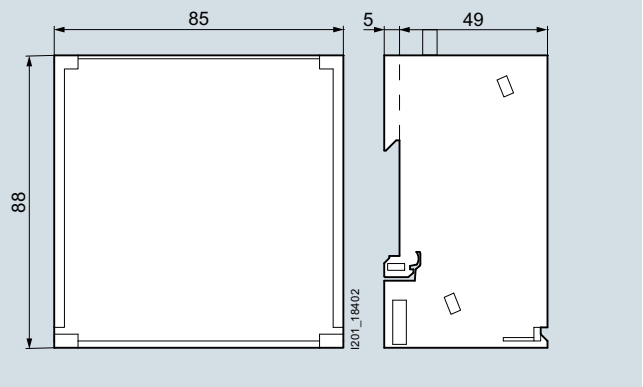


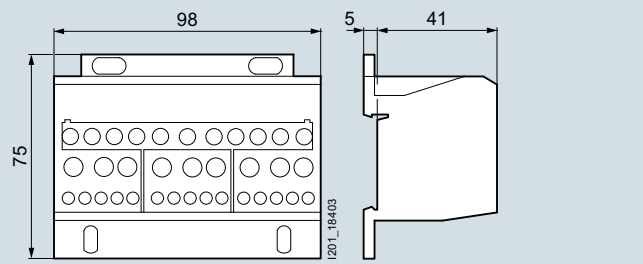
5ST2508



5ST2511



5ST2501



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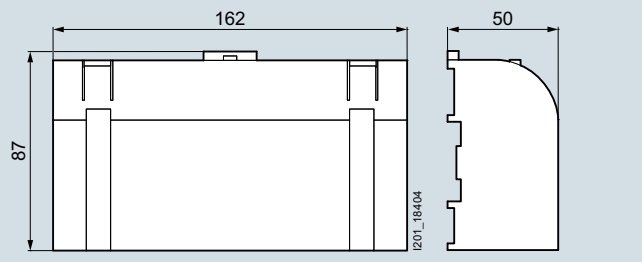

5ST2503

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Overview

SIKclip is a fast wiring system that simplifies the connection of control switches:

- For mounting directly on the rear vertical CU busbar system
- Mounting using brackets on the rear of the DIN rail.

The 4-pole busbar can handle loads of up to 250 A, each individual contact up to 63 A.

High degree of protection because each contact is locked individually.

SIKclip is made of thermoplastic acc. to IEC 60439-3 and is suitable for high thermal loads.

Technical specifications

		5ST25..
Test specifications		EN 60947-1, EN 61439-1
Degree of protection		IP20
Max. rated current I_n	A	250 at 40 °C ambient temperature
Max. rated output current I_n	A	63 at 40 °C ambient temperature
Rated operational voltage U_n	V AC	400
Rated insulation voltage	V AC	660
Test voltage	kV	2.5, 50 Hz
Connecting cables		40 A (6 mm^2), 63 A (10 mm^2)
Connecting cable type		H07VK
Ambient temperature	°C	-5 ... +60

Selection and ordering data

	Length	Conductor cross-section	Color of insulation	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm^2								kg
	SIKclip busbar									
	12 MW				5ST2520		1	1 unit	1AD	0.781
	24 MW			►	5ST2521		1	1 unit	1AD	1.460
	36 MW			►	5ST2522		1	1 unit	1AD	2.041
	Connecting cables with plug									
	120	6	Black	►	5ST2523		1	10 units	1AD	0.012
			Blue	►	5ST2524		1	10 units	1AD	0.012
		10	Black		5ST2525		1	10 units	1AD	0.019
			Blue		5ST2526		1	10 units	1AD	0.018
	220	6	Black		5ST2527		1	10 units	1AD	0.018
			Blue		5ST2528		1	10 units	1AD	0.018
		10	Black		5ST2530		1	10 units	1AD	0.031
			Blue		5ST2531		1	10 units	1AD	0.028
	Crimp connectors				5ST2532		1	20 units	1AD	0.006
	For connection to cables 4/6 mm^2									
	Fixing brackets			►	5ST2533		1	2 units	1AD	0.056
	For mounting on the rear of the standard mounting rail (pair)									

Note:

To install the SIKclip wiring system in the ALPHA AS, the busbars must be installed in a vertical rear position, but not recessed. If the busbars are in a recessed position the cables will not reach the circuit breakers.

*** You can order this quantity or a multiple thereof.**

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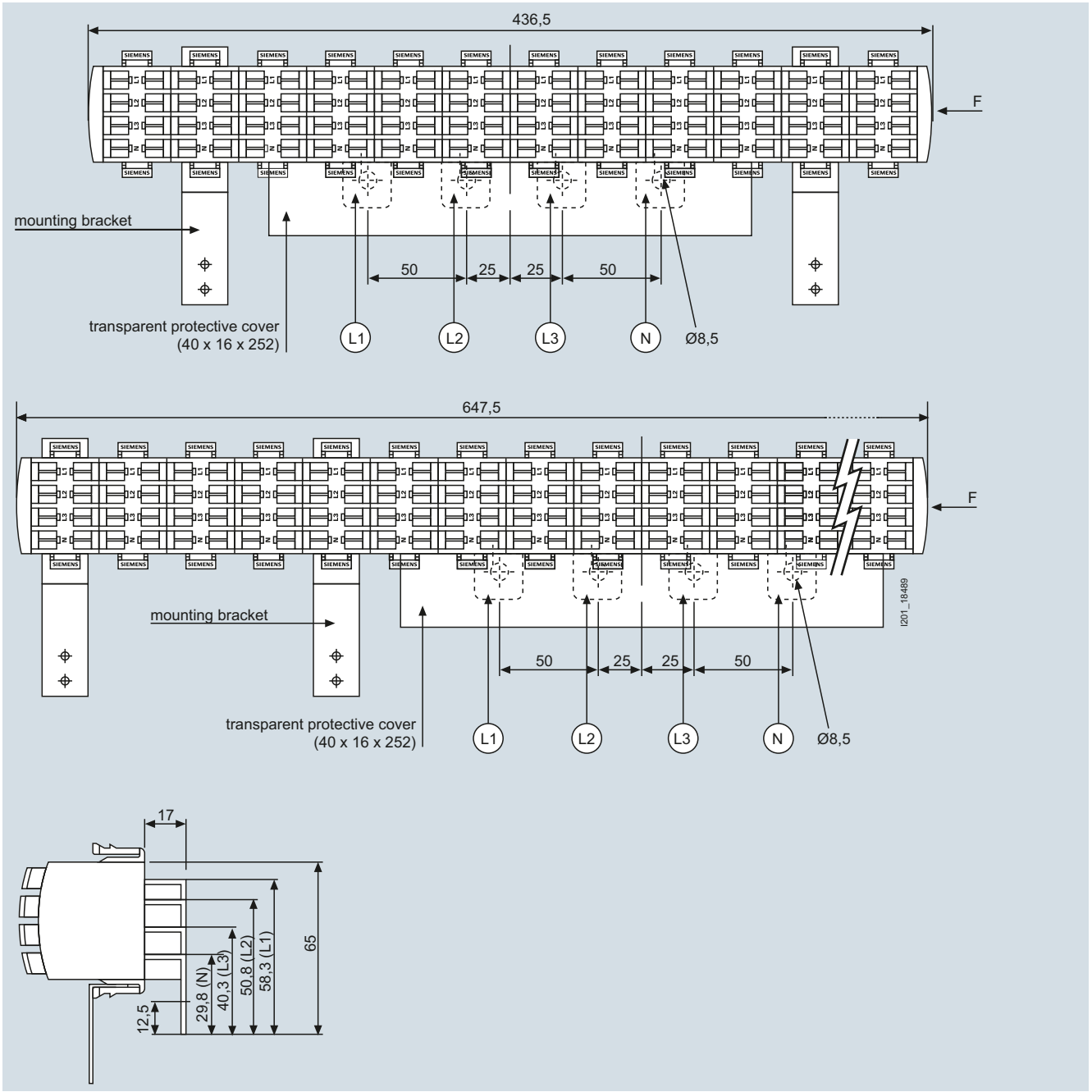
3

Dimensional drawings



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Overview

UL standards are used in North America as well as in several other countries. This is of particular importance to European exporters of electrical switchboard assemblies and equipment for machines who export to the USA, as their products will only be accepted if they meet the relevant UL standards.

A wide range of low-voltage circuit protection devices from Siemens comply with UL standards and are therefore suitable for implementation worldwide in both IEC/EN and UL applications within the framework of their specified use.

Miniature circuit breakers certified to UL 489 permit use as an all-round solution for protection tasks in distribution boards, control cabinets and control systems to UL 508A as "branch protectors". In particular, they are also approved for the protection of electrical circuits in heating, ventilating and cooling systems (HVAC), as well as for DC applications up to 60 V/125 V.

This covers a wide range of protection tasks, in residential and non-residential buildings, as well as in industry. The tripping characteristics B, C and D to EN/IEC 60898-1 have been adapted so that they fall in the permissible tripping range according to UL 489, as well as for applications at 25 °C and 40 °C.

This means that the devices are approved for use according to both standards. The enclosure dimensions of the devices correspond to DIN format. This means that the device series are suitable for universal use worldwide according to IEC or UL standards.

The key difference between the three device series is their application in different power supply systems.

- 5SJ4…-.HG40: 240/120 V AC, 1-pole, "same polarity only",
- 5SJ4…-.HG41: 240 V AC, 1-, 2- and 3-pole,
- 5SJ4…-.HG42: 480Y/277 V AC, 1-, 2- and 3-pole.

The terminals are suitable for "field wiring". This means that the devices can be installed not only in factory-built distribution boards and control cabinets, but also on-site in a customer system.

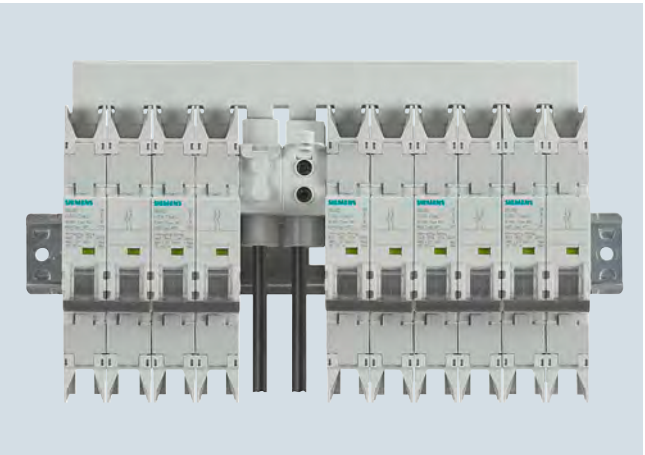
Using this mounting concept, all additional 5ST3. . .-.HG components can be combined with miniature circuit breakers of the 5SJ4…-.HG range. The auxiliary switch (AS) signals the contact position. In the event of a fault, the fault signal contact (FC) signals the automatic tripping of the miniature circuit breaker as well as the contact position. Shunt trips (ST) are used for remote tripping of miniature circuit breakers. Captive metal brackets on the additional components ensure fast mounting on the devices.

Single, two and three-phase busbars in 3 lengths with 6, 12 or 18 pins are available as accessories for all device series for "field wiring". The infeed is via connection terminals, which are available in two versions, for direct infeed at either the busbar or the miniature circuit breakers. Pins that are not required can be covered with touch protection covers.

Benefits

- Can be used globally for all applications in residential, non-residential and industrial buildings. This facilitates the planning of installations and enhances export opportunities
- The devices can be used according to IEC/EN 60898-1 and UL 489, which means these devices can be installed anywhere in the world
- Miniature circuit breakers with 480Y/277 V up to 40 A, with 240/120 V and 240 V up to 63 A
- Can be used for both AC voltage and DC voltage up to 125 V
- Rated making and breaking capacity up to 14 kA in acc. with UL 489 and up to 15 kA in acc. with IEC 60947-2
- Fast mounting with busbars up to 115 A and feeder terminals up to 50 mm^2.

- Infeed direct at miniature circuit breaker for conductor cross-sections up to 35 mm^2



- Bus mounting with central infeed directly on the busbar up to conductor cross-section of 50 mm^2

- Accessories: Auxiliary switches, fault signal contacts and shunt trips up to 480 V can be easily mounted onto the miniature circuit breaker

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Technical specifications

			5SJ4...-.HG40	5SJ4...-.HG41	5SJ4...-.HG42
Standards			EN 60947-2; UL 489 (UL File E243414); UL 489A (UL File E332105); CSA C22.2 No. 5-02		
Approvals			see chapter "Appendix"		
Tripping characteristic			B, C, D	C, D	
Rated voltage					
• Acc. to EN 60947-2		V AC	230/400	230/400	230/400
• Acc. to UL 489 and CSA C22.2 No.5-02		V AC DC V/1P DC V/2P	240/120 60 --	240 60 125	480/277 60 125
Operational voltage	Min.	V AC/DC per pole	24		
• Acc. to IEC 60898-1	Max. Max.	V DC/pole V AC	60 250/440		
• Acc. to UL 489	Max.	V DC/pole	72		
Rated breaking capacity					
• I_{cn} acc. to IEC 60898-1		kA AC	10		
• I_{cu} acc. to IEC 60947-2		kA AC	15		
• Acc. to UL 489/UL 489A and CSA C22.2 No. 5-02		kA AC	14/10[1)]	14/10[1)]	10[1)]
Insulation coordination					
• Rated insulation voltage		V AC	250	250/440	
• Pollution degree for overvoltage category			3/III		
Rated frequency		Hz	50/60		
Touch protection according to EN 50274			Yes		
Handle end position, sealable			Yes		
Degree of protection in accordance with EN 60529			IP40 in the area of the handle		
CFC and silicone-free			Yes		
Mounting			On standard mounting rail		
Terminals	± Screw	(Pozidriv)	2		
• Combined terminals at both ends			Yes		
• Terminal tightening torque, only for Cu, 60/75 °C		Nm lbs/in.	3.5 31		
Conductor cross-sections					
• Solid and stranded, acc. to UL489 and CSA C22.2 No.5-02		AWG	14 ... 4		
• Solid and stranded, according to IEC 60898-1		mm^2	1.5 ... 25		
• Finely stranded, with end sleeve		mm^2	1.5 ... 25		
Mains connection			Any		
Mounting position			Any		
Service life, on average, with rated load			20000 actuations		
EMC environment					
• Acc. to EN 60947-2			Suitable for environment "B" (immunity to interference not applicable)		
Ambient temperature		°C	-25 ... +55, max. 95 % humidity		
Storage temperature		°C	-40 ... +75		
Resistance to climate acc. to IEC 60068-2-30			6 cycles		
Resistance to vibrations acc. to IEC 60068-2-6		m/s^2	50 at 25 ... 150 Hz and 60 at 35 Hz (4 sec)		

[1)] For detailed information about rated switching capacity, see Configuration Manual "Miniature circuit breakers" at: www.siemens.com/lowvoltage/manuals.

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Additional components			Auxiliary switches (AS)			Fault signal contacts (FC)	Shunt trips (ST)	
			5ST3010-0HG 5ST3011-0HG 5ST3012-0HG			5ST3020-0HG 5ST3021-0HG 5ST3022-0HG	5ST3030-0HG	5ST3031-0HG
Standards			UL 489, UL File E321559; CSA 22.2 No. 5-02 IEC/EN 62019, IEC/EN 60947-5-1				IEC/EN 60947-1	
Operational voltage/operational current (load)								
• Acc. to IEC		V AC	400	230			110 ... 415	24 ... 60
		A AC	2	6 (NC: 13 AC, S: AC14)			--	--
		V DC	220	110	60	24	--	24 ... 60
		A DC	1	1	3	6 (DC13)	--	--
• Acc. to UL		V AC	480	277	240	120	110 ... 480	24 ... 60
		A AC	1.5	3	4	6	--	--
		V DC	125	60			--	24 ... 60
		A DC	1	3			--	--
Rated frequency		Hz	50/60					
Short-circuit protection			Miniature circuit breaker or 6 A fuse					
Minimum contact load			50 mA, 24 V					
Tripping operations			--			--	max. 2000	
Service life, on average, with rated load			12000 actuations					
Primary operating range		x U_n	--				0.7 ... 1.1	
Conductor cross-sections		AWG	22 ... 14				22 ... 14	
		mm^2	0.5 ... 2.5				0.5 ... 2.5	
Terminals	± Screw (Pozidriv)		1			1	1	
• Terminal tightening torque		Nm	0.5				0.8	
		lbs/in.	4.5				6.8	

Version		Busbars	Busbars, can be cut	Terminals		
Type		**5ST3663-.HG[1)] 5ST3664-.HG[1)] 5ST3665-.HG[1)]**	**5ST3701-3HG 5ST3703-3HG 5ST3705-3HG 5ST3707-3HG 5ST3710-3HG 5ST3712-3HG 5ST3714-3HG**	**5ST3666-0HG[1)]**	**5ST3666-2HG[1)]**	**5ST3770-3HG**
Standards		UL 489; UL File No. E321559	UL 489; UL File No. E315616	UL 489; UL File No. E321559		UL 489; UL File No. E315616
Operational voltage						
• Acc. to IEC	V AC	1000/1-pole		600/2- to 3-pole		
• Acc. to UL 489	V AC	1000/1-pole		600/2- to 3-pole (60 Hz)		
Rated conditional short-circuit current	kA	10 kA at 600 V	10 kA at 600 V with J 175 A fuse	10 kA at 600 V		10 kA at 600 V with J 175 A fuse
• Dielectric strength	kV/mm	35				
• Surge strength	kV	> 9.5	> 10	> 9.5		> 10
Rated current	A	115 At 40 °C ambient temperature	80 (infeed end) 160 (infeed center) at 35 °C ambient temperature	115 (Cu 75 °C) 95 (Cu 60 °C) at 40 °C ambient temperature	115 (Cu 75 °C) 110 (Cu 60 °C) at 40 °C ambient temperature	115 (Cu 75 °C) 95 (Cu 60 °C) at 35 ? ambient temperature
Insulation coordination						
• Pollution degree		2				
• Overvoltage category		III				
Busbar cross-section (Cu)	mm^2	16	18	16		18
Infeed		Any				
Conductor cross-sections						
• AWG cables	AWG	--		14 ... 2	14 ... 1	14 ... 2
• Solid and stranded	mm^2	--		2.5 ... 35	2.5 ... 50	2.5 ... 35
Terminals		--		6 mm Allen key	± Screw (Pozidriv) 2	6 mm Allen key
• Terminal tightening torque	Nm	--		5.5	4	5.5
	lbs/in.	--		50	35	50
Temperature resistance	°C	125 – UL 94-V0/0.4 mm				
Interrupting rating		10 kA at 600 V AC/DC				

[1)] Note:

The busbars and terminals are suitable for applications up to 80 A if installed in distribution boards with min. dimensions of 18 x 18 x 6.25 inches, or up to 115 A if installed in distribution boards with min. dimensions of 30 x 30 x 10 inches.

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Selection and ordering data

	I_n	Mounting width	DT	Characteristic B Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]							kg
	Miniature circuit breakers "same polarity only" 1P, 240 V AC								
	6	1		5SJ4106-6HG40		1	1 unit	1AE	0.160
	10			5SJ4110-6HG40		1	1 unit	1AE	0.165
	13			5SJ4113-6HG40		1	1 unit	1AE	0.163
	15			5SJ4118-6HG40		1	1 unit	1AE	0.153
	16			5SJ4116-6HG40		1	1 unit	1AE	0.168
	20			5SJ4120-6HG40		1	1 unit	1AE	0.164
	25			5SJ4125-6HG40		1	1 unit	1AE	0.166
	30			5SJ4130-6HG40		1	1 unit	1AE	0.166
	32			5SJ4132-6HG40		1	1 unit	1AE	0.164
	35			5SJ4135-6HG40		1	1 unit	1AE	0.164
	40			5SJ4140-6HG40		1	1 unit	1AE	0.167
	45			5SJ4145-6HG40		1	1 unit	1AE	0.190
	50			5SJ4150-6HG40		1	1 unit	1AE	0.159
	60			5SJ4160-6HG40		1	1 unit	1AE	0.175
	63			5SJ4163-6HG40		1	1 unit	1AE	0.162

[1] 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.

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5SJ4 . . . - . HG miniature circuit breakers acc. to UL 489 and IEC, and accessories

	I_n	Mounting width	DT	Characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic D Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
	Miniature circuit breakers "same polarity only" 1P, 240 V AC												
	0.3	1		5SJ4114-7HG40		1AE		5SJ4114-8HG40		1	1 unit	1AE	0.152
	0.5			5SJ4105-7HG40		1AE		5SJ4105-8HG40		1	1 unit	1AE	0.152
	1			5SJ4101-7HG40		1AE		5SJ4101-8HG40		1	1 unit	1AE	0.165
	1.6			5SJ4115-7HG40		1AE		5SJ4115-8HG40		1	1 unit	1AE	0.162
	2			5SJ4102-7HG40		1AE		5SJ4102-8HG40		1	1 unit	1AE	0.163
	3			5SJ4103-7HG40		1AE		5SJ4103-8HG40		1	1 unit	1AE	0.162
	4			5SJ4104-7HG40		1AE		5SJ4104-8HG40		1	1 unit	1AE	0.163
	5			5SJ4111-7HG40		1AE		5SJ4111-8HG40		1	1 unit	1AE	0.161
	6			5SJ4106-7HG40		1AE		5SJ4106-8HG40		1	1 unit	1AE	0.161
	8			5SJ4108-7HG40		1AE		5SJ4108-8HG40		1	1 unit	1AE	0.164
	10			5SJ4110-7HG40		1AE		5SJ4110-8HG40		1	1 unit	1AE	0.163
	13			5SJ4113-7HG40		1AE		5SJ4113-8HG40		1	1 unit	1AE	0.147
	15			5SJ4118-7HG40		1AE		5SJ4118-8HG40		1	1 unit	1AE	0.163
	16			5SJ4116-7HG40		1AE		5SJ4116-8HG40		1	1 unit	1AE	0.159
	20			5SJ4120-7HG40		1AE		5SJ4120-8HG40		1	1 unit	1AE	0.165
	25			5SJ4125-7HG40		1AE		5SJ4125-8HG40		1	1 unit	1AE	0.161
	30			5SJ4130-7HG40		1AE		5SJ4130-8HG40		1	1 unit	1AE	0.158
	32			5SJ4132-7HG40		1AE		5SJ4132-8HG40		1	1 unit	1AE	0.168
	35			5SJ4135-7HG40		1AE		5SJ4135-8HG40		1	1 unit	1AE	0.161
	40			5SJ4140-7HG40		1AE		5SJ4140-8HG40		1	1 unit	1AE	0.165
	45			5SJ4145-7HG40		1AE		5SJ4145-8HG40		1	1 unit	1AE	0.159
	50			5SJ4150-7HG40		1AE		5SJ4150-8HG40		1	1 unit	1AE	0.162
	60			5SJ4160-7HG40		1AE		5SJ4160-8HG40		1	1 unit	1AE	0.170
	63			5SJ4163-7HG40		1AE		5SJ4163-8HG40		1	1 unit	1AE	0.169
	Miniature circuit breakers 1P, 240 V AC												
	0.3	1		5SJ4114-7HG41		1AE		5SJ4114-8HG41		1	1 unit	1AE	0.177
	0.5			5SJ4105-7HG41		1AE		5SJ4105-8HG41		1	1 unit	1AE	0.184
	1			5SJ4101-7HG41		1AE		5SJ4101-8HG41		1	1 unit	1AE	0.173
	1.6			5SJ4115-7HG41		1AE		5SJ4115-8HG41		1	1 unit	1AE	0.169
	2			5SJ4102-7HG41		1AE		5SJ4102-8HG41		1	1 unit	1AE	0.171
	3			5SJ4103-7HG41		1AE		5SJ4103-8HG41		1	1 unit	1AE	0.171
	4			5SJ4104-7HG41		1AE		5SJ4104-8HG41		1	1 unit	1AE	0.169
	5			5SJ4111-7HG41		1AE		5SJ4111-8HG41		1	1 unit	1AE	0.169
	6			5SJ4106-7HG41		1AE		5SJ4106-8HG41		1	1 unit	1AE	0.169
	8			5SJ4108-7HG41		1AE		5SJ4108-8HG41		1	1 unit	1AE	0.166
	10			5SJ4110-7HG41		1AE		5SJ4110-8HG41		1	1 unit	1AE	0.171
	13			5SJ4113-7HG41		1AE		5SJ4113-8HG41		1	1 unit	1AE	0.174
	15			5SJ4118-7HG41		1AE		5SJ4118-8HG41		1	1 unit	1AE	0.170
	16			5SJ4116-7HG41		1AE		5SJ4116-8HG41		1	1 unit	1AE	0.175
	20			5SJ4120-7HG41		1AE		5SJ4120-8HG41		1	1 unit	1AE	0.172
	25			5SJ4125-7HG41		1AE		5SJ4125-8HG41		1	1 unit	1AE	0.170
	30			5SJ4130-7HG41		1AE		5SJ4130-8HG41		1	1 unit	1AE	0.177
	32			5SJ4132-7HG41		1AE		5SJ4132-8HG41		1	1 unit	1AE	0.155
	35			5SJ4135-7HG41		1AE		5SJ4135-8HG41		1	1 unit	1AE	0.155
	40			5SJ4140-7HG41		1AE		5SJ4140-8HG41		1	1 unit	1AE	0.175
	45			5SJ4145-7HG41		1AE		5SJ4145-8HG41		1	1 unit	1AE	0.155
	50			5SJ4150-7HG41		1AE		5SJ4150-8HG41		1	1 unit	1AE	0.177
	60			5SJ4160-7HG41		1AE		5SJ4160-8HG41		1	1 unit	1AE	0.177
	63			5SJ4163-7HG41		1AE		5SJ4163-8HG41		1	1 unit	1AE	0.155

[1] 1 MW (modular width) = 18 mm.

*** You can order this quantity or a multiple thereof.**

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5SJ4 . . . - . HG miniature circuit breakers acc. to UL 489 and IEC, and accessories

	I_n	Mounting width	DT	Characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic D Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
	Miniature circuit breakers 2P, 240 V AC												
	0.3	2		5SJ4214-7HG41		1AE		5SJ4214-8HG41		1	1 unit	1AE	0.310
	0.5			5SJ4205-7HG41		1AE		5SJ4205-8HG41		1	1 unit	1AE	0.341
	1			5SJ4201-7HG41		1AE		5SJ4201-8HG41		1	1 unit	1AE	0.332
	1.6			5SJ4215-7HG41		1AE		5SJ4215-8HG41		1	1 unit	1AE	0.310
	2			5SJ4202-7HG41		1AE		5SJ4202-8HG41		1	1 unit	1AE	0.326
	3			5SJ4203-7HG41		1AE		5SJ4203-8HG41		1	1 unit	1AE	0.328
	4			5SJ4204-7HG41		1AE		5SJ4204-8HG41		1	1 unit	1AE	0.322
	5			5SJ4211-7HG41		1AE		5SJ4211-8HG41		1	1 unit	1AE	0.325
	6			5SJ4206-7HG41		1AE		5SJ4206-8HG41		1	1 unit	1AE	0.325
	8			5SJ4208-7HG41		1AE		5SJ4208-8HG41		1	1 unit	1AE	0.333
	10			5SJ4210-7HG41		1AE		5SJ4210-8HG41		1	1 unit	1AE	0.330
	13			5SJ4213-7HG41		1AE		5SJ4213-8HG41		1	1 unit	1AE	0.329
	15			5SJ4218-7HG41		1AE		5SJ4218-8HG41		1	1 unit	1AE	0.328
	16			5SJ4216-7HG41		1AE		5SJ4216-8HG41		1	1 unit	1AE	0.329
	20			5SJ4220-7HG41		1AE		5SJ4220-8HG41		1	1 unit	1AE	0.323
	25			5SJ4225-7HG41		1AE		5SJ4225-8HG41		1	1 unit	1AE	0.334
	30			5SJ4230-7HG41		1AE		5SJ4230-8HG41		1	1 unit	1AE	0.346
	32			5SJ4232-7HG41		1AE		5SJ4232-8HG41		1	1 unit	1AE	0.340
	35			5SJ4235-7HG41		1AE		5SJ4235-8HG41		1	1 unit	1AE	0.310
	40			5SJ4240-7HG41		1AE		5SJ4240-8HG41		1	1 unit	1AE	0.343
	45			5SJ4245-7HG41		1AE		5SJ4245-8HG41		1	1 unit	1AE	0.310
	50			5SJ4250-7HG41		1AE		5SJ4250-8HG41		1	1 unit	1AE	0.340
	60			5SJ4260-7HG41		1AE		5SJ4260-8HG41		1	1 unit	1AE	0.343
	63			5SJ4263-7HG41		1AE		5SJ4263-8HG41		1	1 unit	1AE	0.339
	Miniature circuit breakers 3P, 240 V AC												
	0.3	3		5SJ4314-7HG41		1AE		5SJ4314-8HG41		1	1 unit	1AE	0.499
	0.5			5SJ4305-7HG41		1AE		5SJ4305-8HG41		1	1 unit	1AE	0.465
	1			5SJ4301-7HG41		1AE		5SJ4301-8HG41		1	1 unit	1AE	0.489
	1.6			5SJ4315-7HG41		1AE		5SJ4315-8HG41		1	1 unit	1AE	0.482
	2			5SJ4302-7HG41		1AE		5SJ4302-8HG41		1	1 unit	1AE	0.479
	3			5SJ4303-7HG41		1AE		5SJ4303-8HG41		1	1 unit	1AE	0.487
	4			5SJ4304-7HG41		1AE		5SJ4304-8HG41		1	1 unit	1AE	0.465
	5			5SJ4311-7HG41		1AE		5SJ4311-8HG41		1	1 unit	1AE	0.465
	6			5SJ4306-7HG41		1AE		5SJ4306-8HG41		1	1 unit	1AE	0.485
	8			5SJ4308-7HG41		1AE		5SJ4308-8HG41		1	1 unit	1AE	0.491
	10			5SJ4310-7HG41		1AE		5SJ4310-8HG41		1	1 unit	1AE	0.491
	13			5SJ4313-7HG41		1AE		5SJ4313-8HG41		1	1 unit	1AE	0.465
	15			5SJ4318-7HG41		1AE		5SJ4318-8HG41		1	1 unit	1AE	0.488
	16			5SJ4316-7HG41		1AE		5SJ4316-8HG41		1	1 unit	1AE	0.490
	20			5SJ4320-7HG41		1AE		5SJ4320-8HG41		1	1 unit	1AE	0.484
	25			5SJ4325-7HG41		1AE		5SJ4325-8HG41		1	1 unit	1AE	0.504
	30			5SJ4330-7HG41		1AE		5SJ4330-8HG41		1	1 unit	1AE	0.506
	32			5SJ4332-7HG41		1AE		5SJ4332-8HG41		1	1 unit	1AE	0.465
	35			5SJ4335-7HG41		1AE		5SJ4335-8HG41		1	1 unit	1AE	0.507
	40			5SJ4340-7HG41		1AE		5SJ4340-8HG41		1	1 unit	1AE	0.498
	45			5SJ4345-7HG41		1AE		5SJ4345-8HG41		1	1 unit	1AE	0.500
	50			5SJ4350-7HG41		1AE		5SJ4350-8HG41		1	1 unit	1AE	0.523
	60			5SJ4360-7HG41		1AE		5SJ4360-8HG41		1	1 unit	1AE	0.506
	63			5SJ4363-7HG41		1AE		5SJ4363-8HG41		1	1 unit	1AE	0.504

[1] 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.

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5SJ4 . . . - . HG miniature circuit breakers acc. to UL 489 and IEC, and accessories

	I_n	Mounting width	DT	Characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic D Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
	Miniature circuit breakers 1P, 480Y/277 V AC												
	0.3	1		5SJ4114-7HG42		1AE		5SJ4114-8HG42		1	1 unit	1AE	0.155
	0.5			5SJ4105-7HG42		1AE		5SJ4105-8HG42		1	1 unit	1AE	0.179
	1			5SJ4101-7HG42		1AE		5SJ4101-8HG42		1	1 unit	1AE	0.179
	1.6			5SJ4115-7HG42		1AE		5SJ4115-8HG42		1	1 unit	1AE	0.155
	2			5SJ4102-7HG42		1AE		5SJ4102-8HG42		1	1 unit	1AE	0.175
	3			5SJ4103-7HG42		1AE		5SJ4103-8HG42		1	1 unit	1AE	0.173
	4			5SJ4104-7HG42		1AE		5SJ4104-8HG42		1	1 unit	1AE	0.175
	5			5SJ4111-7HG42		1AE		5SJ4111-8HG42		1	1 unit	1AE	0.171
	6			5SJ4106-7HG42		1AE		5SJ4106-8HG42		1	1 unit	1AE	0.175
	8			5SJ4108-7HG42		1AE		5SJ4108-8HG42		1	1 unit	1AE	0.155
	10			5SJ4110-7HG42		1AE		5SJ4110-8HG42		1	1 unit	1AE	0.175
	13			5SJ4113-7HG42		1AE		5SJ4113-8HG42		1	1 unit	1AE	0.155
	15			5SJ4118-7HG42		1AE		5SJ4118-8HG42		1	1 unit	1AE	0.175
	16			5SJ4116-7HG42		1AE		5SJ4116-8HG42		1	1 unit	1AE	0.173
	20			5SJ4120-7HG42		1AE		5SJ4120-8HG42		1	1 unit	1AE	0.174
	25			5SJ4125-7HG42		1AE		5SJ4125-8HG42		1	1 unit	1AE	0.155
	30			5SJ4130-7HG42		1AE		5SJ4130-8HG42		1	1 unit	1AE	0.182
	32			5SJ4132-7HG42		1AE		5SJ4132-8HG42		1	1 unit	1AE	0.155
	35			5SJ4135-7HG42		1AE		--					
	40			5SJ4140-7HG42		1AE		--					
	Miniature circuit breakers 2P, 480Y/277 V AC												
	0.3	2		5SJ4214-7HG42		1AE		5SJ4214-8HG42		1	1 unit	1AE	0.346
	0.5			5SJ4205-7HG42		1AE		5SJ4205-8HG42		1	1 unit	1AE	0.342
	1			5SJ4201-7HG42		1AE		5SJ4201-8HG42		1	1 unit	1AE	0.338
	1.6			5SJ4215-7HG42		1AE		5SJ4215-8HG42		1	1 unit	1AE	0.335
	2			5SJ4202-7HG42		1AE		5SJ4202-8HG42		1	1 unit	1AE	0.336
	3			5SJ4203-7HG42		1AE		5SJ4203-8HG42		1	1 unit	1AE	0.330
	4			5SJ4204-7HG42		1AE		5SJ4204-8HG42		1	1 unit	1AE	0.335
	5			5SJ4211-7HG42		1AE		5SJ4211-8HG42		1	1 unit	1AE	0.330
	6			5SJ4206-7HG42		1AE		5SJ4206-8HG42		1	1 unit	1AE	0.334
	8			5SJ4208-7HG42		1AE		5SJ4208-8HG42		1	1 unit	1AE	0.339
	10			5SJ4210-7HG42		1AE		5SJ4210-8HG42		1	1 unit	1AE	0.332
	13			5SJ4213-7HG42		1AE		5SJ4213-8HG42		1	1 unit	1AE	0.334
	15			5SJ4218-7HG42		1AE		5SJ4218-8HG42		1	1 unit	1AE	0.337
	16			5SJ4216-7HG42		1AE		5SJ4216-8HG42		1	1 unit	1AE	0.334
	20			5SJ4220-7HG42		1AE		5SJ4220-8HG42		1	1 unit	1AE	0.342
	25			5SJ4225-7HG42		1AE		5SJ4225-8HG42		1	1 unit	1AE	0.338
	30			5SJ4230-7HG42		1AE		5SJ4230-8HG42		1	1 unit	1AE	0.342
	32			5SJ4232-7HG42		1AE		5SJ4232-8HG42		1	1 unit	1AE	0.350
	35			5SJ4235-7HG42		1AE		--					
	40			5SJ4240-7HG42		1AE		--					

[1] 1 MW (modular width) = 18 mm.

*** You can order this quantity or a multiple thereof.**

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5SJ4 . . . - . HG miniature circuit breakers acc. to UL 489 and IEC, and accessories

	I_n	Mounting width	DT	Characteristic C: Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic D: Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]											kg
	Miniature circuit breakers 3P, 480Y/277 V AC												
	0.3	3		5SJ4314-7HG42		1AE		5SJ4314-8HG42		1	1 unit	1AE	0.510
	0.5			5SJ4305-7HG42		1AE		5SJ4305-8HG42		1	1 unit	1AE	0.529
	1			5SJ4301-7HG42		1AE		5SJ4301-8HG42		1	1 unit	1AE	0.507
	1.6			5SJ4315-7HG42		1AE		5SJ4315-8HG42		1	1 unit	1AE	0.495
	2			5SJ4302-7HG42		1AE		5SJ4302-8HG42		1	1 unit	1AE	0.495
	3			5SJ4303-7HG42		1AE		5SJ4303-8HG42		1	1 unit	1AE	0.492
	4			5SJ4304-7HG42		1AE		5SJ4304-8HG42		1	1 unit	1AE	0.488
	5			5SJ4311-7HG42		1AE		5SJ4311-8HG42		1	1 unit	1AE	0.485
	6			5SJ4306-7HG42		1AE		5SJ4306-8HG42		1	1 unit	1AE	0.491
	8			5SJ4308-7HG42		1AE		5SJ4308-8HG42		1	1 unit	1AE	0.500
	10			5SJ4310-7HG42		1AE		5SJ4310-8HG42		1	1 unit	1AE	0.497
	13			5SJ4313-7HG42		1AE		5SJ4313-8HG42		1	1 unit	1AE	0.500
	15			5SJ4318-7HG42		1AE		5SJ4318-8HG42		1	1 unit	1AE	0.496
	16			5SJ4316-7HG42		1AE		5SJ4316-8HG42		1	1 unit	1AE	0.497
	20			5SJ4320-7HG42		1AE		5SJ4320-8HG42		1	1 unit	1AE	0.498
	25			5SJ4325-7HG42		1AE		5SJ4325-8HG42		1	1 unit	1AE	0.502
	30			5SJ4330-7HG42		1AE		5SJ4330-8HG42		1	1 unit	1AE	0.514
	32			5SJ4332-7HG42		1AE		5SJ4332-8HG42		1	1 unit	1AE	0.511
	35			5SJ4335-7HG42		1AE		--					
	40			5SJ4340-7HG42		1AE		--					

		Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		MW[1]							kg
	Auxiliary switches (AS) acc. to UL 489								
	1 NO + 1 NC	0.5		5ST3010-0HG		1	1 unit	1AE	0.087
	2 NO			5ST3011-0HG		1	1 unit	1AE	0.086
	2 NC			5ST3012-0HG		1	1 unit	1AE	0.089
	Fault signal contacts (FC) acc. to UL 489								
	1 NO + 1 NC	0.5		5ST3020-0HG		1	1 unit	1AE	0.088
	2 NO			5ST3021-0HG		1	1 unit	1AE	0.085
	2 NC			5ST3022-0HG		1	1 unit	1AE	0.083
	Shunt trips (ST) acc. to UL 489								
	110 ... 480 V AC	1		5ST3030-0HG		1	1 unit	1AE	0.121
	24 ... 60 V AC/DC		►	5ST3031-0HG		1	1 unit	1AE	0.121

[1] 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.

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Accessories

	Pin spacing	Length	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	MW[1]	mm							kg
Busbars acc. to UL 489 specially for 5SJ4…-.HG.. miniature circuit breakers, fixed lengths, cannot be cut[2], UL File E321559									
Single-phase									
For 6 MCBs 1P	1	100		5ST3663-0HG		1	10 units	1AE	0.058
For 12 MCBs 1P		205		5ST3663-1HG		1	10 units	1AE	0.115
For 18 MCBs 1P		310		5ST3663-2HG		1	10 units	1AE	0.173
Two-phase									
For 3 MCBs 2P	1	100		5ST3664-0HG		1	10 units	1AE	0.065
For 6 MCBs 2P		205		5ST3664-1HG		1	10 units	1AE	0.138
For 9 MCBs 2P		310		5ST3664-2HG		1	10 units	1AE	0.212
Three-phase									
For 2 MCBs 3P	1	100		5ST3665-0HG		1	10 units	1AE	0.069
For 4 MCBs 3P		205		5ST3665-1HG		1	10 units	1AE	0.156
For 6 MCBs 3P		310		5ST3665-2HG		1	10 units	1AE	0.249
Busbars acc. to UL 489 specially for 5SJ4…-.HG.. miniature circuit breakers, can be cut, UL File E315616									
Single-phase									
For MCBs 1P	1	1016		5ST3701-3HG		1	1 unit	1AE	0.820
For MCBs 1P with AS or FC		1016		5ST3703-3HG		1	1 unit	1AE	0.710
Two-phase									
For MCBs 2P	1	1016		5ST3705-3HG		1	1 unit	1AE	1.010
For MCBs 2P with AS or FC		1016		5ST3707-3HG		1	1 unit	1AE	0.990
Three-phase									
For MCBs 3P	1	1016		5ST3710-3HG		1	1 unit	1AE	1.230
For MCBs 3P with AS or FC	1+1+1.5	1016		5ST3712-3HG		1	1 unit	1AE	1.170
For MCBs 3x (1P with AS or FC)		1016		5ST3714-3HG		1	1 unit	1AE	1.160
Note: For the UL 489 busbars that can be cut, use only the associated separate infeed, end cap and touch protection cover.									
Terminals according to UL 489									
Infeed at the miniature circuit breaker • Specially for 5SJ4...-.HG.. miniature circuit breakers • Max. 35 mm²				5ST3666-0HG		1	10 units	1AE	0.036
Infeed at the miniature circuit breaker • Specially for 5SJ4...-.HG.. miniature circuit breakers • For 5ST37..-3HG busbars that can be cut only • Max. 35 mm²				5ST3770-3HG		1	10 units	1AE	0.038
Infeed at the busbar Max. 50 mm²				5ST3666-2HG		1	10 units	1AE	0.034
End cap for 5ST37..-3HG, can be cut acc. to UL 489									
End cap For 1-, 2-, 3-phase busbars				5ST3750-3HG		1	10 units	1AE	0.003

1) 1 MW (modular width) = 18 mm.

2) All unassigned pins of the busbar must be covered with 5ST3666-1HG touch protection covers.

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5SJ4 . . . - . HG miniature circuit breakers acc. to UL 489 and IEC, and accessories

		Pin spacing	Length	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		MW[1]	mm							kg
Touch protection covers for busbars acc. to UL 489										
	Touch protection covers 3 × 1 pin				5ST3666-1HG		1	10 units	1AE	0.004
	Touch protection covers • For 5ST337..-3HG busbars that can be cut only • 3 × 1 pin				5ST3655-3HG		1	10 units	1AE	0.004
Handle locking devices according to UL, UL File E321559										
	Can be sealed against undesired manual ON/OFF switching, padlock with max. 3 mm shackle				5ST3801		1	1 unit	1AD	0.012
Padlocks										
	For 5ST3801 handle locking device				5ST3802		1	1 unit	1AD	0.033

[1] 1 MW (modular width) = 18 mm.

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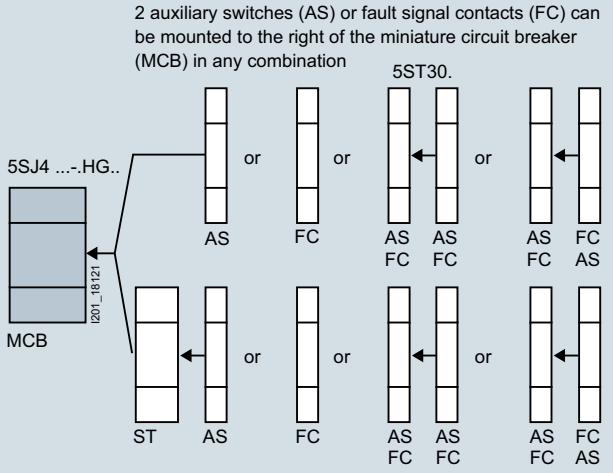
More information

Mounting concept for mounting 5ST30. .-0HG accessories on 5SJ4. . .-. HG miniature circuit breakers

The diagram shows which additional components can be mounted on the right.



MCB: Miniature circuit breaker
ST: Shunt trip
AS: Auxiliary switch
FC: Fault signal contact

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SHU 5SP3 main miniature circuit breakers

Overview

The selective main miniature circuit breaker is used as a circuit breaker on meter panels.

Characteristic E is adapted to the special application requirements for cascade circuits between melting fuses and miniature circuit breakers in distributor circuits.

Used in conjunction with downstream miniature circuit breakers, SHU 5SP3 main miniature circuit breakers ensure effective protection and optimum availability of the plant.

Benefits

- Quick and easy installation on busbar and standard mounting rail
- Reliable and high selectivity
- Optimum availability of the consumer load
- The SHU 5SP3 main miniature circuit breaker operates on a voltage-independent basis
- High and safe selectivity between sub-distribution and meter panel ensures the continued supply of the unaffected circuits in the event of a fault, thus improving system availability
- In the event of a fault, the SHU 5SP3 main miniature circuit breaker prevents an existing short-circuit from being reconnected until the cause of the fault has been eliminated
- The SHU 5SP3 selective main miniature circuit breaker ensures fast and safe disconnection and reconnection of loads
- It complies with all the requirements of TAB 2007 and can therefore be used in metering systems

Technical specifications

			5SP37.., 5SP37..-1	5SP37..-2, 5SP37..-2KK0.	5SP38..-2
Standards			DIN VDE 0645	DIN VDE 0641-21	
Rated voltage U_n					
• 1-pole		V AC	230/400		--
• 3 x 1-pole		V AC	400	--	400
Operational voltage	Min.	V AC	110		
	Max.	V AC	440		
Rated frequency		Hz	50 ... 60		
Rated current I_n		A	16 ... 100	16 ... 63	
Rated insulation voltage U_i		V AC	690		
Rated making and breaking capacity I_{cn}		A	25000		
Insulation coordination					
• Overvoltage category			IV		
• Pollution degree			3		
Surge strength U_{imp}		kV	6		
Impact resistance			30 g, at least 3 impacts, impact duration 11 ms		
Resistance to vibrations			2 g, 20 frequency cycles 5 ... 150 ... 15 Hz		
Switching position indication			OFF = green, ON = red		
Main switch characteristics	Acc. to EN 60204-1		Yes		
Handle end position, sealable			Yes		
Cutoff		ON/OFF	--	Locking slide with lock, additional wire seal, cable ties and Antilux	
Device depth		mm	92		
Degree of protection			IP20 with connected conductors		
Mains connection			Any		
Mounting position			Any		
Mounting			On standard mounting rail or interface adapter	Direct tool-free mounting on the busbar system	
Service life, on average, with rated load		Actuations	20000		
Wire connections			Saddle terminals at both ends		
• Top				Screwless spring terminal for flexible cables, in particular for meter connecting cables acc. to DIN 43870-3	
• Bottom				Box terminal, also for infeed to the busbar system, up to 100 A infeed current	
Conductor cross-sections					
• Top and bottom, solid and stranded		mm^2	2.5 ... 70	--	
• Top and bottom, finely stranded		mm^2	2.5 ... 50	--	
• Top, finely stranded		mm^2	--	2.5 ... 16	
• Bottom, solid, stranded and finely stranded, with end sleeve		mm^2	--	2.5 ... 50	
Storage temperature		°C	-40 ... +70		
Ambient temperature		°C	-25 ... +55		

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Selection and ordering data

	I_n	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]							kg
	Main miniature circuit breakers, 1P, L1								
	For direct busbar mounting (spacing: 40 mm), no further accessories required								
	16	1.5		5SP3716-2KK01		1	1 unit	1AE	0.503
	20			5SP3720-2KK01		1	1 unit	1AE	0.483
	25			5SP3725-2KK01		1	1 unit	1AE	0.400
	35			5SP3735-2KK01		1	1 unit	1AE	0.511
	40			5SP3740-2KK01		1	1 unit	1AE	0.495
	50			5SP3750-2KK01		1	1 unit	1AE	0.511
	63			5SP3763-2KK01		1	1 unit	1AE	0.517
	Main miniature circuit breakers, 1P, L2								
	For direct busbar mounting (spacing: 40 mm), no further accessories required								
	16	1.5		5SP3716-2KK02		1	1 unit	1AE	0.473
	20			5SP3720-2KK02		1	1 unit	1AE	0.474
	25			5SP3725-2KK02		1	1 unit	1AE	0.474
	35			5SP3735-2KK02		1	1 unit	1AE	0.509
	40			5SP3740-2KK02		1	1 unit	1AE	0.476
	50			5SP3750-2KK02		1	1 unit	1AE	0.483
	63			5SP3763-2KK02		1	1 unit	1AE	0.509
	Main miniature circuit breakers, 1P, L3								
	For direct busbar mounting (spacing: 40 mm), no further accessories required								
	16	1.5		5SP3716-2KK03		1	1 unit	1AE	0.468
	20			5SP3720-2KK03		1	1 unit	1AE	0.466
	25			5SP3725-2KK03		1	1 unit	1AE	0.472
	35			5SP3735-2KK03		1	1 unit	1AE	0.489
	40			5SP3740-2KK03		1	1 unit	1AE	0.469
	50			5SP3750-2KK03		1	1 unit	1AE	0.488
	63			5SP3763-2KK03		1	1 unit	1AE	0.503
	Main miniature circuit breakers, 1P each 1 x L1, L2, L3, packaged as a set								
	For direct busbar mounting (spacing: 40 mm), no further accessories required								
	16	3 x 1.5		5SP3716-2		1	1 set	1AE	1.270
	20			5SP3720-2		1	1 set	1AE	1.310
	25			5SP3725-2		1	1 set	1AE	1.305
	35			5SP3735-2		1	1 set	1AE	1.341
	40			5SP3740-2		1	1 set	1AE	1.324
	50			5SP3750-2		1	1 set	1AE	1.309
	63			5SP3763-2		1	1 set	1AE	1.354
	Main miniature circuit breakers, 3 x 1P single-pole switching								
	For direct busbar mounting (spacing: 40 mm), no further accessories required								
	16	4.5		5SP3816-2		1	1 unit	1AE	1.256
	20			5SP3820-2		1	1 unit	1AE	1.281
	25			5SP3825-2		1	1 unit	1AE	1.256
	35			5SP3835-2		1	1 unit	1AE	1.277
	40			5SP3840-2		1	1 unit	1AE	1.284
	50			5SP3850-2		1	1 unit	1AE	1.262
	63			5SP3863-2		1	1 unit	1AE	1.303

[1] 1 MW (modular width) = 18 mm.

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SHU 5SP3 main miniature circuit breakers

	I_n	Mounting width DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]						kg
Acc. to DIN 0641-21 for mounting on 35 mm DIN rail								
	Main miniature circuit breakers, 1P							
	16	1.5	5SP3716-3		1	1 unit	1AE	0.350
	20		5SP3720-3		1	1 unit	1AE	0.350
	25		5SP3725-3		1	1 unit	1AE	0.350
	35		5SP3735-3		1	1 unit	1AE	0.444
	40		5SP3740-3		1	1 unit	1AE	0.444
	50		5SP3750-3		1	1 unit	1AE	0.479
	63		5SP3763-3		1	1 unit	1AE	0.350
	Main miniature circuit breakers, 3 x 1P							
	16	4.5	5SP3816-3		1	1 unit	1AE	1.050
	20		5SP3820-3		1	1 unit	1AE	1.050
	25		5SP3825-3		1	1 unit	1AE	1.050
	35		5SP3835-3		1	1 unit	1AE	1.050
	40		5SP3840-3		1	1 unit	1AE	1.088
	50		5SP3850-3		1	1 unit	1AE	1.050
	63		5SP3863-3		1	1 unit	1AE	1.110
	Main miniature circuit breakers, 2P							
	16	3	5SP3216-3		1	1 unit	1AE	0.700
	20		5SP3220-3		1	1 unit	1AE	0.700
	25		5SP3225-3		1	1 unit	1AE	0.700
	35		5SP3235-3		1	1 unit	1AE	0.700
	40		5SP3240-3		1	1 unit	1AE	0.700
	50		5SP3250-3		1	1 unit	1AE	0.700
	63		5SP3263-3		1	1 unit	1AE	0.700
	Main miniature circuit breakers, 3P							
	16	4.5	5SP3316-3		1	1 unit	1AE	1.050
	20		5SP3320-3		1	1 unit	1AE	1.050
	25		5SP3325-3		1	1 unit	1AE	1.050
	35		5SP3335-3		1	1 unit	1AE	1.050
	40		5SP3340-3		1	1 unit	1AE	1.050
	50		5SP3350-3		1	1 unit	1AE	1.050
	63		5SP3363-3		1	1 unit	1AE	1.050
	Main miniature circuit breakers, 4P							
	16	6	5SP3416-3		1	1 unit	1AE	1.400
	20		5SP3420-3		1	1 unit	1AE	1.400
	25		5SP3425-3		1	1 unit	1AE	1.400
	35		5SP3435-3		1	1 unit	1AE	1.400
	40		5SP3440-3		1	1 unit	1AE	1.400
	50		5SP3450-3		1	1 unit	1AE	1.400
	63		5SP3463-3		1	1 unit	1AE	1.400

[1] 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.

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	I_n	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	MW[1]							kg
	Main miniature circuit breakers, 1P For mounting on standard mounting rail, busbar (spacing: 40 mm, with 5ST1 busbar adapter), or for screw fixing								
	80			5SP3780		1	1 unit	1AE	0.515
	100			5SP3791		1	1 unit	1AE	0.529
	Main miniature circuit breakers, 3 x 1P Premounted on 5ST1324 busbar adapter; can be clipped onto busbars (spacing: 40 mm); including three 5ST1323 transparent operating protective covers								
	80	6		5SP3780-1		1	1 set	1AE	1.785
	100			5SP3791-1		1	1 set	1AE	1.857
	Mounting plates For mounting on standard mounting rails according to EN 50022								
	For 1 or 2 standard mounting rails, universal application, tier spacing 125 mm		►	5ST1322		1	10 units	1AE	0.030
	Busbar adapters for 5SP37.. and 5SP37..-1 Suitable for busbar spacing 40 mm can be equipped with 3 selective main miniature circuit breakers			5ST1328		1	1 unit	1AE	0.250
	Breaker blocking covers for 5SP37.. and 5SP37..-1 To prevent manual switching OFF			5ST1318		1	10 units	1AE	0.003
	Operating protective covers, transparent, for 5SP37.. and 5SP37..-1 Multiple locking options against accidental and intentional operation • Padlocks • Phillips screwdrivers • Special wrenches (Antilux) • These can be installed by the operator or the power utility			5ST1323		1	3 units	1AE	0.011
	Terminal covers for 5SP37.. and 5SP37..-1 2 units required per device Terminal covers in compliance with cladding dimensions acc. to DIN 43880			5ST1316		1	6 units	1AE	0.004

[1] 1 MW (modular width) = 18 mm.

* You can order this quantity or a multiple thereof.

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Notes

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4/2	**Introduction**
4/4	**5SV RCCBs**
4/10	**5SM3 RCCBs**
4/13	**SIQUENCE 5SM3/5SU1 universal current-sensitive RCCBs, type B and type B+**
4/18	**Additional components**
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4/42	**5ST busbars for modular installation devices**
4/45	**5SM1 and 5SZ9 RCCB socket outlets**
4/46	**Accessories**
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For further technical product information:

Configuration Manual

Residual Current Protective Devices / Arc Fault Detection Devices (AFDDs)
Article No.: 3ZW1012-5SM33-0AC1

Siemens Industry Online Support:

www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
Download
FAQ
Manual
Product note
Software archive
Technical data

NEW

Direct reference to the products in the Industry Mall from the selection and ordering data tables:

Article No.
www.siemens.com/product?Article No.
3VA2025-5HL36-0AA0

Paper catalog:
To get more product information enter the Web address plus Article No.

PDF catalog:
Get more product information with just a mouse click.

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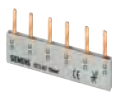
Overview

Devices		Page	Application	Standards	Used in		
					Non-residential buildings	Residential buildings	Industry
	5SV RCCBs	4/4	Personnel, material and fire protection, as well as protection against direct contact. SIGRES with active condensation protection for use in harsh environments. Super resistant and selective versions	IEC/EN 61008 IEC/EN 62423	✓	✓	✓
	5SM3 RCCBs	4/10	Personnel, material and fire protection, as well as protection against direct contact	IEC/EN 61008 IEC/EN 62423	✓	✓	✓
	SIQUENCE 5SM3/5SU1 universal current-sensitive RCCBs, type B and type B+	4/13	SIQUENCE, the technology of universal current-sensitive residual current protective devices	VDE 0664-100 VDE 0664-200 VDE V 0664-110	✓	--	✓
	Additional components	4/18	Remote controlled mechanisms, auxiliary switches for all residual current operated circuit breakers Leakage current measurement device for fault locating and the optimum selection of RCCBs	IEC/EN 62019	✓	--	✓
	5SM2 RC units	4/22	The freely selectable combination of RC units with miniature circuit breakers permits the flexible configuration of RCBO combinations	IEC/EN 61009	✓	--	✓
	5SU1 RCBOs	4/30	The ideal protection combination for all electrical circuits due to the compact device versions of RCCBs and miniature circuit breakers in a single device	IEC/EN 61009	✓	✓	✓
	5SM6 AFD units	4/38	Enhanced fire protection through the detection and isolation of arcing faults	IEC/EN 62606	✓	✓	--
	**5ST busbars for modular installation devices**	4/42	Busbars in 10 mm^2 and 16 mm^2 save space in the distribution board and time during mounting	--	✓	✓	✓
	5SM1 and 5SZ9 RCCB socket outlets	4/45	For retrofitting in existing installations	VDE 0664	✓	✓	✓
	Accessories	4/46	Locking devices, covers – everything you need for mounting	--	✓	✓	✓
	5SV8 residual current monitors	Ch. 12	For monitoring of residual currents in electrical plants with indication if a specified limit value is exceeded, see chapter "Monitoring Devices" —> Monitoring devices for electrical values —> Residual current monitors"	IEC 62020 EN 62020	✓	--	✓

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SIGRES

SIGRES RCCBs were developed for use in harsh ambient conditions, such as swimming baths as protection against chlorine and ozone, in the agricultural sector (ammonia), on building sites and in the chemical industry (nitrogen oxide, sulfur dioxide, solvents), in the food processing industry (hydrogen sulfide) and in unheated rooms (dampness). The patented active condensation protection requires a continuous power supply and bottom infeed if the RCCB is switched off.

When used in ambient conditions as defined in product standard EN 61008-1, the operation interval for pressing the test button can be extended to once a year.

Super resistant K

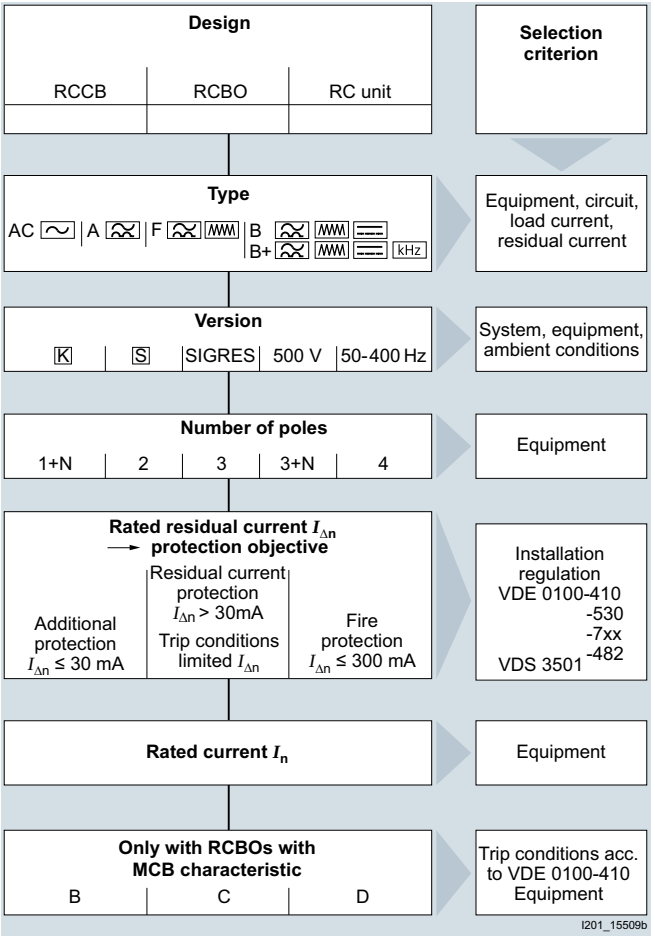
Super resistant (short-time delayed) RCCBs meet the maximum permissible break times for instantaneous devices. However, by implementing a short-time delay they prevent unnecessary tripping operations, and thus plant faults, when pulse-shaped leakage currents occur – as is the case when capacitors are switched on.

Selective S

Can be used as upstream group switch for selective tripping contrary to downstream, instantaneous or short-time delayed RCCBs.

Note:

You will find further information on the subject of residual current protective devices in the technology primer "Residual Current Protective Devices", Article No.: E10003-E38-2B-G0090-7600 and in the Configuration Manual "Residual Current Protective Devices/Arc Fault Detection Devices (AFDDs)" at: www.siemens.com/lowvoltage/manuals.



Selection aid for finding the appropriate residual current protective device

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Overview

RCCBs are used in all systems up to 240/415 V AC. Devices of type AC trip in the event of sinusoidal AC residual currents, type A also trips in the event of pulsating DC residual currents.

In addition, RCCBs type F also detect residual currents with mixed frequencies up to 1 kHz.

RCCBs with a rated residual current of maximum 30 mA are used for personnel, material and fire protection, as well as for protection against direct contact. RCCBs with a rated residual current of 10 mA are primarily used in areas that represent an increased risk for personnel.

Since the introduction of DIN VDE 0100-410, all socket outlet current circuits up to 20 A must also be fitted with residual current protective devices with a rated residual current of max. 30 mA. This also applies to outdoor electrical circuits up to 32 A for the connection of portable equipment.

Devices with a rated residual current of maximum 300 mA are used as preventive fire protection in case of insulation faults. RCCBs with a rated residual current of 100 mA are primarily used outside Europe.

Benefits

- Instantaneous residual current operated circuit breakers with the N connection on the left or right-hand side enable simple bus mounting with standard pin busbars with miniature circuit breakers installed on the right-hand side.
- Instantaneous type A devices have a surge current withstand capability with current waveform 8/20 µs of more than 1 kA, super resistant of more than 3 kA and selective of more than 5 kA. This ensures safe operation.
- SIGRES has an extremely long service life due to a patented active condensation protection and identical dimensions enable the quick and easy replacement of existing instantaneous RCCBs.
- Super resistant devices increase system availability, as unnecessary tripping is prevented in power supply systems with short-time glitches.
- Selective RCCBs increase system availability as a staggered tripping time enables the selective tripping of RCCBs connected in series in the event of a fault.
- Auxiliary switches, fault signal contacts, undervoltage releases or shunt trips are also available as additional components.
- By means of internal contacts, effective touch protection is provided when grasping and manually operating the latching slide.
- To facilitate entry of pin busbars with connection cables up to 35 mm^2, the devices are equipped with rectangular terminals for the accommodation of funnel-shaped cable entries.
- By means of standardized clearances of the terminals in modular width dimensions, the RCCBs and MCBs can be optionally connected to busbars on the top or on the bottom.

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Technical specifications

			Instantaneous	SIGRES	Super resistant	Selective
Standards			IEC/EN 61008-1 (VDE 0664-10); IEC/EN 61008-2-1 (VDE 0664-11); IEC/EN 61543 (VDE 0664-30); IEC/EN 62423 (VDE 0664-40)			
Surge current withstand capability						
• Type A with current waveform 8/20 µs	Acc. to EN 60060-2 (VDE 0432-2)	kA	> 1		> 3	> 5
• Type F with current waveform 8/20 µs	Acc. to EN 60060-2 (VDE 0432-2)	kA	--	--	> 3	--
Minimum operational voltage for test function operation						
• 30-mA devices		V AC	195			
• Non-30-mA devices		V AC	100			
• 24 V devices		V AC	20			
Test cycles			1/2 year	1 year	1/2 year	
Insulation coordination						
• Overvoltage category			III			
Pollution degree			2			
Terminal conductor cross-sections						
• 1-wire						
- Solid (≤ 10 mm^2) / stranded (≥ 16 mm^2)		mm^2	0.75 ... 35			
- Finely stranded with non-insulated end sleeve		mm^2	0.75 ... 25			
- Finely stranded with insulated end sleeve		mm^2	0.75 ... 25			
- Finely stranded without end sleeve		mm^2	1 ... 35			
• 2-wire, same cross-section, same conductor type						
- Solid (≤ 10 mm^2) / stranded (≥ 16 mm^2)		mm^2	0.75 ... 10			
- Finely stranded with non-insulated end sleeve		mm^2	0.75 ... 4			
- Finely stranded with insulated end sleeve		mm^2	0.75 ... 4			
- Finely stranded without end sleeve		mm^2	1 ... 4			
• 1-wire + busbar (pin thickness 1.5 mm)						
- Solid (≤ 10 mm^2) / stranded (≥ 16 mm^2)		mm^2	10 ... 25			
- Finely stranded with non-insulated end sleeve		mm^2	6 ... 25			
- Finely stranded with insulated end sleeve		mm^2	6 ... 16			
Terminal tightening torque						
• Up to I_n 80 A		Nm	2.5			
• At I_n = 100 A, 125 A		Nm	3.0 ... 3.5			
Mains connection			Top or bottom	Bottom	Top or bottom	
Rated frequency		Hz	50/60[1)]			
Mounting position (on a standard mounting rail)			Any			
Degree of protection	Acc. to EN 60529 (VDE 0470-1)		IP20, if the distribution board is installed, with connected conductors			
Touch protection	Acc. to EN 50274 (VDE 0660-514)		Finger and back-of-hand safe			
Service life	Average number of operating cycles Test cycle acc. to IEC/EN 61008		> 10000			
Storage temperature		°C	-40 ... +75			
Ambient temperature		°C	-25 ... +45, marked with -25			
Resistance to climate	Acc. to IEC 60068-2-30		28 cycles (55 °C; 95 % rel. air humidity)			
CFC and silicone-free			Yes			

1) 5SV residual current operated circuit breakers have been developed for 50 Hz systems and can reliably detect and shut down ground fault currents of this frequency, but in the case of residual currents that deviate markedly from this frequency, or that have a higher proportion of harmonics, the trip values increase slightly.

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Selection and ordering data

(Type AC)	Rated residual current	Rated current	Max. permissible short-circuit back-up fuse	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	$I_{\Delta n}$	I_n	10000								
	mA	A	A	MW							kg
RCCBs, type AC, instantaneous											
	1P+N; 230 V AC										
	N connection, right										
	10	16	63	2		5SV4111-0		1	1 unit	1AI	0.215
	30	16	63	2		5SV4311-0		1	1 unit	1AI	0.202
		25				5SV4312-0		1	1 unit	1AI	0.207
			Bulk packaging 36 units			5SV4312-0GV01 NEW		1	36 units	1AI	0.212
		40	63			5SV4314-0		1	1 unit	1AI	0.204
			Bulk packaging 36 units			5SV4314-0GV01 NEW		1	36 units	1AI	0.212
		63	80			5SV4316-0		1	1 unit	1AI	0.220
		80				5SV4317-0		1	1 unit	1AI	0.221
	100	25	63	2		5SV4412-0		1	1 unit	1AI	0.195
		40				5SV4414-0		1	1 unit	1AI	0.197
		63	80			5SV4416-0		1	1 unit	1AI	0.200
		80				5SV4417-0		1	1 unit	1AI	0.207
	300	25	63	2		5SV4612-0		1	1 unit	1AI	0.196
		40				5SV4614-0		1	1 unit	1AI	0.194
		63	80			5SV4616-0		1	1 unit	1AI	0.200
		80				5SV4617-0		1	1 unit	1AI	0.204
	3P+N; 400 V AC										
	N connection, right										
	30	25	80	4		5SV4342-0		1	1 unit	1AI	0.362
			Bulk packaging 18 units			5SV4342-0GV01 NEW		1	18 units	1AI	0.381
		40	80			5SV4344-0		1	1 unit	1AI	0.360
			Bulk packaging 18 units			5SV4344-0GV01 NEW		1	18 units	1AI	0.383
		63	100			5SV4346-0		1	1 unit	1AI	0.400
		80				5SV4347-0		1	1 unit	1AI	0.399
	100	25	80	4		5SV4442-0		1	1 unit	1AI	0.335
		40				5SV4444-0		1	1 unit	1AI	0.335
		63	100			5SV4446-0		1	1 unit	1AI	0.367
		80				5SV4447-0		1	1 unit	1AI	0.350
	300	25	80	4		5SV4642-0		1	1 unit	1AI	0.334
		40				5SV4644-0		1	1 unit	1AI	0.335
		63	100			5SV4646-0		1	1 unit	1AI	0.361
		80				5SV4647-0		1	1 unit	1AI	0.361
	500	25	80	4		5SV4742-0		1	1 unit	1AI	0.350
		40				5SV4744-0		1	1 unit	1AI	0.362
		63	100			5SV4746-0		1	1 unit	1AI	0.362
		80				5SV4747-0		1	1 unit	1AI	0.356
	1P+N; 230 V AC										
	N connection, left										
	10	16	63	2		5SV4111-0KL		1	1 unit	1AI	0.214
	30	16	63	2		5SV4311-0KL		1	1 unit	1AI	0.205
		25				5SV4312-0KL		1	1 unit	1AI	0.201
		40				5SV4314-0KL		1	1 unit	1AI	0.222
			Bulk packaging 36 units			5SV4314-0GV02 NEW		1	36 units	1AI	0.211
		63	80			5SV4316-0KL		1	1 unit	1AI	0.200
		80				5SV4317-0KL		1	1 unit	1AI	0.221
	100	40	63	2		5SV4414-0KL		1	1 unit	1AI	0.197
		63	80			5SV4416-0KL		1	1 unit	1AI	0.200
	300	25	63	2		5SV4612-0KL		1	1 unit	1AI	0.190
		40				5SV4614-0KL		1	1 unit	1AI	0.195
		63	80			5SV4616-0KL		1	1 unit	1AI	0.200
		80				5SV4617-0KL		1	1 unit	1AI	0.200
	3P+N; 400 V AC										
	N connection, left										
	30	25	80	4		5SV4342-0KL		1	1 unit	1AI	0.364
		40				5SV4344-0KL		1	1 unit	1AI	0.350
		63				5SV4346-0KL		1	1 unit	1AI	0.400
		80				5SV4347-0KL		1	1 unit	1AI	0.399
	300	25	80	4		5SV4642-0KL		1	1 unit	1AI	0.350
		40				5SV4644-0KL		1	1 unit	1AI	0.334
		63				5SV4646-0KL		1	1 unit	1AI	0.362
		80				5SV4647-0KL		1	1 unit	1AI	0.385

* You can order this quantity or a multiple thereof.

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(Type A)	Rated residual current $I_{\Delta n}$	Rated current I_n	Max. permissible short-circuit back-up fuse 10000	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mA	A	A	MW							kg
RCCBs, type A, instantaneous											
	1P+N; 230 V AC										
	N connection, right										
	10	16	63	2		5SV3111-6		1	1 unit	1AH	0.217
	30	16	63	2		5SV3311-6		1	1 unit	1AH	0.204
			Bulk packaging 36 units			5SV3311-6GV01 NEW		1	36 units	1AH	0.207
		25	63			5SV3312-6		1	1 unit	1AH	0.203
			Bulk packaging 36 units			5SV3312-6GV01 NEW		1	36 units	1AH	0.207
		40	63			5SV3314-6		1	1 unit	1AH	0.204
			Bulk packaging 36 units			5SV3314-6GV01 NEW		1	36 units	1AH	0.209
		63	80			5SV3316-6		1	1 unit	1AH	0.200
		80				5SV3317-6		1	1 unit	1AH	0.200
	100	25	63	2		5SV3412-6		1	1 unit	1AH	0.197
		40				5SV3414-6		1	1 unit	1AH	0.202
		63	80			5SV3416-6		1	1 unit	1AH	0.200
		80				5SV3417-6		1	1 unit	1AH	0.208
	300	25	63	2		5SV3612-6		1	1 unit	1AH	0.196
		40				5SV3614-6		1	1 unit	1AH	0.195
		63	80			5SV3616-6		1	1 unit	1AH	0.209
		80				5SV3617-6		1	1 unit	1AH	0.204
	3P+N; 400 V AC										
	N connection, right										
	30	25	80	4		5SV3342-6		1	1 unit	1AH	0.361
			Bulk packaging 18 units			5SV3342-6GV01 NEW		1	18 units	1AH	0.363
		40	80			5SV3344-6		1	1 unit	1AH	0.361
			Bulk packaging 18 units			5SV3344-6GV01 NEW		1	18 units	1AH	0.382
		63	100			5SV3346-6		1	1 unit	1AH	0.398
			Bulk packaging 18 units			5SV3346-6GV01 NEW		1	18 units	1AH	0.421
		80	100			5SV3347-6		1	1 unit	1AH	0.399
	100	25	80	4		5SV3442-6		1	1 unit	1AH	0.350
		40				5SV3444-6		1	1 unit	1AH	0.367
		63	100			5SV3446-6		1	1 unit	1AH	0.372
		80				5SV3447-6		1	1 unit	1AH	0.367
	300	25	80	4		5SV3642-6		1	1 unit	1AH	0.336
		40				5SV3644-6		1	1 unit	1AH	0.339
		63	100			5SV3646-6		1	1 unit	1AH	0.358
		80				5SV3647-6		1	1 unit	1AH	0.358
	500	25	80	4		5SV3742-6		1	1 unit	1AH	0.363
		40				5SV3744-6		1	1 unit	1AH	0.350
		63	100			5SV3746-6		1	1 unit	1AH	0.364
			Bulk packaging 18 units			5SV3746-6GV01 NEW		1	18 units	1AH	0.386
		80				5SV3747-6		1	1 unit	1AH	0.364
	1P+N; 230 V AC										
	N connection, left										
	10	16	63	2		5SV3111-6KL		1	1 unit	1AH	0.217
	30	16	63	2		5SV3311-6KL		1	1 unit	1AH	0.204
		25				5SV3312-6KL		1	1 unit	1AH	0.203
		40				5SV3314-6KL		1	1 unit	1AH	0.208
		63	80			5SV3316-6KL		1	1 unit	1AH	0.200
		80				5SV3317-6KL		1	1 unit	1AH	0.200
	100	25	63	2		5SV3412-6KL		1	1 unit	1AH	0.203
		40				5SV3414-6KL		1	1 unit	1AH	0.202
		63	80			5SV3416-6KL		1	1 unit	1AH	0.200
		80				5SV3417-6KL		1	1 unit	1AH	0.200
	300	25	63	2		5SV3612-6KL		1	1 unit	1AH	0.196
		40				5SV3614-6KL		1	1 unit	1AH	0.195
		63	80			5SV3616-6KL		1	1 unit	1AH	0.204
		80				5SV3617-6KL		1	1 unit	1AH	0.200
	3P+N; 400 V AC										
	N connection, left										
	30	25	80	4		5SV3342-6KL		1	1 unit	1AH	0.366
		40				5SV3344-6KL		1	1 unit	1AH	0.361
			Bulk packaging 18 units			5SV3344-6GV02 NEW		1	18 units	1AH	0.384
		63	80			5SV3346-6KL		1	1 unit	1AH	0.407
		80				5SV3347-6KL		1	1 unit	1AH	0.399
	300	25	80	4		5SV3642-6KL		1	1 unit	1AH	0.350
		40				5SV3644-6KL		1	1 unit	1AH	0.350
		63				5SV3646-6KL		1	1 unit	1AH	0.358
		80				5SV3647-6KL		1	1 unit	1AH	0.364
	500	63	80	4		5SV3746-6KL		1	1 unit	1AH	0.364

*** You can order this quantity or a multiple thereof.**

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5SV RCCBs

(Type A)	Rated residual current $I_{\Delta n}$ mA	Rated current I_n A	Max. permissible short-circuit back-up fuse 10000 A	Mounting width MW	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
RCCBs, type A, super resistant K NEW											
	1P+N; 230 V AC										
	N connection, right										
	30	25	63	2		5SV3312-6KK01		1	1 unit	1AH	0.205
		40				5SV3314-6KK01		1	1 unit	1AH	0.205
		63	80			5SV3316-6KK01		1	1 unit	1AH	0.205
		80				5SV3317-6KK01		1	1 unit	1AH	0.205
	300	25	63	2		5SV3612-6KK01		1	1 unit	1AH	0.205
		40				5SV3614-6KK01		1	1 unit	1AH	0.205
		63	80			5SV3616-6KK01		1	1 unit	1AH	0.205
		80				5SV3617-6KK01		1	1 unit	1AH	0.205
	3P+N; 400 V AC										
	N connection, right										
	30	25	100	4		5SV3342-6KK01		1	1 unit	1AH	0.409
		40				5SV3344-6KK01		1	1 unit	1AH	0.409
		63				5SV3346-6KK01		1	1 unit	1AH	0.409
		80				5SV3347-6KK01		1	1 unit	1AH	0.409
	300	25	100	4		5SV3642-6KK01		1	1 unit	1AH	0.409
		40				5SV3644-6KK01		1	1 unit	1AH	0.409
		63				5SV3646-6KK01		1	1 unit	1AH	0.409
		80				5SV3647-6KK01		1	1 unit	1AH	0.409
RCCBs, type A, selective S NEW											
	1P+N; 230 V AC										
	N connection, right										
	100	63	80	2		5SV3416-8		1	1 unit	1AH	0.205
	300	25	63	2		5SV3612-8		1	1 unit	1AH	0.205
		40				5SV3614-8		1	1 unit	1AH	0.205
		63	80			5SV3616-8		1	1 unit	1AH	0.205
		80				5SV3617-8		1	1 unit	1AH	0.205
	3P+N; 400 V AC										
	N connection, right										
	100	40	100	4		5SV3444-8		1	1 unit	1AH	0.409
		63				5SV3446-8		1	1 unit	1AH	0.409
	300	25	100	4		5SV3642-8		1	1 unit	1AH	0.409
		40				5SV3644-8		1	1 unit	1AH	0.409
		63				5SV3646-8		1	1 unit	1AH	0.409
		80				5SV3647-8		1	1 unit	1AH	0.409
	1000	63	100	4		5SV3846-8		1	1 unit	1AH	0.409
	1P+N; 230 V AC										
	N connection, left										
	300	40	63	2		5SV3614-8KL		1	1 unit	1AH	0.201
		63	80			5SV3616-8KL		1	1 unit	1AH	0.201
	3P+N; 400 V AC										
	N connection, left										
	300	63	80	4		5SV3646-8KL		1	1 unit	1AH	0.409
RCCBs, type A, SIGRES, instantaneous NEW											
	1P+N; 230 V AC										
	N connection, right										
	30	16	63	2		5SV3311-6KK12		1	1 unit	1AH	0.204
		25				5SV3312-6KK12		1	1 unit	1AH	0.222
		40				5SV3314-6KK12		1	1 unit	1AH	0.204
		63	80			5SV3316-6KK12		1	1 unit	1AH	0.202
	3P+N; 400 V AC										
	N connection, right										
	30	25	100	4		5SV3342-6KK12		1	1 unit	1AH	0.399
		40				5SV3344-6KK12		1	1 unit	1AH	0.400
		63				5SV3346-6KK12		1	1 unit	1AH	0.399
		80				5SV3347-6KK12		1	1 unit	1AH	0.409
	300	25	100	4		5SV3642-6KK12		1	1 unit	1AH	0.386
		40				5SV3644-6KK12		1	1 unit	1AH	0.364
		63				5SV3646-6KK12		1	1 unit	1AH	0.364
		80				5SV3647-6KK12		1	1 unit	1AH	0.386

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	Rated residual current	Rated current	Max. permissible short-circuit back-up fuse	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
(Type F)	$I_{\Delta n}$	I_n	10000								
	mA	A	A	MW							kg
RCCBs, type F, super resistant NEW											
	1P + N; 230 V AC										
	N connection, right										
	30	25	63	2		5SV3312-3		1	1 unit	1AH	0.205
		40				5SV3314-3		1	1 unit	1AH	0.205
		63	80			5SV3316-3		1	1 unit	1AH	0.205
		80				5SV3317-3		1	1 unit	1AH	0.205
	300	25	63	2		5SV3612-3		1	1 unit	1AH	0.205
		40				5SV3614-3		1	1 unit	1AH	0.205
		63	80			5SV3616-3		1	1 unit	1AH	0.205
		80				5SV3617-3		1	1 unit	1AH	0.205
	3P + N; 400 V AC										
	N connection, right										
	30	25	100	4		5SV3342-3		1	1 unit	1AH	0.409
		40				5SV3344-3		1	1 unit	1AH	0.409
		63				5SV3346-3		1	1 unit	1AH	0.409
		80				5SV3347-3		1	1 unit	1AH	0.409
	300	25	100	4		5SV3642-3		1	1 unit	1AH	0.409
		40				5SV3644-3		1	1 unit	1AH	0.409
		63				5SV3646-3		1	1 unit	1AH	0.409
		80				5SV3647-3		1	1 unit	1AH	0.409
RCCBs, type F, selective S NEW											
	1P + N; 230 V AC										
	N connection, right										
	300	40	63	2		5SV3614-7		1	1 unit	1AH	0.205
		80	80			5SV3617-7		1	1 unit	1AH	0.205
	3P + N; 400 V AC										
	N connection, right										
	300	40	100	4		5SV3644-7		1	1 unit	1AH	0.409
		80				5SV3647-7		1	1 unit	1AH	0.409

*** You can order this quantity or a multiple thereof.**

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Overview

RCCBs are used in all systems up to 240/415 V AC. Devices of type AC trip in the event of sinusoidal AC residual currents, type A also trips in the event of pulsating DC residual currents.

In addition, RCCBs type F also detect residual currents with mixed frequencies up to 1 kHz.

RCCBs with a rated residual current of maximum 30 mA are used for personnel, material and fire protection, as well as for protection against direct contact. RCCBs with a rated residual current of 10 mA are primarily used in areas that represent an increased risk for personnel.

Since the introduction of DIN VDE 0100-410, all socket outlet current circuits up to 20 A must also be fitted with residual current protective devices with a rated residual current of max. 30 mA. This also applies to outdoor electrical circuits up to 32 A for the connection of portable equipment.

Devices with a rated residual current of maximum 300 mA are used as preventive fire protection in case of insulation faults. RCCBs with a rated residual current of 100 mA are primarily used outside Europe.

Benefits

- Instantaneous RCCBs with the N connection on the left-hand side enable simple bus mounting with standard pin busbars with miniature circuit breakers installed on the right-hand side
- Instantaneous RCCBs with the N connection on the right-hand side can be bus-mounted with miniature circuit breakers using a special pin busbar
- Instantaneous type A devices have a surge current withstand capability with current waveform 8/20 µs of more than 1 kA, super resistant of more than 3 kA and selective of more than 5 kA. This ensures safe operation
- Super resistant devices increase system availability, as unnecessary tripping is prevented in power supply systems with short-time glitches
- Selective RCCBs increase system availability as a staggered tripping time enables the selective tripping of RCCBs connected in series in the event of a fault

Technical specifications

			Instantaneous	Selective
Standards			IEC/EN 61008-1 (VDE 0664-10); IEC/EN 61008-2-1 (VDE 0664-11); IEC/EN 61543 (VDE 0664-30); IEC/EN 62423 (VDE 0664-40)	
Surge current withstand capability				
• Type A with current waveform 8/20 µs	Acc. to EN 60060-2 (VDE 0432-2)	kA	> 1	> 5
Minimum operational voltage for test function operation		V AC	195	
Test cycles			1/2 year	
Insulation coordination				
• Overvoltage category			III	
Pollution degree			2	
Terminal conductor cross-sections				
• 2 MW	I_n = 100 A, 125 A	mm^2	1.5 ... 50	
• 4 MW	I_n = 100 A, 125 A	mm^2	2.5 ... 50	
Terminal tightening torque				
• I_n = 100 A, 125 A		Nm	3.0 ... 3.5	
Mains connection			Top or bottom	
Mounting position (on a standard mounting rail)			Any	
Degree of protection	Acc. to EN 60529 (VDE 0470-1)		IP20, if the distribution board is installed, with connected conductors	
Touch protection	Acc. to EN 50274 (VDE 0660-514)		Finger and back-of-hand safe	
Service life	Average number of switching cycles		> 10000	
Storage temperature		°C	-40 ... +75	
Ambient temperature		°C	-25 ... +45, marked with -25	
Resistance to climate	Acc. to IEC 60068-2-30		28 cycles (55 °C; 95 % rel. air humidity)	
CFC and silicone-free			Yes	

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Selection and ordering data

(Type AC)	Rated residual current	Rated current	Max. permissible short-circuit back-up fuse	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	$I_{\Delta}n$	I_n	10000								
	mA	A	A	MW							kg
RCCBs, type AC, instantaneous											
	1P+N; 230 V AC; 50 Hz										
	N connection, right										
	30	100	125	2		5SM3318-0KK		1	1 unit	1AI	0.259
		125				5SM3315-0KK		1	1 unit	1AI	0.248
	100	100	125			5SM3418-0KK		1	1 unit	1AI	0.258
		125				5SM3415-0KK		1	1 unit	1AI	0.255
	300	100	125			5SM3618-0KK		1	1 unit	1AI	0.230
		125				5SM3615-0KK		1	1 unit	1AI	0.245
	3P+N; 400 V AC; 50 Hz										
	N connection, right										
	30	100	100	4		5SM3348-0		1	1 unit	1AI	0.554
		125	125			5SM3345-0		1	1 unit	1AI	0.555
	30	100	100		▶	5SM3448-0		1	1 unit	1AI	0.522
		125	125			5SM3445-0		1	1 unit	1AI	0.517
	300	100	100			5SM3648-0		1	1 unit	1AI	0.530
		125	125			5SM3645-0		1	1 unit	1AI	0.530
	500	100	100		▶	5SM3748-0		1	1 unit	1AI	0.516
		125	125			5SM3745-0		1	1 unit	1AI	0.533
RCCBs, type AC, selective											
	3P+N, 400 V AC, 50 Hz										
	N connection, right										
	300	100	100	4		5SM3648-2		1	1 unit	1AI	0.548

* You can order this quantity or a multiple thereof.

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5SM3 RCCBs

(Type A)	Rated residual current	Rated current	Max. permissible short-circuit back-up fuse	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	$I_{\Delta n}$	I_n	10000								
	mA	A	A	MW							kg
RCCBs, type A, instantaneous											
	1P+N; 230 V AC; 50 Hz										
	N connection, right										
	30	100	125			5SM3318-6KK		1	1 unit	1AH	0.268
		125				5SM3315-6KK		1	1 unit	1AH	0.265
	100	100	125			5SM3418-6KK		1	1 unit	1AH	0.272
		125				5SM3415-6KK		1	1 unit	1AH	0.274
	300	100	125			5SM3618-6KK		1	1 unit	1AH	0.248
		125				5SM3615-6KK		1	1 unit	1AH	0.245
	3P+N; 400 V AC; 50 Hz										
	N connection, right										
	30	100	100		▶	5SM3348-6		1	1 unit	1AH	0.554
		125	125			5SM3345-6		1	1 unit	1AH	0.556
	100	100	100		▶	5SM3448-6		1	1 unit	1AH	0.518
		125	125			5SM3445-6		1	1 unit	1AH	0.531
	300	100	100		▶	5SM3648-6		1	1 unit	1AH	0.532
		125	125			5SM3645-6		1	1 unit	1AH	0.536
	500	100	100		▶	5SM3748-6		1	1 unit	1AH	0.519
		125	125			5SM3745-6		1	1 unit	1AH	0.523
RCCBs, type A, selective S											
	3P+N; 400 V AC; 50 Hz										
	N connection, right										
	300	100	100	4		5SM3648-8		1	1 unit	1AH	0.519
		125	125			5SM3645-8		1	1 unit	1AH	0.538
	500	125	125	4		5SM3745-8		1	1 unit	1AH	0.517

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Overview

Frequency converters, medical devices and UPS systems are seeing increasing use in industry. Smooth DC residual currents or currents with low residual ripple may occur in the event of faults on these devices.

Type A residual current protective devices are unable to detect these smooth DC residual currents. Furthermore, such smooth DC residual currents make type A devices increasingly insensitive to AC residual currents and pulsating DC residual currents. If a fault occurs, there is therefore no tripping and the desired protective function is no longer assured.

UC-sensitive residual current protective devices of types B and B+ have an additional transformer which is supplied with a control signal. This enables an evaluation of the change of the transformer's operating range caused by smooth DC residual currents, thus ensuring the desired protective function.

The residual current protective devices of type B are suitable for use in three-phase current systems before input circuits with rectifiers. They are not intended for use in DC systems and in networks with operating frequencies other than 50 Hz or 60 Hz.

The devices in this series are designed as residual current operated circuit breakers (RCCBs) up to 80 A and as residual current circuit breakers with integral overcurrent protection (RCBOs) for 100 A or 125 A in Characteristics C or D.

Type B+ residual current protective devices also offer enhanced, preventative fire protection. In these versions, the tripping value is limited to a maximum of 420 mA up to 20 kHz.

All universal current-sensitive RCCBs, type B or B+ are now also available in a SIGRES version, meaning they are also ideal for use in harsh ambient conditions.

When used in ambient conditions as defined in product standard EN 61008-1, the operation interval for pressing the test button can be extended to once a year.

Benefits

- Universal current-sensitive residual current protective devices detect not only AC residual currents and pulsating DC residual currents, but also smooth DC residual currents, thus ensuring the desired protective function with all types of residual current
- With type B, the tripping characteristic is adapted to suit the increase of leakage currents at higher frequencies in systems with capacitive impedances, thus ensuring greater operating safety
- Type B+ versions offer enhanced preventative fire protection and correspond to the prestandards DIN V VDE V 0664-110 and/or DIN V VDE V 0664-210 and VdS Directive 3501
- The RCBO is a compact device for up to 125 A. It provides not only personnel, material and fire protection but also overload and short-circuit protection for cables. This reduces wiring and mounting outlay
- The RCBOs offer external remote tripping over terminals Y1/Y2. This supports implementation of central OFF circuits.

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Technical specifications

		SIQUENCE, 5SM3 RCCBs, type B and type B+		SIQUENCE, 5SU1 RCBOs type B and type B+
Standards		IEC/EN 62423 (VDE 0664-40); IEC/EN 61543 (VDE 0664-30); additionally applicable for type B+; DIN VDE 0664-400		IEC/EN 62423 (VDE 0664-40); IEC/EN 61543 (VDE 0664-30); additionally applicable for type B+ DIN VDE 0664-401
Versions		1P+N	3P+N	4P
Tripping characteristic		--	--	C, D
Surge current withstand capability With current waveform 8/20 µs acc. to EN 60060-2 (VDE 0432-2)				
• Super resistant	kA	> 3	> 3	> 3
• Selective	kA	--	> 5	> 5
Minimum operational voltage for test function operation	V AC	195	195	195
Rated voltages U_n	V AC	230	400	400, 480
Rated frequency f_n	Hz	50 ... 60		
Rated currents I_n	A	16, 25, 40, 63	25, 40, 63, 80	100, 125
Rated residual currents $I_{\Delta n}$	mA	30, 300	30, 300, 500	30, 300
Rated breaking capacity				
• I_m	A	800		--
• I_{cn}	kA	--		10
Insulation coordination				
• Overvoltage category		III		
Conductor cross-sections				
• Solid and stranded	mm^2	1.5 ... 25		6 ... 50
• Finely stranded, with end sleeve	mm^2	1.5 ... 16		6 ... 35
Terminal tightening torque For all devices	Nm	2.5 ... 3.0		3.0 ... 3.5
Mains connection		Optionally top or bottom (bottom for the SIGRES function to also be effective in the deactivated state)		
Mounting position (on a standard mounting rail)		Any		
Degree of protection Acc. to EN 60529 (VDE 0470-1)		IP20, if the distribution board is installed, with connected conductors		
Touch protection Acc. to EN 50274 (VDE 0660-514)		Finger and back-of-hand safe		
Service life Average number of switching cycles		> 10000 switching cycles		
Storage temperature	°C	-40 ... +75		
Ambient temperature	°C	-25 ... +45, marked with -25		
Resistance to climate acc. to IEC 60068-2-30		28 cycles (55 °C; 95 % rel. air humidity)		
CFC and silicone-free		Yes		

For details of I^2t characteristics, see Configuration Manual "Residual Current Protective Devices/Arc Fault Detection Devices (AFDDs)" at: www.siemens.com/lowvoltage/manuals.

Power losses per conducting path under rated current load Note: 0.4 W per unit must be added for SIGRES versions.	**Number of poles**	**Rated current**	**Rated residual current $I_{\Delta n}$ [mA]**	**Power loss per conducting path P_v [W]**
	2/4	16	30/300	0.17
		25	30/300	0.42
		40	30/300	1.09
		63	30/300/500	2.7
		80	30/300/500	4.35

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Selection and ordering data

(Type B/type B+)	Rated residual current	Rated current	Max. permissible short-circuit back-up fuse	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	$I_{\Delta n}$	I_n	10000								
	mA	A	A	MW							kg
SIQUENCE RCCBs, type B, super resistant K											
	1P+N; 230 V AC; 50 ... 60 Hz										
	30	16	100	4		5SM3321-4		1	1 unit	1AJ	0.459
		25				5SM3322-4		1	1 unit	1AJ	0.566
		40				5SM3324-4		1	1 unit	1AJ	0.563
		63				5SM3326-4		1	1 unit	1AJ	0.567
	300	16	100	4		5SM3621-4		1	1 unit	1AJ	0.564
		25				5SM3622-4		1	1 unit	1AJ	0.570
		40				5SM3624-4		1	1 unit	1AJ	0.573
		63				5SM3626-4		1	1 unit	1AJ	0.579
	3P+N; 230 ... 400 V AC; 50 ... 60 Hz										
	30	25	100	4		5SM3342-4		1	1 unit	1AJ	0.571
		40				5SM3344-4		1	1 unit	1AJ	0.555
		63				5SM3346-4		1	1 unit	1AJ	0.566
		80				5SM3347-4		1	1 unit	1AJ	0.554
	300	25	100	4		5SM3642-4		1	1 unit	1AJ	0.564
		40				5SM3644-4		1	1 unit	1AJ	0.565
		63				5SM3646-4		1	1 unit	1AJ	0.565
		80				5SM3647-4		1	1 unit	1AJ	0.564
	500	63	100	4		5SM3746-4		1	1 unit	1AJ	0.557
		80				5SM3747-4		1	1 unit	1AJ	0.575
SIQUENCE RCCBs, type B, selective S											
	3P+N; 230 ... 400 V AC; 50 ... 60 Hz										
	300	63	100	4		5SM3646-5		1	1 unit	1AJ	0.555
		80				5SM3647-5		1	1 unit	1AJ	0.564
	500	63	100	4		5SM3746-5		1	1 unit	1AJ	0.555
		80				5SM3747-5		1	1 unit	1AJ	0.587
SIQUENCE RCCBs, type B+, super resistant K											
	1P+N; 230 V AC; 50 ... 60 Hz										
	30	16	100	4		5SM3321-4KK14		1	1 unit	1AJ	0.583
		25				5SM3322-4KK14		1	1 unit	1AJ	0.550
		40				5SM3324-4KK14		1	1 unit	1AJ	0.560
		63				5SM3326-4KK14		1	1 unit	1AJ	0.568
	300	16	100	4		5SM3621-4KK14		1	1 unit	1AJ	0.570
		25				5SM3622-4KK14		1	1 unit	1AJ	0.566
		40				5SM3624-4KK14		1	1 unit	1AJ	0.560
		63				5SM3626-4KK14		1	1 unit	1AJ	0.600
	3P+N; 230 ... 400 V AC; 50 ... 60 Hz										
	30	25	100	4		5SM3342-4KK14		1	1 unit	1AJ	0.571
		40				5SM3344-4KK14		1	1 unit	1AJ	0.568
		63				5SM3346-4KK14		1	1 unit	1AJ	0.561
		80				5SM3347-4KK14		1	1 unit	1AJ	0.575
	300	25	100	4		5SM3642-4KK14		1	1 unit	1AJ	0.557
		40				5SM3644-4KK14		1	1 unit	1AJ	0.565
		63				5SM3646-4KK14		1	1 unit	1AJ	0.551
		80				5SM3647-4KK14		1	1 unit	1AJ	0.570
SIQUENCE RCCBs, type B+, selective S											
	3P+N; 230 ... 400 V AC; 50 ... 60 Hz										
	300	63	100	4		5SM3646-5KK14		1	1 unit	1AJ	0.564
		80				5SM3647-5KK14		1	1 unit	1AJ	0.572

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SIQUENCE 5SM3/5SU1 universal current-sensitive RCCBs, type B and type B+

(Type B/type B+)	Rated residual current	Rated current	Max. permissible short-circuit back-up fuse	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	$I_{\Delta n}$	I_n	10000								
	mA	A	A	MW							kg
SIQUENCE RCBOs, type B, super resistant K, rated breaking capacity 10 kA											
	4P; 400 V AC; 50 ... 60 Hz										
	Characteristic C										
	30	100	--	11		5SU1374-7AK81		1	1 unit	1BD	2.038
		125				5SU1374-7AK82		1	1 unit	1BD	2.071
	300	100	--	11		5SU1674-7AK81		1	1 unit	1BD	2.071
		125				5SU1674-7AK82		1	1 unit	1BD	2.066
	Characteristic D										
	30	100	--	11		5SU1374-8AK81		1	1 unit	1BD	2.082
	300	100	--	11		5SU1674-8AK81		1	1 unit	1BD	2.050
	4P; 480 V AC; 50 ... 60 Hz										
	Characteristic C										
	300	100	--	11		5SU1674-7CK81		1	1 unit	1BD	2.028
		125				5SU1674-7CK82		1	1 unit	1BD	2.074
SIQUENCE RCBOs, type B, selective S, rated breaking capacity 10 kA											
	4P; 400 V AC; 50 ... 60 Hz										
	Characteristic C										
	300	125	--	11		5SU1674-7BK82		1	1 unit	1BD	2.083
	Characteristic D										
	300	100	--	11		5SU1674-8BK81		1	1 unit	1BD	2.081
SIQUENCE RCBOs, type B+, super resistant K, rated breaking capacity 10 kA											
	4P; 400 V AC; 50 ... 60 Hz										
	Characteristic C										
	30	100	--	11		5SU1374-7DK81		1	1 unit	1BD	2.045
		125				5SU1374-7DK82		1	1 unit	1BD	2.081
	300	100	--	11		5SU1674-7DK81		1	1 unit	1BD	2.061
		125				5SU1674-7DK82		1	1 unit	1BD	2.062
	Characteristic D										
	30	100	--	11		5SU1374-8DK81		1	1 unit	1BD	2.084
	300	100	--	11		5SU1674-8DK81		1	1 unit	1BD	2.082
	4P; 480 V AC; 50 ... 60 Hz										
	Characteristic C										
	300	100	--	11		5SU1674-7FK81		1	1 unit	1BD	2.050
		125				5SU1674-7FK82		1	1 unit	1BD	2.050
SIQUENCE RCBOs, type B+, selective S, rated breaking capacity 10 kA											
	4P; 400 V AC; 50 ... 60 Hz										
	Characteristic C										
	300	125	--	11		5SU1674-7EK82		1	1 unit	1BD	2.053
	Characteristic D										
	300	100	--	11		5SU1674-8EK81		1	1 unit	1BD	2.078

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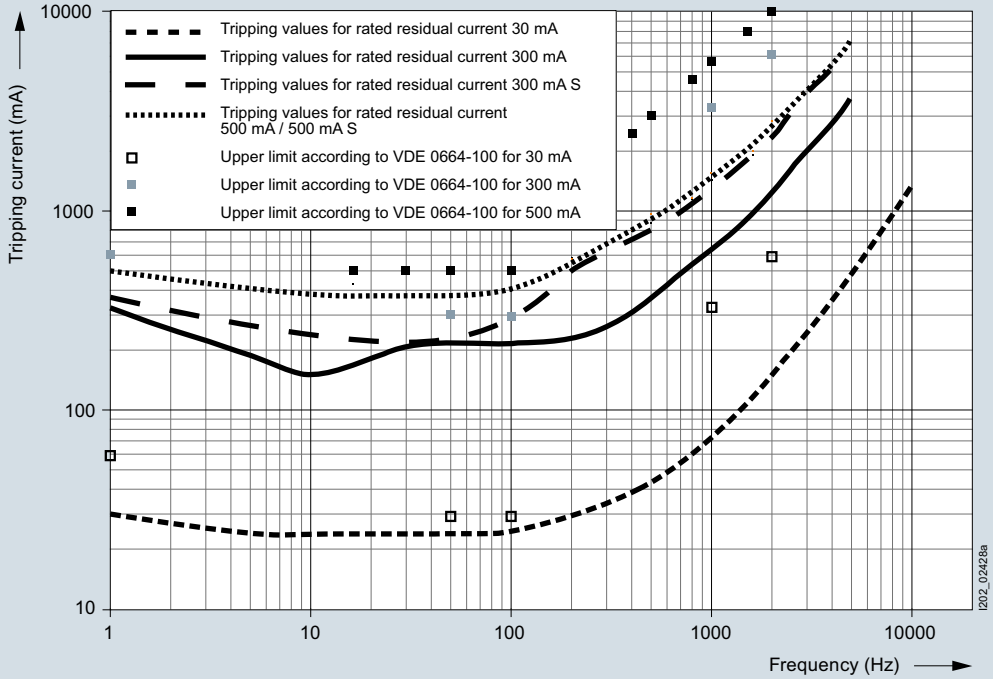
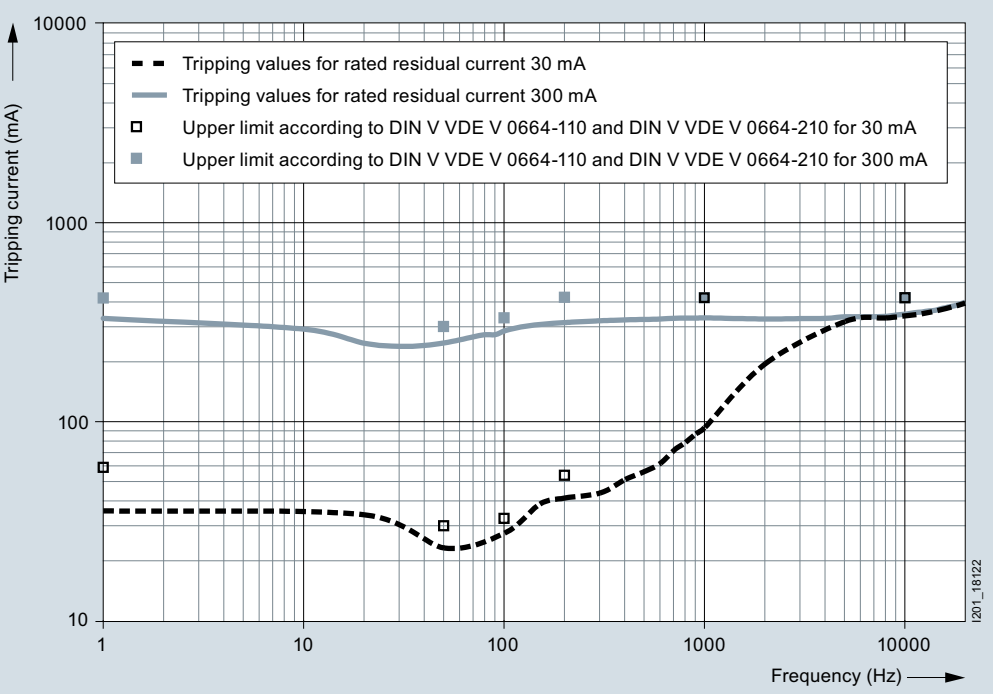
Characteristic curves



Tripping current as a function of frequency for type B



Tripping current as a function of frequency for type B+

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Overview

Auxiliary switches (AS)

The auxiliary switch (AS) always signals the contact position, regardless of whether the RCCB was tripped manually or as the result of a fault. An additional version is also available for the switching of small currents and voltages for the control of programmable control systems (PLCs) acc. to EN 61131-2. The auxiliary switch with test button enables the testing of control circuits without the need to switch the RCCB.

Fault signal contacts (FC)

The fault signal contact (FC) signals automatic breaking in the event of a fault. If the fault signal contact is activated, the contact position does not change if the RCCB is tripped manually. Fault signal contacts with TEST and RESET buttons enable testing of control circuits without the need to trip the RCCB. The red RESET button integrated in the handle also indicates automatic tripping of the RCCB. The signal can be acknowledged manually using the RESET button.

Shunt trips (ST)

Shunt trips are used for the remote tripping of RCCBs.

Undervoltage releases (UR)

Undervoltage releases are integrated (e.g. in EMERGENCY-STOP loops), thus ensuring tripping in the event of an emergency, which, in turn, ensures disconnection of the control circuit according to EN 60204. In the event that the voltage is interrupted or too low, it also trips, i.e. prevents activation of the RCCB.

Remote controlled mechanisms are used for the remote ON/OFF switching of RCCBs. They also enable local manual switching. A blocking function permits maintenance work. A tripped RCCB must be acknowledged prior to switching back on.

The leakage current measurement device detects the leakage currents – like the circuit breaker – thus providing a direct statement as to the current loading of the RCCB. It is used to measure leakage currents up to 300 mA. This requires a voltmeter with an internal resistance over 1 MΩ/V and a measuring range for AC voltages of U_{rms} = 1 mV to 2 V. For the fault-free operation of an RCCB, the measured leakage current should be no greater than 1/3 of the rated residual current.

Benefits

Can be universally retrofitted with all additional components

- Captive metal brackets on the additional components ensure the quick and easy mounting of devices without the need for tools.
- Fault signal contacts with TEST and RESET button enable simple testing of auxiliary circuits and, in the event of a fault, acknowledgement of the fault over the RESET button, without the need to switch the RCCBs.
- The auxiliary switches with TEST button enable simple manual testing of control circuits during operation of the entire installation without the need to switch the RCCBs.
- Bus systems, such as *instabus* KNX, AS-Interface bus or PROFIBUS, can be integrated in the communication over binary inputs
- The leakage current measurement device enables the systematic selection of the rated residual current, thus preventing inadvertent tripping of an RCCB.

Technical specifications

		Auxiliary switches (AS) 5SW330.	Auxiliary switches (AS) 5SW3330
Standards		EN 62019	
Terminals			
• Conductor cross-section	mm^2	0,75 ... 2.5	
• Tightening torque	Nm	0.5	
Short-circuit protection		B6 or C6 or gL/gG 6 A fuse	
Min. contact load		50 mA/24 V	
Max. contact load			
• 230 V AC, AC-12	A	6	5
• 230 V AC, AC-14	A	3.6	--
• 220 V DC, DC-12	A	1	0.5

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			Auxiliary switches (AS)		Fault signal contacts (FC)
			5ST3010, 5ST3010-2 5ST3011, 5ST3011-2 5ST3012, 5ST3012-2	5ST3013, 5ST3013-2 5ST3014, 5ST3014-2 5ST3015, 5ST3015-2	5ST3020, 5ST3020-2 5ST3021, 5ST3021-2 5ST3022, 5ST3022-2
Standards			EN 62019; IEC/EN 60947-5-1; UL 1077; CSA C22.2 No. 235		
Approvals			see chapter "Appendix"		
Short-circuit protection			Miniature circuit breaker or gG 6 A fuse		
Contact load					
• Min. • Max.			50 mA, 24 V --	1 mA/5 V DC 50 mA/30 V DC	50 mA, 24 V --
• 400 V AC, AC-14, NO • 230 V AC, AC-14, NO • 400 V AC, AC-13, NC • 230 V AC, AC-13, NC		A A A A	2 6 2 6	-- -- -- --	2 6 2 6
• 220 V DC, DC-13, NO+NC • 110 V DC, DC-13, NO+NC • 60 V DC, DC-13, NO+NC • 24 V DC, DC-13, NO+NC		A A A A	1 1 3 6	-- -- -- --	1 1 3 6
Service life, on average, with rated load			20000 actuations	20000 actuations	20000 actuations
Conductor cross-sections		mm^2 AWG	0.5 ... 2.5 22 ... 14	0.5 ... 2.5 22 ... 14	0.5 ... 2.5 22 ... 14
Terminals					
• Terminal tightening torque		Nm lbs/in.	0.5 4.5	0.5 4.5	0.5 4.5
Mounting position			Any	Any	Any
Ambient temperature		°C	-25 ... +55	-25 ... +55	-25 ... +55
Storage temperature		°C	-40 ... +75	-40 ... +75	-40 ... +75
Resistance to climate	Acc. to IEC 60068-2-30	Cycles	28		
Shock	Acc. to IEC 60068-2-27	m/s	50 at 11 ms half-sine		
Resistance to vibrations	Acc. to IEC 60068-2-6	m/s^2	50 at 10 ... 150 Hz		

			Undervoltage releases (UR)	Shunt trips (ST)	
			5ST304.	5ST3030	5ST3031
Standards			EN 60947-1		
Rated voltages U_n		V AC	230	110 ... 415	24 ... 48
		V DC	24, 110	110	24 ... 48
• Operating range U_n			0.85 ... 1.1 x U_n	0.7 ... 1.1 x U_n	
• Rated frequency f_n		Hz	--	50 ... 60	
Response limits					
• Tripping			< 0.35 ... 0.7 × U_n	--	
Short-circuit protection			Miniature circuit breakers B/C 6 A or fuse gG 6 A		
Minimum contact load			50 mA, 24 V	50 mA, 24 V	
Tripping operations			max. 2000	max. 2000	
Service life, on average, with rated load			20000 actuations	20000 actuations	
Conductor cross-sections		mm^2 AWG	0.5 ... 2.5 22 ... 14	0.5 ... 2.5 22 ... 14	
Terminals					
• Terminal tightening torque		Nm lbs/in.	0.8 6.8	0.8 6.8	
Mounting position			Any	Any	
Ambient temperature		°C	-25 ... +55	-25 ... +55	
Storage temperature		°C	-40 ... +75	-40 ... +75	
Resistance to climate	Acc. to IEC 60068-2-30	Cycles	28		
Shock	Acc. to IEC 60068-2-27	m/s	50 at 11 ms half-sine		
Resistance to vibrations	Acc. to IEC 60068-2-6	m/s^2	50 at 10 ... 150 Hz		
Switching frequency			--		
Switching duration		s	--		
Minimum command duration		s	--		
Rated power dissipation		VA	--		
Behavior in the event of control voltage failure			--		

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Selection and ordering data

	Rated voltage	Mounting width MW	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Auxiliary switches (AS)								
	For 5SM3 residual current protective devices up to 80 A								
	1 NO + 1 NC	0.5	▶	5SW3300		1	1/10 units	1BE	0.053
	2 NC	0.5		5SW3301		1	1/10 units	1BE	0.052
	2 NO	0.5		5SW3302		1	1/10 units	1BE	0.055
	Auxiliary switches (AS)								
	For 5SM3 residual current protective devices, 100 ... 125 A, 3P+N								
	1 NO + 1 NC	0.5		5SW3330		1	1 unit	1BE	0.064
	Auxiliary switches (AS)								
	For 5SL, 5SY, 5SP miniature circuit breakers, 5SU1 RCBOs, for 5SV residual current protective devices and 5TE8 switches								
	1 NO + 1 NC	0.5	▶	5ST3010		1	1 unit	1AD	0.055
	For low power		▶	5ST3013		1	1 unit	1AD	0.064
	2 NO			5ST3011		1	1 unit	1AD	0.066
	For low power			5ST3014		1	1 unit	1AD	0.067
	2 NC			5ST3012		1	1 unit	1AD	0.067
	For low power			5ST3015		1	1 unit	1AD	0.064
	Auxiliary switches (AS) with TEST button								
	For 5SL, 5SY, 5SP miniature circuit breakers, 5SU1 RCBOs, for 5SV residual current protective devices and 5TE8 switches								
	1 NO + 1 NC	0.5		5ST3010-2		1	1 unit	1AD	0.071
	For low power			5ST3013-2		1	1 unit	1AD	0.067
	2 NO			5ST3011-2		1	1 unit	1AD	0.068
	For low power			5ST3014-2		1	1 unit	1AD	0.045
	2 NC			5ST3012-2		1	1 unit	1AD	0.071
	For low power			5ST3015-2		1	1 unit	1AD	0.063
	Fault signal contacts (FC)								
	For 5SL, 5SY, 5SP miniature circuit breakers, 5SU1 RCBOs and 5SV residual current protective devices								
	1 NO + 1 NC	0.5	▶	5ST3020		1	1 unit	1AD	0.066
	2 NO			5ST3021		1	1 unit	1AD	0.068
	2 NC			5ST3022		1	1 unit	1AD	0.069
	Fault signal contacts (FC) with TEST and ACKNOWLEDGE button								
	For 5SL, 5SY, 5SP miniature circuit breakers, 5SU1 RCBOs and 5SV residual current protective devices								
	1 NO + 1 NC	0.5	▶	5ST3020-2		1	1 unit	1AD	0.072
	2 NO			5ST3021-2		1	1 unit	1AD	0.048
	2 NC			5ST3022-2		1	1 unit	1AD	0.048
	Undervoltage releases (UR)								
	For 5SY, 5SP miniature circuit breakers, 5SV residual current protective devices and 5SU1 RCBOs								
	With integrated auxiliary switch								
	230 AC	1	▶	5ST3040		1	1 unit	1AD	0.114
	110 DC			5ST3041		1	1 unit	1AD	0.112
	24 DC			5ST3042		1	1 unit	1AD	0.111
	Without integrated auxiliary switch								
	230 AC	1	▶	5ST3043		1	1 unit	1AD	0.102
	110 DC			5ST3044		1	1 unit	1AD	0.089
	24 DC			5ST3045		1	1 unit	1AD	0.097

* You can order this quantity or a multiple thereof.

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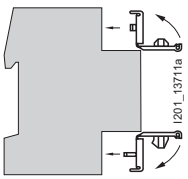
	Rated voltage	Mounting width MW	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Shunt trips (ST) For 5SY, 5SP miniature circuit breakers, 5SV residual current protective devices and 5SU1 RCBOs								
	110 ... 415 V AC	1	▶	5ST3030		1	1 unit	1AD	0.102
	24 ... 48 V AC/DC	1	▶	5ST3031		1	1 unit	1AD	0.102
	Remote controlled mechanisms (RC) For 5SM3 RCCBs up to 80 A								
	Rated voltage U_n = 230 V AC	3.5	▶	5ST3051		1	1 unit	1AD	0.448
	Leakage current measurement devices								
	Rated voltage U_n = 500 V AC; 50 ... 60 Hz; 4P Rated residual current $I_{\Delta n}$ = 0 ... 300 mA Rated current I_n = 63 A.	4		5SM1930-0		1	1 unit	1BE	0.456
	**Covers for connection terminals** For 5SM3 RCCBs up to 80 A, sealable (2 units in plastic bag)								
		2		5SW3010		1	1/50 units	1BE	0.012
		2.5		5SW3011		1	1/50 units	1BE	0.013
		4		5SW3008		1	1/50 units	1BE	0.005
	Locking devices For 5SM3 RCCBs up to 80 A, sealable and lockable 4.5 mm lock hasp diameter			5SW3303		1	10 units	1BE	0.011
	Handle locking devices • For 5SV RCCBs • Sealable • For padlock with 3 ... 6 mm shackle			5ST3806		1	5 units	1AD	0.003
	Padlocks For 5SW3303 locking device			5ST3802		1	1 unit	1AD	0.033
	Locking devices with padlock Comprising 5SW3303 locking device and 5ST3802 padlock			5SW3312		1	1 set	1BE	0.043
	Gland for N conductor For easier wiring in various circuit versions and bus mountings or as a support terminal for N conductors from 2.5 mm² to 50 mm² with blue color marking 1P Rated operational current I_e 125 A Rated operational voltage U_e 230 V AC Conductor cross-sections up to 50 mm²	1		5TE9113		1	1 unit	1BK	0.114

*** You can order this quantity or a multiple thereof.**

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5SM2 RC units

Overview

RC units are used in all supply systems up to 240/415 V AC. Devices of type AC trip in the event of sinusoidal AC residual currents, type A also trips in the event of pulsating DC residual currents.

In addition, RC units, type F also detect residual currents with mixed frequencies up to 1 kHz.

RCCBs with a rated residual current of maximum 30 mA are used for personnel, material and fire protection, as well as for protection against direct contact.

Devices with a rated residual current of maximum 300 mA are used as preventative fire protection in case of insulation faults.

RC units are combined with miniature circuit breakers with A, B, C and D characteristics, provided that these are available in the MCB range. The two components are simply plugged together without the need for any tools.

They then form a combination of RCCB and miniature circuit breakers for personnel, fire and line protection.

The dimensioning of the rated residual current depends on the size of the plant.

Benefits

- Our wide variety of RC unit types and comprehensive range of miniature circuit breakers offer a huge spectrum of combinations for all applications
- Instantaneous type A devices have a surge current withstand capability with current waveform 8/20 µs of more than 1 kA, super resistant of more than 3 kA and selective of more than 5 kA. This ensures safe operation
- All additional components for miniature circuit breakers can be retrofitted on the right-hand side
- All 100 A and 125 A RC units offer external remote tripping over terminals Y1/Y2. This supports implementation of central OFF circuits
- Both components can be simply plugged into each other and secured with captive metal brackets - no tools required. This saves considerable time when mounting.

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Technical specifications

			5SM2
Standards			IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40)
Surge current withstand capability			
• Type A with current waveform 8/20 µs	Acc. to EN 60060-2 (VDE 0432-2)		
- Instantaneous		kA	> 1
- Super resistant		kA	> 3
- Selective		kA	> 5
• Type F with current waveform 8/20 µs	Acc. to EN 60060-2 (VDE 0432-2)	kA	> 3
Minimum operational voltage for test function operation		V AC	195
Rated voltage U_n		V AC	230 ... 400
Rated frequency f_n		Hz	50 ... 60
Rated currents I_n		A	0.3 ... 16; 0.3 ... 40; 0.3 ... 63; 80 ... 100
Rated residual currents $I_{\Delta n}$		mA	10, 30, 100, 300, 500, 1000
Insulation coordination			
• Overvoltage category			III
Pollution degree			2
Terminal conductor cross-sections			
• Up to I_n 63 A		mm^2	1.5 ... 25
• At I_n = 80 ... 100 A		mm^2	6.0 ... 50
Terminal tightening torque		Nm	2.5 ... 3.0
Mains connection			Either top or bottom
Mounting position (on a standard mounting rail)			Any
Degree of protection	Acc. to EN 60529 (VDE 0470-1)		IP20, if the distribution board is installed, with connected conductors
Touch protection	Acc. to EN 50274 (VDE 0660-514)		Finger and back-of-hand safe
Service life	Average number of switching cycles		> 10000 switching cycles
Storage temperature		°C	-40 ... +75
Ambient temperature		°C	-25 ... +45, marked with -25
Resistance to climate	Acc. to IEC 60068-2-30		28 cycles (55 °C; 95 % rel. air humidity)
CFC and silicone-free			Yes

Power losses per conducting path under rated current load

Number of poles	Rated current	Rated residual current $I_{\Delta n}$ [A]	Power loss per conducting path P_v [W]
2	16	0.01	2.5
2/3/4	40	0.03	3.6
	63	0.03	4.6
	40	0.3/0.5/1	1.9
	63	0.1/0.3/0.5/1	3.0
2/4	80	0.3	4.8
	80	0.3/1	4.0
	100	0.3	6.0
	100	0.3/1	5.0

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Selection and ordering data

(Type AC)	Rated residual current	Rated current	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	$I_{\Delta n}$	I_n								
	mA	A	MW							kg
RC units, type AC, instantaneous										
	For 5SY miniature circuit breakers, not suitable for use with 5SY5, 5SY30 and 5SY60									
	2P, 230 ... 400 V AC, 50 ... 60 Hz									
	10[1)]	0.3 ... 40	2		5SM2121-0		1	1 unit	1Al	0.193
	30				5SM2322-0		1	1 unit	1Al	0.206
	300				5SM2622-0		1	1 unit	1Al	0.192
	30	0.3 ... 63			5SM2325-0		1	1 unit	1Al	0.209
	300				5SM2625-0		1	1 unit	1Al	0.193
	500				5SM2725-0		1	1 unit	1Al	0.193
	1000				5SM2825-0		1	1 unit	1Al	0.218
	3P; 230 ... 400 V AC; 50 ... 60 Hz									
	30	0.3 ... 40	3		5SM2332-0		1	1 unit	1Al	0.283
	300				5SM2632-0		1	1 unit	1Al	0.286
	30	0.3 ... 63			5SM2335-0		1	1 unit	1Al	0.337
	300				5SM2635-0		1	1 unit	1Al	0.287
	500				5SM2735-0		1	1 unit	1Al	0.290
	4P, 230 ... 400 V AC, 50 ... 60 Hz									
	30	0.3 ... 40	3	►	5SM2342-0		1	1 unit	1Al	0.310
	300			►	5SM2642-0		1	1 unit	1Al	0.316
	30	0.3 ... 63			5SM2345-0		1	1 unit	1Al	0.375
	300				5SM2645-0		1	1 unit	1Al	0.318
	500				5SM2745-0		1	1 unit	1Al	0.324
	For 5SL4 miniature circuit breakers									
	2P, 230 ... 400 V AC, 50 ... 60 Hz									
	30	0.3 ... 40	2		5SM2323-0		1	1 unit	1Al	0.205
	300				5SM2623-0		1	1 unit	1Al	0.191
	30	0.3 ... 63			5SM2326-0		1	1 unit	1Al	0.215
	300				5SM2626-0		1	1 unit	1Al	0.195
	3P; 230 ... 400 V AC; 50 ... 60 Hz									
	30	0.3 ... 40	3		5SM2333-0		1	1 unit	1Al	0.282
	300				5SM2633-0		1	1 unit	1Al	0.268
	30	0.3 ... 63			5SM2336-0		1	1 unit	1Al	0.359
	300				5SM2636-0		1	1 unit	1Al	0.300
	4P, 230 ... 400 V AC, 50 ... 60 Hz									
	30	0.3 ... 40	3		5SM2343-0		1	1 unit	1Al	0.310
	300				5SM2643-0		1	1 unit	1Al	0.303
	30	0.3 ... 63			5SM2346-0		1	1 unit	1Al	0.390
	300				5SM2646-0		1	1 unit	1Al	0.320

* You can order this quantity or a multiple thereof.

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(Type AC)	Rated residual current	Rated current	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	$I_{\Delta n}$	I_n								
	mA	A	MW							kg
RC units, type AC, selective S										
	For 5SY miniature circuit breakers, not suitable for use with 5SY5, 5SY30 and 5SY60									
	2P, 230 ... 400 V AC, 50 ... 60 Hz									
	300	0.3 ... 40	2		5SM2622-2		1	1 unit	1AI	0.211
	300	0.3 ... 63			5SM2625-2		1	1 unit	1AI	0.209
	4P, 230 ... 400 V AC, 50 ... 60 Hz									
	300	0.3 ... 63	3		5SM2645-2		1	1 unit	1AI	0.366
	1000				5SM2845-2		1	1 unit	1AI	0.328
	For 5SL4 miniature circuit breakers									
	2P, 230 ... 400 V AC, 50 ... 60 Hz									
	300	0.3 ... 40	2		5SM2623-2		1	1 unit	1AI	0.211
		0.3 ... 63			5SM2626-2		1	1 unit	1AI	0.213
	4P, 230 ... 400 V AC, 50 ... 60 Hz									
	300	0.3 ... 63	4		5SM2646-2		1	1 unit	1AI	0.368
RC units, type AC, instantaneous										
	For 5SP4 miniature circuit breakers (B and C characteristics)									
	2P, 230 ... 400 V AC, 50 ... 60 Hz									
	30	80 ... 100	3.5		5SM2327-0		1	1 unit	1AI	0.508
	300				5SM2627-0		1	1 unit	1AI	0.470
	4P, 230 ... 400 V AC, 50 ... 60 Hz									
	30	80 ... 100	5		5SM2347-0		1	1 unit	1AI	0.897
	300				5SM2647-0		1	1 unit	1AI	0.697

1) 2SM2 RC units with $I_{\Delta n}$ = 10 mA can be combined with switches I_n = 16 A

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5SM2 RC units

(Type A)	Rated residual current	Rated current	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	$I_{\Delta n}$	I_n								
	mA	A	MW							kg
RC units, type A, instantaneous										
	For 5SY miniature circuit breakers, not suitable for use with 5SY5, 5SY8 and 5SY60..									
	2P, 230 ... 400 V AC, 50 ... 60 Hz									
	10	0.3 ... 16	2		5SM2121-6		1	1 unit	1AH	0.203
	30	0.3 ... 40		▶	5SM2322-6		1	1 unit	1AH	0.201
	300				5SM2622-6		1	1 unit	1AH	0.194
	30	0.3 ... 63			5SM2325-6		1	1 unit	1AH	0.212
	100				5SM2425-6		1	1 unit	1AH	0.207
	300				5SM2625-6		1	1 unit	1AH	0.194
	500				5SM2725-6		1	1 unit	1AH	0.197
	3P; 230 ... 400 V AC; 50 ... 60 Hz									
	30	0.3 ... 40	3		5SM2332-6		1	1 unit	1AH	0.300
	300				5SM2632-6		1	1 unit	1AH	0.288
	30	0.3 ... 63			5SM2335-6		1	1 unit	1AH	0.338
	100				5SM2435-6		1	1 unit	1AH	0.312
	300				5SM2635-6		1	1 unit	1AH	0.289
	500				5SM2735-6		1	1 unit	1AH	0.294
	4P, 230 ... 400 V AC, 50 ... 60 Hz									
	30	0.3 ... 40	3	▶	5SM2342-6		1	1 unit	1AH	0.327
	300			▶	5SM2642-6		1	1 unit	1AH	0.322
	30	0.3 ... 63			5SM2345-6		1	1 unit	1AH	0.375
	100				5SM2445-6		1	1 unit	1AH	0.338
	300				5SM2645-6		1	1 unit	1AH	0.319
	500				5SM2745-6		1	1 unit	1AH	0.319
	For 5SL4 miniature circuit breakers									
	2P, 230 ... 400 V AC, 50 ... 60 Hz									
	30	0.3 ... 40			5SM2323-6		1	1 unit	1AH	0.198
	300				5SM2623-6		1	1 unit	1AH	0.190
	30	0.3 ... 63			5SM2326-6		1	1 unit	1AH	0.215
	300				5SM2626-6		1	1 unit	1AH	0.203
	3P; 230 ... 400 V AC; 50 ... 60 Hz									
	30	0.3 ... 40	3		5SM2333-6		1	1 unit	1AH	0.300
	300				5SM2633-6		1	1 unit	1AH	0.303
	30	0.3 ... 63			5SM2336-6		1	1 unit	1AH	0.359
	300				5SM2636-6		1	1 unit	1AH	0.300
	4P, 230 ... 400 V AC, 50 ... 60 Hz									
	30	0.3 ... 40	3		5SM2343-6		1	1 unit	1AH	0.327
	300				5SM2643-6		1	1 unit	1AH	0.322
	30	0.3 ... 63			5SM2346-6		1	1 unit	1AH	0.390
	300				5SM2646-6		1	1 unit	1AH	0.320

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(Type A)	Rated residual current	Rated current	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	$I_{\Delta n}$ mA	I_n A	MW							kg
	For 5SP4 miniature circuit breakers (B and C characteristics)									
	2P, 125 ... 230 V AC, 50 ... 60 Hz									
	30	80 ... 100	3.5		5SM2327-6		1	1 unit	1AH	0.516
	300				5SM2627-6		1	1 unit	1AH	0.467
	4P, 230 ... 400 V AC, 50 ... 60 Hz									
	30	80 ... 100	5		5SM2347-6		1	1 unit	1AH	0.899
	300				5SM2647-6		1	1 unit	1AH	0.682
RC units, type A, super resistant K										
	For 5SY miniature circuit breakers, not suitable for use with 5SY5, 5SY8 and 5SY60..									
	2P, 230 ... 400 V AC, 50 ... 60 Hz									
	30	0.3 ... 40	2		5SM2322-6KK01		1	1 unit	1AH	0.211
	30	0.3 ... 63			5SM2325-6KK01		1	1 unit	1AH	0.215
	3P; 230 ... 400 V AC; 50 ... 60 Hz									
	30	0.3 ... 40	3		5SM2332-6KK01		1	1 unit	1AH	0.351
	30	0.3 ... 63			5SM2335-6KK01		1	1 unit	1AH	0.338
	4P, 230 ... 400 V AC, 50 ... 60 Hz									
	30	0.3 ... 40	3		5SM2342-6KK01		1	1 unit	1AH	0.381
	30	0.3 ... 63			5SM2345-6KK01		1	1 unit	1AH	0.386

*** You can order this quantity or a multiple thereof.**

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5SM2 RC units

(Type A)	Rated residual current	Rated current	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	$I_{\Delta n}$	I_n								
	mA	A	MW							kg
RC units, type A, selective S										
	For 5SY miniature circuit breakers, not suitable for use with 5SY5, 5SY8 and 5SY60..									
	2P, 230 ... 400 V AC, 50 ... 60 Hz									
	300	0.3 ... 40	2		5SM2622-8		1	1 unit	1AH	0.207
	1000				5SM2822-8		1	1 unit	1AH	0.205
	300	0.3 ... 63			5SM2625-8		1	1 unit	1AH	0.205
	1000				5SM2825-8		1	1 unit	1AH	0.182
	3P; 230 ... 400 V AC; 50 ... 60 Hz									
	1000	0.3 ... 40	3		5SM2832-8		1	1 unit	1AH	0.286
	300	0.3 ... 63	3		5SM2635-8		1	1 unit	1AH	0.338
	500				5SM2735-8		1	1 unit	1AH	0.301
	1000				5SM2835-8		1	1 unit	1AH	0.295
	4P, 230 ... 400 V AC, 50 ... 60 Hz									
	1000	0.3 ... 40	3		5SM2842-8		1	1 unit	1AH	0.324
	300	0.3 ... 63			5SM2645-8		1	1 unit	1AH	0.366
	500				5SM2745-8		1	1 unit	1AH	0.333
	1000				5SM2845-8		1	1 unit	1AH	0.327
	For 5SL4 miniature circuit breakers									
	2P, 230 ... 400 V AC, 50 ... 60 Hz									
	300	0.3 ... 40	2		5SM2623-8		1	1 unit	1AH	0.207
	300	0.3 ... 63			5SM2626-8		1	1 unit	1AH	0.210
	3P; 230 ... 400 V AC; 50 ... 60 Hz									
	300	0.3 ... 63	3		5SM2636-8		1	1 unit	1AH	0.340
	4P, 230 ... 400 V AC, 50 ... 60 Hz									
	300	0.3 ... 63	3		5SM2646-8		1	1 unit	1AH	0.368

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(Type A)	Rated residual current	Rated current	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	$I_{\Delta n}$ mA	I_n A	MW							kg
	For 5SP4 miniature circuit breakers (B and C characteristics)									
	2P, 125 ... 230 V AC, 50 ... 60 Hz									
	300	80 ... 100	3.5		5SM2627-8		1	1 unit	1AH	0.514
	1000	80 ... 100	3.5		5SM2827-8		1	1 unit	1AH	0.478
	4P, 230 ... 400 V AC, 50 ... 60 Hz									
	300	80 ... 100	5		5SM2647-8		1	1 unit	1AH	0.798
	1000				5SM2847-8		1	1 unit	1AH	0.703
RC units, type F, super resistant										
	For 5SY miniature circuit breakers, not suitable for use with 5SY5, 5SY8 and 5SY60..									
	2P, 230 ... 400 V AC, 50 ... 60 Hz									
	30	0.3 ... 40	2		5SM2322-3		1	1 unit	1AH	0.214
	30	0.3 ... 63	2		5SM2325-3		1	1 unit	1AH	0.214

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Overview

RCBOs are a combination of an RCCB and a miniature circuit breaker in a compact design for personnel, fire and line protection. For personnel protection and fire protection, the residual current part of the type AC trips in the event of sinusoidal AC residual currents, type A also trips in the event of pulsating DC residual currents.

In addition, RCBOs type F also detect residual currents with mixed frequencies up to 1 kHz.

RCBOs with a rated residual current of maximum 30 mA are used for personnel, material and fire protection, as well as for protection against direct contact. RCBOs with a rated residual current of 10 mA are primarily used in areas that represent an increased risk for personnel and in the outdoor installations of residential buildings.

Devices with a rated residual current of maximum 300 mA are used as preventative fire protection in case of insulation faults.

The MCB part of the RCBO protects lines against overload and short circuits and is available in characteristics B and C.

Since DIN VDE 0100-410 came into effect in June 2007, all socket outlet current circuits up to 20 A must now also be fitted with residual current protective devices with a rated residual current of max. 30 mA. This also applies to outdoor electrical circuits up to 32 A for the connection of portable equipment.

In order to implement this protection, we recommend the use of RCBOs with 30 mA on a country-specific basis.

Assignment to each individual branch circuit helps prevent the undesired tripping of fault-free circuits induced by the accumulation of operation-related leakage currents or by transient current pulses during switching operations.

Additional components of the 5SY miniature circuit breakers can be mounted at the side and carry out additional functions.

For further details on additional components, please see chapter "Miniature Circuit Breakers".

RCBOs comprise one part for fault-current detection and one part for overcurrent detection. They are equipped with a delayed overload/time-dependent thermal release (thermal bimetal) for low overcurrents and with an instantaneous electromagnetic release for higher overload and short-circuit currents.

The special contact materials used guarantee a long service life and offer a high degree of protection against contact welding.

Benefits

For all versions

- Clear and visible conductor connection in front of the rear busbar facilitates controls
- Large and easily accessible wiring space enables easy insertion of conductor in the terminals
- The surge current withstand capability of over 1 kA ensures safe and reliable operation
- All additional components for miniature circuit breakers can be retrofitted on the right-hand side.

For all 10 kA versions up to 40 A

- Integrated movable terminal covers located at the cable entries ensure the terminals are fully insulated when the screws are tightened. The effective touch protection when grasping the device considerably exceeds the requirements of BGV A3
- The RCBOs can be quickly and easily removed from the assembly by hand if connections need to be changed. Time-saving replacement of parts as busbars no longer need to be freed from adjacent miniature circuit breakers.

For all 125 A versions

- The RCBOs offer external remote tripping over terminals Y1/Y2. This supports implementation of central OFF circuits.

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Technical specifications

			Up to 40 A	125 A
Standards			IEC/EN 61009-1 (VDE 0664-20); IEC/EN 61009-2-1 (VDE 0664-21) IEC/EN 61543 (VDE 0664-30); IEC/EN 62423 (VDE 0664-40)	
Rated voltages U_n		V AC	230	400
Rated frequency f_n		Hz	50 ... 60	
Rated currents I_n		A	6, 8, 10, 13, 16, 20, 25, 32, 40	125
Rated residual currents $I_{\Delta n}$		mA	10, 30, 100, 300	30, 300, 1000
Rated breaking capacity		kA	6 / 10	10
Energy limitation class			3	--
Surge current withstand capability				
• Type A with current waveform 8/20 µs	Acc. to EN 60060-2 (VDE 0432-2)			
- Instantaneous		kA	> 1	
- Super resistant		kA	> 3	--
- Selective		kA	> 5	
• Type F with current waveform 8/20 µs		kA	> 3	--
Minimum voltage for operation of the test equipment		V AC	195	
Insulation coordination				
• Overvoltage category			III	
Pollution degree			2	
Terminal conductor cross-sections				
• Solid and stranded		mm^2	0.75 ... 35	6 ... 50
• Finely stranded with end sleeve		mm^2	0.75 ... 25	6 ... 35
Terminal tightening torque		Nm	2.5 ... 3.0	3.0 ... 3.5
Mains connection			Top or bottom	
Mounting position (on a standard mounting rail)			Any	
Degree of protection	Acc. to EN 60529 (VDE 0470-1)		IP20, if the distribution board is installed, with connected conductors	
Touch protection	Acc. to EN 50274 (VDE 0660-514)		Finger and back-of-hand safe	
Service life	Average number of switching cycles		> 10000	
Storage temperature		°C	-40 ... +75	
Ambient temperature		°C	-25 ... +45, marked with -25	
Resistance to climate	Acc. to IEC 60068-2-30		28 cycles (55 °C; 95 % rel. air humidity)	
CFC and silicone-free			Yes	

Power losses

Note:

All data under loading with rated current I_n.

Rated current I_n [A]	Rated residual current $I_{\Delta n}$ [mA]	Power loss of complete device P_v [W]	
		Characteristic B	Characteristic C
6	10	2.8	2.2
	30 ... 300	2.7	1.9
8	30 ... 300	--	1.2
10	10	2.4	2.2
	30 ... 300	1.8	1.6
13	10	3.5	3.3
	30 ... 300	2.4	2.2
16	10	4.7	4.5
	30 ... 300	3.0	2.8
20	30 ... 300	3.7	3.3
25	30 ... 300	5.1	5.1
32	30 ... 300	5.7	5.7
40	30 ... 300	7.8	7.8

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Selection and ordering data

(Type AC)	Rated residual current $I_{\Delta n}$ mA	Rated current I_n A	Mounting width MW	DT	Tripping characteristic B Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Tripping characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
RCBOs, type AC, instantaneous														
1P + N, 230 V AC, 50 ... 60 Hz														
4 500 / 3														
N connection, right														
	30	6	2		--				5SU1353-1KK06		1	1 unit	1BB	0.270
		8			--				5SU1353-1KK08		1	1 unit	1BB	0.268
		10			--				5SU1353-1KK10		1	1 unit	1BB	0.269
		13			--				5SU1353-1KK13		1	1 unit	1BB	0.274
		16			--				5SU1353-1KK16		1	1 unit	1BB	0.269
		20			--				5SU1353-1KK20		1	1 unit	1BB	0.281
		25			--				5SU1353-1KK25		1	1 unit	1BB	0.279
		32			--				5SU1353-1KK32		1	1 unit	1BB	0.284
		40			--				5SU1353-1KK40		1	1 unit	1BB	0.285
	300	6	2		--				5SU1653-1KK06		1	1 unit	1BB	0.267
		10			--				5SU1653-1KK10		1	1 unit	1BB	0.268
		13			--				5SU1653-1KK13		1	1 unit	1BB	0.290
		16			--				5SU1653-1KK16		1	1 unit	1BB	0.267
		20			--				5SU1653-1KK20		1	1 unit	1BB	0.278
		25			--				5SU1653-1KK25		1	1 unit	1BB	0.274
		32			--				5SU1653-1KK32		1	1 unit	1BB	0.279
		40			--				5SU1653-1KK40		1	1 unit	1BB	0.275
N connection, left														
	30	6	2		--				5SU1353-1KL06		1	1 unit	1BB	0.287
		10			--				5SU1353-1KL10		1	1 unit	1BB	0.282
		13			--				5SU1353-1KL13		1	1 unit	1BB	0.303
		16			--				5SU1353-1KL16		1	1 unit	1BB	0.286
		20			--				5SU1353-1KL20		1	1 unit	1BB	0.295
		25			--				5SU1353-1KL25		1	1 unit	1BB	0.298
		32			--				5SU1353-1KL32		1	1 unit	1BB	0.296
		40			--				5SU1353-1KL40		1	1 unit	1BB	0.296
	300	6			--				5SU1653-1KL06		1	1 unit	1BB	0.280
		10			--				5SU1653-1KL10		1	1 unit	1BB	0.290
		16			--				5SU1653-1KL16		1	1 unit	1BB	0.274
		20			--				5SU1653-1KL20		1	1 unit	1BB	0.298
		25			--				5SU1653-1KL25		1	1 unit	1BB	0.289
		32			--				5SU1653-1KL32		1	1 unit	1BB	0.288
		40			--				5SU1653-1KL40		1	1 unit	1BB	0.285
6 000 / 3														
N connection, right														
	30	6	2		5SU1356-0KK06		1BB		5SU1356-1KK06		1	1 unit	1BB	0.272
		8			--				5SU1356-1KK08		1	1 unit	1BB	0.269
		10			5SU1356-0KK10		1BB		5SU1356-1KK10		1	1 unit	1BB	0.268
		13			5SU1356-0KK13		1BB		5SU1356-1KK13		1	1 unit	1BB	0.271
		16			5SU1356-0KK16		1BB		5SU1356-1KK16		1	1 unit	1BB	0.269
		20			5SU1356-0KK20		1BB		5SU1356-1KK20		1	1 unit	1BB	0.278
		25			5SU1356-0KK25		1BB		5SU1356-1KK25		1	1 unit	1BB	0.280
		32			5SU1356-0KK32		1BB		5SU1356-1KK32		1	1 unit	1BB	0.286
		40			5SU1356-0KK40		1BB		5SU1356-1KK40		1	1 unit	1BB	0.285
	300	6	2		5SU1656-0KK06		1BB		5SU1656-1KK06		1	1 unit	1BB	0.276
		10			5SU1656-0KK10		1BB		5SU1656-1KK10		1	1 unit	1BB	0.268
		13			5SU1656-0KK13		1BB		5SU1656-1KK13		1	1 unit	1BB	0.274
		16			5SU1656-0KK16		1BB		5SU1656-1KK16		1	1 unit	1BB	0.267
		20			5SU1656-0KK20		1BB		5SU1656-1KK20		1	1 unit	1BB	0.278
		25			5SU1656-0KK25		1BB		5SU1656-1KK25		1	1 unit	1BB	0.280
		32			5SU1656-0KK32		1BB		5SU1656-1KK32		1	1 unit	1BB	0.275
		40			5SU1656-0KK40		1BB		5SU1656-1KK40		1	1 unit	1BB	0.288

* You can order this quantity or a multiple thereof.

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(Type AC)	Rated residual current $I_{\Delta n}$ mA	Rated current I_n A	Mounting width MW	DT	Tripping characteristic B Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Tripping characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
RCBOs, type AC, instantaneous														
	1P + N, 230 V AC, 50 ... 60 Hz													
	10 000													
	3													
	30	6	2		5SU1354-0KK06		1BB		5SU1354-1KK06		1	1 unit	1BB	0.275
		8			--				5SU1354-1KK08		1	1 unit	1BB	0.279
		10			5SU1354-0KK10		1BB		5SU1354-1KK10		1	1 unit	1BB	0.276
		13			5SU1354-0KK13		1BB		5SU1354-1KK13		1	1 unit	1BB	0.280
		16			5SU1354-0KK16		1BB		5SU1354-1KK16		1	1 unit	1BB	0.272
		20			5SU1354-0KK20		1BB		5SU1354-1KK20		1	1 unit	1BB	0.278
		25			5SU1354-0KK25		1BB		5SU1354-1KK25		1	1 unit	1BB	0.277
		32			5SU1354-0KK32		1BB		5SU1354-1KK32		1	1 unit	1BB	0.275
		40			5SU1354-0KK40		1BB		5SU1354-1KK40		1	1 unit	1BB	0.284
	100	6	2		--				5SU1454-1KK06		1	1 unit	1BB	0.275
		10			--				5SU1454-1KK10		1	1 unit	1BB	0.280
		13			--				5SU1454-1KK13		1	1 unit	1BB	0.282
		16			--				5SU1454-1KK16		1	1 unit	1BB	0.274
		20			--				5SU1454-1KK20		1	1 unit	1BB	0.279
		25			--				5SU1454-1KK25		1	1 unit	1BB	0.279
		32			--				5SU1454-1KK32		1	1 unit	1BB	0.287
		40			--				5SU1454-1KK40		1	1 unit	1BB	0.286
	300	6	2		5SU1654-0KK06		1BB		5SU1654-1KK06		1	1 unit	1BB	0.251
		10			5SU1654-0KK10		1BB		5SU1654-1KK10		1	1 unit	1BB	0.272
		13			5SU1654-0KK13		1BB		5SU1654-1KK13		1	1 unit	1BB	0.270
		16			5SU1654-0KK16		1BB		5SU1654-1KK16		1	1 unit	1BB	0.270
		20			5SU1654-0KK20		1BB		5SU1654-1KK20		1	1 unit	1BB	0.275
		25			5SU1654-0KK25		1BB		5SU1654-1KK25		1	1 unit	1BB	0.278
		32			5SU1654-0KK32		1BB		5SU1654-1KK32		1	1 unit	1BB	0.275
		40			5SU1654-0KK40		1BB		5SU1654-1KK40		1	1 unit	1BB	0.277
RCBOs, type AC, short-time delayed G														
	1P+N; 230 V AC; 50 ... 60 Hz													
	10 000													
	3													
	30	10	2		5SU1354-0LB10		1BB		5SU1354-1LB10		1	1 unit	1BB	0.284
		13			5SU1354-0LB13		1BB		5SU1354-1LB13		1	1 unit	1BB	0.286
		16			5SU1354-0LB16		1BB		5SU1354-1LB16		1	1 unit	1BB	0.282
		20			5SU1354-0LB20		1BB		5SU1354-1LB20		1	1 unit	1BB	0.283
		25			5SU1354-0LB25		1BB		5SU1354-1LB25		1	1 unit	1BB	0.289
		32			5SU1354-0LB32		1BB		5SU1354-1LB32		1	1 unit	1BB	0.286
		40			5SU1354-0LB40		1BB		5SU1354-1LB40		1	1 unit	1BB	0.265
RCBOs, type AC, instantaneous														
	2P, 400 V AC, 50 ... 60 Hz													
	10 000													
	30	125	6.5		5SU1324-0KK82		1BB		5SU1324-1KK82		1	1 unit	1BB	1.151
	300	125			5SU1624-0KK82		1BB		5SU1624-1KK82		1	1 unit	1BB	1.108
	4P, 400 V AC, 50 ... 60 Hz													
	10 000													
	30	125	11		5SU1344-0KK82		1BB		5SU1344-1KK82		1	1 unit	1BB	2.032
	300	125			5SU1644-0KK82		1BB		5SU1644-1KK82		1	1 unit	1BB	2.027

* You can order this quantity or a multiple thereof.

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5SU1 RCBOs

RCBOs, type A, instantaneous

(Type A)	Rated residual current $I_{\Delta n}$ mA	Rated current I_n A	Mounting width MW	DT	Tripping characteristic B Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Tripping characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
1P+N, 230 V AC, 50 ... 60 Hz														
4 500 / 3														
N connection, right														
	30	6	2		--				5SU1353-7KK06		1	1 unit	1BC	0.286
		8			--				5SU1353-7KK08		1	1 unit	1BC	0.288
		10			--				5SU1353-7KK10		1	1 unit	1BC	0.269
		13			--				5SU1353-7KK13		1	1 unit	1BC	0.270
		16			--				5SU1353-7KK16		1	1 unit	1BC	0.268
		20			--				5SU1353-7KK20		1	1 unit	1BC	0.276
		25			--				5SU1353-7KK25		1	1 unit	1BC	0.278
		32			--				5SU1353-7KK32		1	1 unit	1BC	0.285
		40			--				5SU1353-7KK40		1	1 unit	1BC	0.289
	300	6	2		--				5SU1653-7KK06		1	1 unit	1BC	0.263
		10			--				5SU1653-7KK10		1	1 unit	1BC	0.267
		13			--				5SU1653-7KK13		1	1 unit	1BC	0.292
		16			--				5SU1653-7KK16		1	1 unit	1BC	0.266
		20			--				5SU1653-7KK20		1	1 unit	1BC	0.284
		25			--				5SU1653-7KK25		1	1 unit	1BC	0.274
		32			--				5SU1653-7KK32		1	1 unit	1BC	0.281
		40			--				5SU1653-7KK40		1	1 unit	1BC	0.280
N connection, left														
	30	6	2		--				5SU1353-7KL06		1	1 unit	1BC	0.285
		10			--				5SU1353-7KL10		1	1 unit	1BC	0.284
		16			--				5SU1353-7KL16		1	1 unit	1BC	0.286
		20			--				5SU1353-7KL20		1	1 unit	1BC	0.298
		25			--				5SU1353-7KL25		1	1 unit	1BC	0.293
		32			--				5SU1353-7KL32		1	1 unit	1BC	0.296
		40			--				5SU1353-7KL40		1	1 unit	1BC	0.294
1P+N, 230 V AC, 50 ... 60 Hz														
6 000 / 3														
N connection, right														
	30	6	2		5SU1356-6KK06		1BC		5SU1356-7KK06		1	1 unit	1BC	0.268
		8			--				5SU1356-7KK08		1	1 unit	1BC	0.271
		10			5SU1356-6KK10		1BC	►	5SU1356-7KK10		1	1 unit	1BC	0.268
		13			5SU1356-6KK13		1BC		5SU1356-7KK13		1	1 unit	1BC	0.272
		16		►	5SU1356-6KK16		1BC	►	5SU1356-7KK16		1	1 unit	1BC	0.269
		20			5SU1356-6KK20		1BC		5SU1356-7KK20		1	1 unit	1BC	0.280
		25			5SU1356-6KK25		1BC		5SU1356-7KK25		1	1 unit	1BC	0.278
		32			5SU1356-6KK32		1BC		5SU1356-7KK32		1	1 unit	1BC	0.284
		40			5SU1356-6KK40		1BC		5SU1356-7KK40		1	1 unit	1BC	0.284
	300	6	2		5SU1656-6KK06		1BC		5SU1656-7KK06		1	1 unit	1BC	0.267
		10			5SU1656-6KK10		1BC		5SU1656-7KK10		1	1 unit	1BC	0.264
		13			5SU1656-6KK13		1BC		5SU1656-7KK13		1	1 unit	1BC	0.268
		16			5SU1656-6KK16		1BC		5SU1656-7KK16		1	1 unit	1BC	0.264
		20			5SU1656-6KK20		1BC		5SU1656-7KK20		1	1 unit	1BC	0.276
		25			5SU1656-6KK25		1BC		5SU1656-7KK25		1	1 unit	1BC	0.278
		32			5SU1656-6KK32		1BC		5SU1656-7KK32		1	1 unit	1BC	0.277
		40			5SU1656-6KK40		1BC		5SU1656-7KK40		1	1 unit	1BC	0.277

* You can order this quantity or a multiple thereof.

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(Type A)	Rated residual current	Rated current	Mounting width	DT	Tripping characteristic B Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Tripping characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	$I_{\Delta n}$	I_n												
	mA	A	MW											kg
	1P+N; 230 V AC; 50 ... 60 Hz 10 000 3													
	10	6	2		5SU1154-6KK06		1BC		5SU1154-7KK06		1	1 unit	1BC	0.275
		10			5SU1154-6KK10		1BC		5SU1154-7KK10		1	1 unit	1BC	0.274
		13			5SU1154-6KK13		1BC		5SU1154-7KK13		1	1 unit	1BC	0.282
		16			5SU1154-6KK16		1BC	▶	5SU1154-7KK16		1	1 unit	1BC	0.275
	30	6	2		5SU1354-6KK06		1BC	▶	5SU1354-7KK06		1	1 unit	1BC	0.274
		8			--				5SU1354-7KK08		1	1 unit	1BC	0.273
		10			5SU1354-6KK10		1BC	▶	5SU1354-7KK10		1	1 unit	1BC	0.274
		13			5SU1354-6KK13		1BC		5SU1354-7KK13		1	1 unit	1BC	0.276
		16		▶	5SU1354-6KK16		1BC	▶	5SU1354-7KK16		1	1 unit	1BC	0.274
		20			5SU1354-6KK20		1BC		5SU1354-7KK20		1	1 unit	1BC	0.280
		25			5SU1354-6KK25		1BC		5SU1354-7KK25		1	1 unit	1BC	0.275
		32			5SU1354-6KK32		1BC		5SU1354-7KK32		1	1 unit	1BC	0.282
		40			5SU1354-6KK40		1BC		5SU1354-7KK40		1	1 unit	1BC	0.282
	300	6	2		5SU1654-6KK06		1BC		5SU1654-7KK06		1	1 unit	1BC	0.272
		10			5SU1654-6KK10		1BC		5SU1654-7KK10		1	1 unit	1BC	0.270
		13			5SU1654-6KK13		1BC		5SU1654-7KK13		1	1 unit	1BC	0.281
		16			5SU1654-6KK16		1BC		5SU1654-7KK16		1	1 unit	1BC	0.271
		20			5SU1654-6KK20		1BC		5SU1654-7KK20		1	1 unit	1BC	0.273
		25			5SU1654-6KK25		1BC		5SU1654-7KK25		1	1 unit	1BC	0.266
		32			5SU1654-6KK32		1BC		5SU1654-7KK32		1	1 unit	1BC	0.273
		40			5SU1654-6KK40		1BC		5SU1654-7KK40		1	1 unit	1BC	0.281
	2P; 230 V AC; 50 ... 60 Hz 10 000 3													
	30	6	3		5SU1324-6FA06		1BC		5SU1324-7FA06		1	1 unit	1BC	0.403
		10		▶	5SU1324-6FA10		1BC	▶	5SU1324-7FA10		1	1 unit	1BC	0.404
		13			5SU1324-6FA13		1BC		5SU1324-7FA13		1	1 unit	1BC	0.413
		16		▶	5SU1324-6FA16		1BC	▶	5SU1324-7FA16		1	1 unit	1BC	0.404
		20			5SU1324-6FA20		1BC		5SU1324-7FA20		1	1 unit	1BC	0.412
		25			5SU1324-6FA25		1BC		5SU1324-7FA25		1	1 unit	1BC	0.412
		32			5SU1324-6FA32		1BC		5SU1324-7FA32		1	1 unit	1BC	0.417
		40			5SU1324-6FA40		1BC		5SU1324-7FA40		1	1 unit	1BC	0.420
	2P; 400 V AC; 50 ... 60 Hz 10 000													
	30	125	6.5		5SU1324-6KK82		1BC		5SU1324-7KK82		1	1 unit	1BC	1.212
	300	125			5SU1624-6KK82		1BC		5SU1624-7KK82		1	1 unit	1BC	0.930
	4P; 400 V AC; 50 ... 60 Hz 10 000													
	30	125	11		5SU1344-6KK82		1BC		5SU1344-7KK82		1	1 unit	1BC	2.022
	300	125			5SU1644-6KK82		1BC		5SU1644-7KK82		1	1 unit	1BC	2.029

*** You can order this quantity or a multiple thereof.**

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5SU1 RCBOs

(Type A)	Rated residual current	Rated current	Mounting width	DT	Tripping characteristic B Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Tripping characteristic C Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	$I_{\Delta n}$	I_n												
	mA	A	MW											kg
RCBOs, type A, super resistant K														
	1P+N; 230 V AC; 50 ... 60 Hz 10 000 3													
	30	10	2		--				5SU1354-7VK10		1	1 unit	1BC	0.282
		16			--				5SU1354-7VK16		1	1 unit	1BC	0.286
		20			--				5SU1354-7VK20		1	1 unit	1BC	0.286
		25			--				5SU1354-7VK25		1	1 unit	1BC	0.288
		32			--				5SU1354-7VK32		1	1 unit	1BC	0.289
		40			--				5SU1354-7VK40		1	1 unit	1BC	0.293
RCBOs, type A, selective S														
	2P; 400 V AC; 50 ... 60 Hz 10 000													
	300	125	6.5		5SU1624-6WK82		1BC		5SU1624-7WK82		1	1 unit	1BC	1.156
	4P; 400 V AC; 50 ... 60 Hz 10 000													
	300	125	11		5SU1644-6WK82		1BC		5SU1644-7WK82		1	1 unit	1BC	2.031
	1000	125			5SU1844-6WK82		1BC		5SU1844-7WK82		1	1 unit	1BC	2.010
RCBOs, type F, super resistant														
	1P+N, 230 V AC, 50 ... 60 Hz 10 000 3													
	30	6	2		5SU1354-3KK06		1BC		5SU1354-4KK06		1	1 unit	1BC	0.282
		10			5SU1354-3KK10		1BC		5SU1354-4KK10		1	1 unit	1BC	0.286
		13			5SU1354-3KK13		1BC		5SU1354-4KK13		1	1 unit	1BC	0.287
		16			5SU1354-3KK16		1BC		5SU1354-4KK16		1	1 unit	1BC	0.283
		20			5SU1354-3KK20		1BC		5SU1354-4KK20		1	1 unit	1BC	0.285
		25			5SU1354-3KK25		1BC		5SU1354-4KK25		1	1 unit	1BC	0.267
		32			5SU1354-3KK32		1BC		5SU1354-4KK32		1	1 unit	1BC	0.288
		40			5SU1354-3KK40		1BC		5SU1354-4KK40		1	1 unit	1BC	0.293

* You can order this quantity or a multiple thereof.

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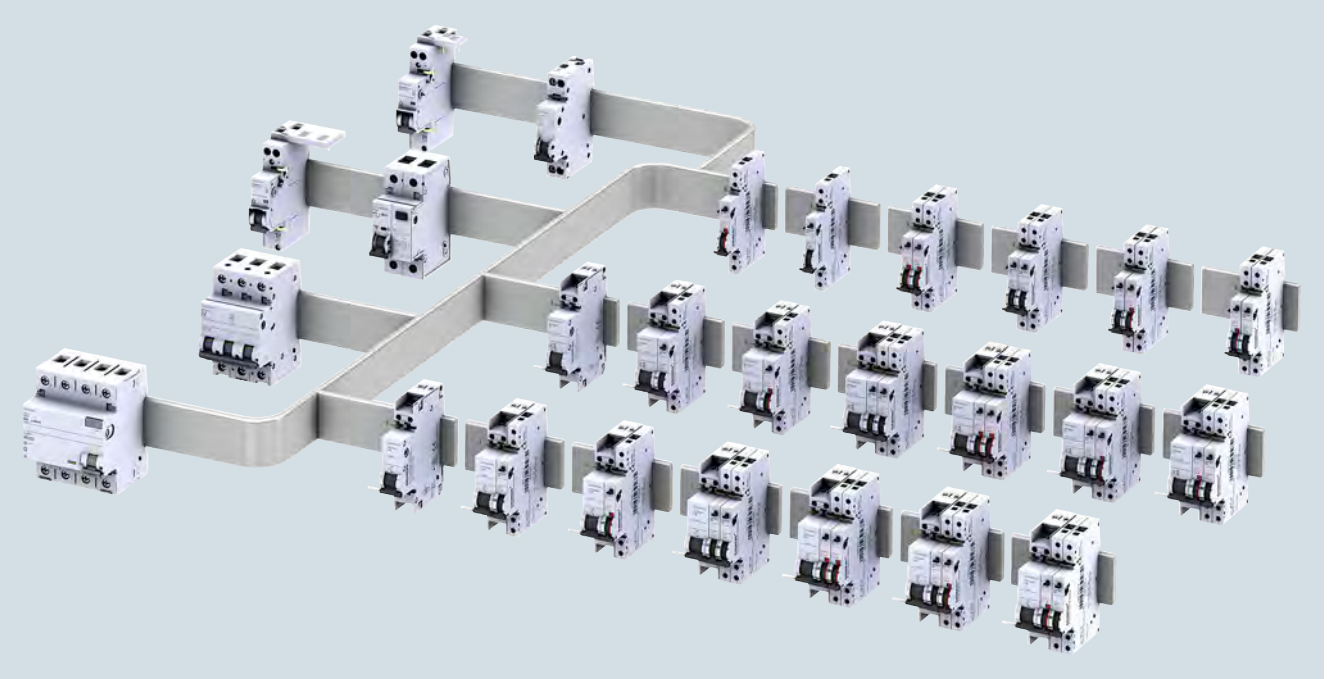
	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Handle couplers for additional components For mounting the additional components auxiliary switches, fault signal contacts, shunt trips and undervoltage releases onto 5SU1 RCBOs, you require a handle coupler (1 set - 5 units).	►	5ST3805-1		1	1 set	1AD	0.006
	Locking devices For RCBOs, sealable and lockable		5ST3801-1		1	1 unit	1AD	0.013

Note:

The same additional components are used for RCBOs as for miniature circuit breakers, see chapter "Miniature Circuit Breakers".



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Overview

Characteristics

The Siemens portfolio of protective devices has been proving itself in the field for many years. This range of fuses, miniature circuit breakers and residual current protective devices has been expanded to include AFDDs (arc fault detection devices). These AFDDs detect arcing faults caused by serial faults or loose contacts or as a result of insulation faults that enable contact between phase conductors or between phase and protective conductors. They therefore offer extremely effective protection against fires started by electrical faults.

Generally speaking, arcing faults in the circuit can result from damage to cables and other insulations and from contamination. Insulation faults result, for example, from vibrations, thermal expansion and contraction, mechanical loads and aging.

A distinction is made between 3 types of arcing faults:

Serial arcing faults

These are caused by breaks in the conductor or when a loose contact is in the circuit in series with the load. As the current flow in such cases is always lower than the operational load current, miniature circuit breakers and residual current protective devices are unable to detect such faults and initiate tripping.

The AFDD is specially designed to detect the specific characteristics of these arcing faults, and it reliably disconnects the affected circuit as soon as the limit values are exceeded.

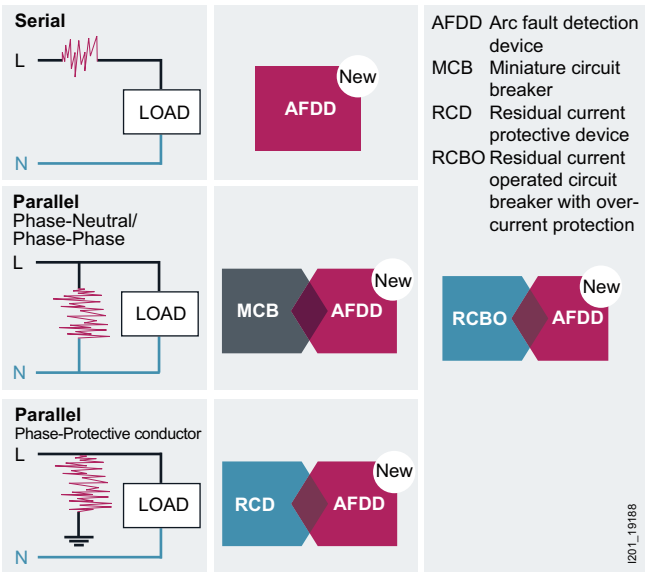
Parallel arcing faults between phase conductor/neutral conductor or phase conductor/phase conductor

These are caused by electric arcs resulting from damage to the insulation that permits contact between the two conductors. In this case, the level of current is determined by the impedances in the circuit. Depending on the rated current of the overcurrent protection device (for instance a miniature circuit breaker), this can be disconnected. However, if the impedance in the circuit is too high to reach the trip current of the overcurrent protection device, no tripping takes place. AFDDs disconnect the currents of arcing faults upwards of 2.5 A, thus providing reliable protection in the case of such faults.

Parallel arcing faults between phase conductor/protective conductor

Arcing faults against the protective conductor are reliably detected and shut down by residual current protective devices. Residual current protective device with rated residual currents up to max. 300 mA have already been providing effective fire protection in such cases for many years. AFDDs also detect these arcing faults and provide adequate fire protection where no residual current protective device is implemented.

Closing of the safety gap on the IEC market



Preventing undesired tripping operations

Electric arcs and high-frequency signals occur during normal operation in networks with multiple electrical loads (e.g. electric motors, light switches, dimmers). The AFDD must not break the circuit in such cases.

Thanks to the sophisticated detection logic of our AFDDs, they are able to clearly distinguish between normal operational interference signals and hazardous arcing faults.

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Product versions and application

Siemens offers two product versions, which can be used in various combinations with a range of 1MW/2MW wide miniature circuit breakers and/or RCBOs up to 16 A rated current.

This simplifies product selection and reduces inventory, while enabling coverage of every conceivable application. It also means that our tried and tested protective devices (MCBs, RCBOs) can be combined with the new functionality provided by arc fault protection. In particular, the version with RCBOs offers a protective device that provides comprehensive personnel, short-circuit, overload and fire protection in a single device.

The version combined with a compact miniature circuit breaker in 1 MW is a space-saving alternative that is ideal for retrofitting.

Whether auxiliary switch or fault signal contact – the 5SM6 AFD units can be combined at random with the versatile range of additional components from the familiar portfolio of 5SY miniature circuit breakers and 5SU1 RCBOs.

This also enables connection to a higher-level I&C system.

The 5SM6 AFD units can be connected easily and quickly. The miniature circuit breakers or RCBOs can be mounted quickly and simply by just snapping them onto the mounting rail without the need for tools. For a fast and reliable power supply, the infeed can be implemented via a busbar assembly.

The AFDDs are primarily intended for protection of final circuits in cases where

- There is an increased risk of fire due to flammable materials being stored or processed (e.g. wood processing)
- Flammable building materials are in use (e.g. wood paneling)
- Valuable goods need to be protected (e.g. museums)
- There are rooms in which a fire might not be noticed immediately (e.g. bedrooms, children's bedrooms).

Status displays and self tests

In order to facilitate fault locating in the event of tripping, AFDDs have a display with 5 LEDs that provide information on the cause of tripping (serial/parallel arcing faults, overvoltage). The sophisticated detection electronics system also automatically checks the functionality of the AFDD. If the self-monitoring process detects a fault, the AFDD switches off and displays the corresponding indication.

	Arc fault detection device (5SM6) fault indication
	Device functional
	Restricted device function (background noise marginal)
	Serial or parallel arcing faults detected
	Overvoltage (> 275 V)
	Self-test failed
	No power supply

Integrated overvoltage protection

Depending on the load distribution in the three-phase current system, an interruption on the infeed side of the neutral conductor may cause a shift of the neutral point and thus an increase in voltage between the phase conductor and the neutral conductor. This increase in voltage can damage the loads or present a fire risk due to overloaded components.

In order to ensure all-round protection, the AFDDs are fitted with an overvoltage release that disconnects when the voltage between phase conductor and neutral conductor exceeds 275 V, thus isolating downstream loads from the hazardous line voltage.

Technical specifications

Standards			Future standard – IEC/EN 62606
Versions			2-pole
Rated voltage U_n		V	230
Rated current I_n		A	Up to 16
Rated frequency		Hz	50
Mains connection			Bottom
Tripping in the event of overvoltage		V	> 275
Degree of protection	Acc. to EN 60529 (VDE 0470-1)		IP20, with connected conductors
Surge current withstand capability With current waveform 8/20 µs		kA	3
Touch protection	Acc. to EN 50274 (VDE 0660-514)		Finger and back-of-hand safe
Terminal tightening torque		Nm	2,0 ... 2.5
Terminal/conductor cross-sections • Solid and stranded • Finely stranded with end sleeve		 mm^2 mm^2	 0.75 ... 16 0.75 ... 10
Overvoltage category			III
Mounting position			Any
Service life, average number of switching cycles			> 10000
Ambient temperature		°C	-25 ... +40, marked with -25
Storage temperature		°C	-40 ... +75
Resistance to climate	Acc. to IEC 60068-2-30		28 cycles (55 °C; 95 % rel. air humidity)
Pollution degree			2
CFC and silicone-free			Yes
Power loss		W	0.6

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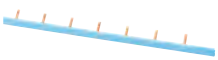
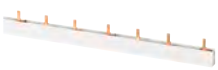
5SM6 AFD units

Selection and ordering data

	Version	Rated current I_n	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	MW							kg
	AFD units									
	For 5SY60 miniature circuit breakers (1 MW) 2-pole, 230 V AC; 50 Hz	Up to 16	1		5SM6011-1		1	1 unit	1BA	0.111
	For 5SU1.5 (2 MW) RCBOs, 5SU1 ... FA (3 MW) RCBOs, and 5SY/5SL4 miniature circuit breakers (2 MW), but not suitable for 5SY5, 5SY8, 5SY60 2-pole; 230 V AC; 50 Hz	Up to 16	1		5SM6021-1		1	1 unit	1BA	0.118

	Version	Pin spacing	Length	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		MW	mm							kg
Pin busbars for AFDDs (1+N)										
	10 mm², can be cut									
	Single-phase, for 5SM6011-1									
	Insulation, gray	2	962		5ST3764-1		1	10 units	1AD	0.145
	Insulation, blue	2	962		5ST3765-1		1	10 units	1AD	0.145
	3-phase, for 5SM6011-1									
	Insulation, gray	2	1032		5ST3740-1		1	1 unit	1AD	0.420
	2-phase (1+N), for 5SM6021-1									
	Insulation, gray	1+2	996		5ST3735-1		1	1 unit	1AD	0.350
	4-phase (3+N), for 5SM6021-1									
	Insulation, gray	1+2	926		5ST3746-1		1	1 unit	1AD	0.505

* You can order this quantity or a multiple thereof.

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NEW 5SM6 AFD units for PV applications

Overview

The Siemens portfolio of protective devices has been proving itself in the field for many years. This range of fuses, miniature circuit breakers and residual current protective devices has now been expanded to include the 5SM6 AFD units. These AFD units detect arcing faults that may be caused, for example, by serial faults or loose contacts.

Benefits

- Easy to install and retrofit
- Visual and acoustic indication of arcing faults when a fault is detected
- Resetting of the arcing fault indication
- Developed according to UL 1699B
- Cost savings thanks to easy installation
- Integration into an external safety system for safe system disconnection

Technical specifications

			5SM6094-1
Standards			IEC 60364-7-712, UL1699B
Category			PV AFD Type 1 (UL 1699B)
Rated current I_n		A	40
Rated voltage DC		V	1000
Tripping current for serial arcs		A	1 … 40
Tripping voltage DC		V	Min. 100
Supply voltage DC		V	24
Terminal conductor cross-sections			
• String connection		mm^2	2.5 ... 10
• Supply voltage connection		mm^2	2.5
• Signal connection		mm^2	2.5
Terminal tightening torque			
• String connection		Nm	max. 3.5
• Supply voltage connection		Nm	max. 1.5
• Signal connection		Nm	max. 1.5
Current consumption			
• Active		mA	120
• Passive		mA	60
Operational current (load) alarm relay (125 V AC)		A	0.3
Operational current (load) alarm relay (30 V DC)		A	1
Overvoltage category			III
Supply voltage connection			Bottom
Mounting position			Any
Number of poles			1
Degree of protection			
• Acc. to EN 60529 (VDE 0470-1)			IP20, with connected conductors
• Acc. to EN 50274 (VDE 0660-514)			Finger and back-of-hand safe
CFC and silicone-free			Yes
Pollution degree			2
Storage temperature		°C	-40 … +75
Ambient temperature		°C	-20 … +50
Resistance to climate	Acc. to IEC 60068-2-30		28 cycles (55 °C; 95 % rel. air humidity)

Selection and ordering data

	Version	Rated current I_n	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	MW							kg
	AFD units									
	1P; 1000 V DC	Up to 40	2		5SM6094-1		1	1 unit	1BA	0.131

* You can order this quantity or a multiple thereof.

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5ST busbars for modular installation devices

Overview

4-pole 5SM3 RCCBs are bus-mounted either together or in combination with miniature circuit breakers. RCCBs with an N wire connection on the left-hand side facilitate installation because standard busbars are used, as those used for bus mounting miniature circuit breakers.

Busbars in 10 mm^2 and 16 mm^2 versions are available.

The extremely flexible 5ST36 busbar system with fixed lengths enables installation in any length as the busbars can be overlapped.

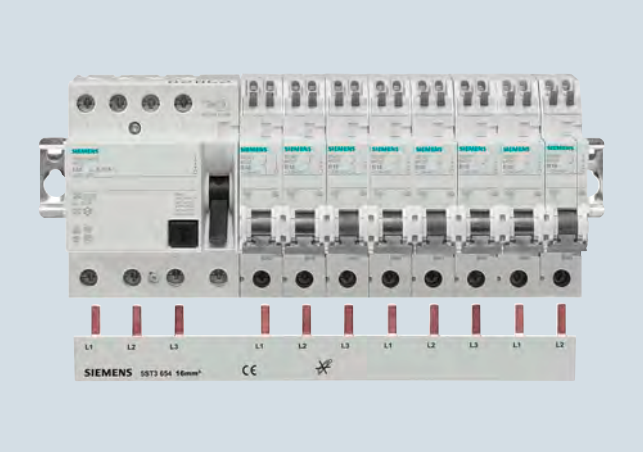
No further need for time-consuming tasks, such as cutting, cutting to length, deburring, cleaning of cut surfaces and mounting of end caps.

Any free pins on the busbars can be made safe by covering with touch protection.

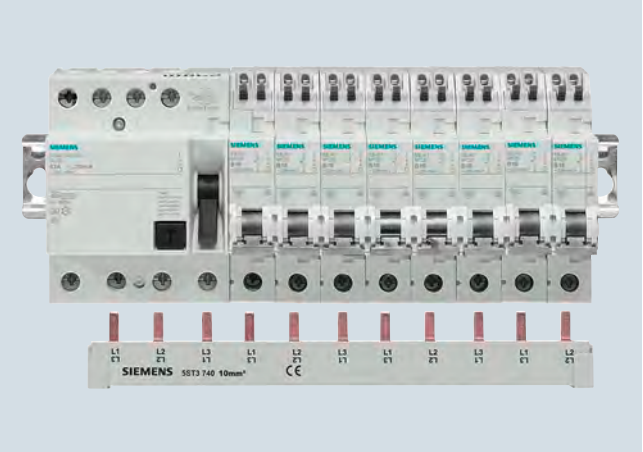
If several RCBOs are bus-mounted together, this is implemented with two-phase busbars, which are used as 1+N busbars.

Benefits

- Connection of miniature circuit breakers to 4-pole RCCBs with N connection right and three-phase busbar, using busbar specially designed for this application. No cutting or end caps required.



- Connection of miniature circuit breakers to 4-pole RCCBs with N connection left, with three-phase busbar that can be cut. No additional items to be stored and busbars that are always available.



- Connection of 1P+N RCBOs with two-phase busbar. No cutting or end caps required.

- Bus-mounting of residual current protective devices on busbar (3-phase +N) that can be cut. A proven and frequently used application.

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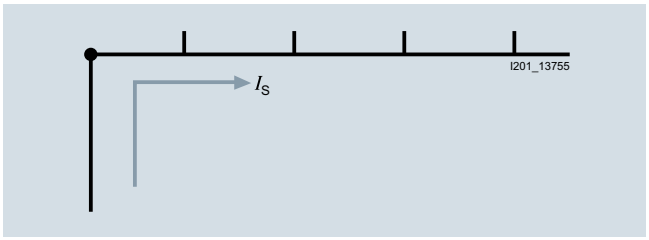
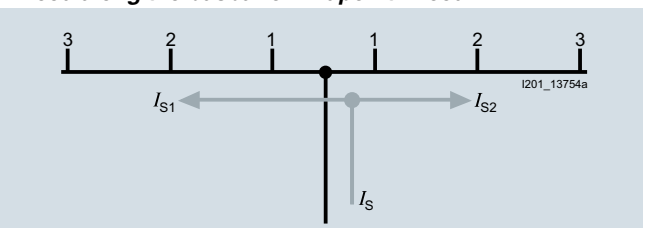
Technical specifications

			5ST3, 5ST2
Standards			EN 60439-1 (VDE 0660-500): 2005-01
Busbar material			SF-Cu F 24
Partition material			Plastic, Cycoloy 3600 Heat-resistant over 90 °C flame-retardant self-extinguishing dioxin and halogen-free
Rated operational voltage U_e		V AC	400
Rated current I_n			
• Cross-section 10 mm²		A	63
• Cross-section 16 mm²		A	80
Rated impulse withstand voltage U_{imp}		kV	4
Test pulse voltage (1.2/50)		kV	6.2
Rated conditional short-circuit current I_{cc}		kA	25
Resistance to climate			
• Constant atmosphere	Acc. to DIN 50015		23/83; 40/92; 55/20
• Humid heat	Corresponds to IEC 68-2-30		28 cycles
Insulation coordination	Acc. to IEC 60664-1 (VDE 0110-1)		
• Overvoltage category			III
• Pollution degree			2
Maximum busbar current I_S/phase			
• Infeed at the start of the busbar			
- Cross-section 10 mm²		A	63
- Cross-section 16 mm²		A	80
• Infeed at the center of the busbar			
- Cross-section 10 mm²		A	100
- Cross-section 16 mm²		A	130

Infeed at the start or end of the busbar

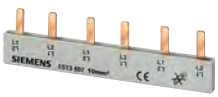
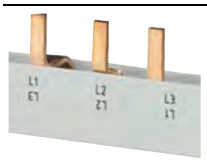


Infeed along the busbar or midpoint infeed



The sum of the outgoing current per branch (1, 2, 3 ... n) must not be greater than the max. busbar current I_S/phase.

Selection and ordering data

	Version	Pin spacing	Length	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		MW	mm							kg
	**5ST36 busbars, fixed lengths, cannot be cut, fully insulated**									
	For 1 FI 4P, N connection right, and 8 MCB 1P									
	• 3-phase 10 mm²	1	210		5ST3624		1	10 units	1AD	0.078
	• 3-phase 16 mm²	1	210		5ST3654		1	10 units	1AD	0.113
	For 6 RCBOs 1P+N together									
	• 2-phase 10 mm²	1	210		5ST3608		1	10 units	1AD	0.063
	• 2-phase 16 mm²	1	210		5ST3638		1	10 units	1AD	0.089
	**5ST37 busbars, 12 MW, can be cut to length, with end caps**									
	For 6 RCBOs 1P+N									
	• 2-phase 10 mm²	1	216		5ST3734		1	1 unit	1AD	0.072
	• 2-phase 16 mm²	1	216	►	5ST3704		1	1 unit	1AD	0.097

* You can order this quantity or a multiple thereof.

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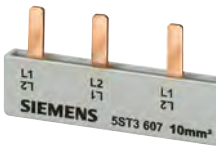
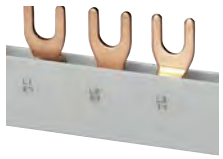
5ST busbars for modular installation devices

	Version	Pin spacing	Length	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		MW	mm							kg
	5ST36 busbars, 10 mm², 4-phase fixed lengths, cannot be cut, fully insulated									
	For 6 RCBOs 1P+N	1	215		5ST3623		1	10 units	1AD	0.087
	**5ST36 busbars, 16 mm², 4-phase fixed lengths, cannot be cut, fully insulated**									
	For 6 RCBOs 1P+N	1	215		5ST3653		1	10 units	1AD	0.126
	5ST37 busbars, with end caps, can be cut, with touch protection									
	For RCBO 1P+N and MCB 2P									
	• 4-phase 10 mm²	1	1008		5ST3770-2		1	10 units	1AD	0.578
	• 4-phase 16 mm²	1	1008		5ST3770-3		1	10 units	1AD	0.779
	For RCCBs 4P, N right and 6 MCBs 1P+N									
	• 4-phase 10 mm²	1	288		5ST3770-4		1	10 units	1AD	0.153
	• 4-phase 16 mm²	1	288		5ST3770-5		1	10 units	1AD	0.203
	End caps for 5ST37, can be cut									
	• For two-phase and three-phase busbars			►	5ST3750		1	10 units	1AD	0.002
	• For four-phase busbars			►	5ST3718		1	10 units	1AD	0.001
	Touch protection									
	For free connections, yellow (RAL 1004) 5 x 1 pin			►	5ST3655		1	10 units	1AD	0.008
	**Busbar, 12 MW, with fork-type connections, can be cut to length, with end caps**									
	For bus mounting 5SM3 RCCBs together Three-phase + N, 16 mm²	1	216		5ST2145		1	1 unit	1AD	0.151
	End caps for 5ST2145 busbars, can be cut									
	For three-phase busbars			►	5ST2156		1	10 units	1AD	0.001
	Terminals up to 35 mm² (stranded), for direct infeed of 5ST2145 busbar									
	Side-by-side mounting possible				5ST2157		1	5 units	1AD	0.030

* You can order this quantity or a multiple thereof.

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Overview

	Number of poles	Rated current I_n A	Rated residual current $I_{\Delta n}$ mA	⏦ (Type A)
RCCB protective socket outlets				
• For mounting onto device box, equipped with RCCB and 2 SCHUKO® socket outlets	2	16	10, 30	✓
• Molded-plastic enclosures, equipped with RCCB and SCHUKO® socket outlet	2	16	10	✓

⏦ = Type A for AC and pulsating DC residual currents

Application

RCCB protective socket outlets

- Molded-plastic enclosure equipped with RCCB and flush-mounted SCHUKO® socket outlet or flush-mounted SCHUKO® double socket outlet
- For electrical devices where there is a risk of accidental contact with live parts in the event of damage
- Rated voltage: 230 V AC, 50 Hz to 60 Hz
- For outdoor connection of gardening equipment and socket outlets in workshops or for agricultural purposes
- Degree of protection IP21 (5SM1920-.), degree of protection IP54 (5SZ92.6)

Selection and ordering data

	Rated residual current $I_{\Delta n}$ mA	Rated current I_n A	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
RCCB protective socket outlets									
• RCCB protective socket outlets according to VDE 0664, for mounting on device boxes, equipped with residual current operated circuit breaker and 2 childproof SCHUKO® socket outlets, degree of protection IP21									
	10	16		5SM1920-5		1	1 unit	1BE	0.538
	30			5SM1920-8		1	1 unit	1BE	0.530
• RCCB protective socket outlet according to VDE 0664 in molded-plastic enclosure, equipped with residual current operated circuit breaker and flush-mounted SCHUKO® socket outlet, degree of protection IP54									
	10	16		5SZ9206		1	1 unit	1BE	0.765
	30			5SZ9216		1	1 unit	1BE	0.765

* You can order this quantity or a multiple thereof.

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Accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Terminal covers, gray For surface mounting, degree of protection IP40, sealable, with 35 mm standard mounting rail							
	• Up to 2.5 MW		5SW3004		1	1 unit	1BE	0.089
	• Up to 4.5 MW		5SW3005		1	1 unit	1BE	0.185
	Wall enclosures, gray For flush mounting, degree of protection IP40 with 35 mm standard mounting rail							
	• Up to 2.5 MW		5SW3006		1	1/4 units	1BE	0.131
	• Up to 4.5 MW		5SW3007		1	1 unit	1BE	0.162
	Molded-plastic enclosures, gray For surface mounting, degree of protection IP54, sealable, with 35 mm standard mounting rail, with transparent hinged lid for 4.5 MW		5SW1200		1	1 unit	1BE	0.476
	Covers Can be assembled as mini distribution board, suitable for all devices, cover parts prepared for rail mounting of conventional label caps, comprising:							
	• End plates (for snapping onto standard mounting rail) ►		5ST2134		1	10 units	1AD	0.026
	• Angled profile (approx. 1 m long)		5ST2135		1	5 units	1AD	0.288
	• Alternative flat profiles (as a cover between the rows of devices length approx. 1 m)		5ST2136		1	5 units	1AD	0.239
	Touch protection For RCCBs up to 80 A 1 set contains 12 units		5SW3313		1	1 set	1BE	0.012
	Fixing parts Plastic 4 MW		5ST2201		1	1 unit	1AD	0.012
	Inscription labels (white) 15 × 9 mm, 3 frames with 44 labels each any attachment and inscription, self-adhesive		5ST2173		1	1 set	1AD	0.048
	Labeling system Available from:		Murrplastik Systemtechnik GmbH Postfach 1143 71570 Oppenweiler, Germany Telephone: +49 7191-482-0 e-mail: info@murrplastik.de					

* You can order this quantity or a multiple thereof.

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Application

Standards	Application	Required $I_{\Delta n}$ [mA]	Recommended Siemens residual current protective devices			
			Type A	Type F	SIQUENCE type B/type B+	SIGRES
DIN VDE 0100-410	Protection against electric shock	30 ... 500	✓	✓	✓	✓
	Socket outlets up to 20 A, outdoor plants	10 ... 30	✓	✓	--	--
DIN VDE 0100-482	Fire protection for particular risks or safety hazards	30, 300	✓	✓	✓	--
DIN VDE 0100-701	Rooms WITH baths or showers, socket outlets in zone 3	10 ... 30	✓	✓	--	--
DIN VDE 0100-702	Basins for swimming pools and other basins	10 ... 30	✓	--	--	✓
DIN VDE 0100-703	Rooms and cabins with sauna heating	10 ... 30	✓	--	--	✓
DIN VDE 0100-704 BGI 608	Building sites, socket outlet current circuits up to 32 A and for handheld equipment, plug-and-socket devices I_n > 32 A	≤ 30	✓	✓	✓	✓
		≤ 500	✓	✓	✓	✓
DIN VDE 0100-705	Agricultural and general horticultural premises, socket outlet current circuits	≤ 500	✓	✓	--	✓
		≤ 30	✓	✓	--	✓
DIN VDE 0100-706	Conductive areas with limited freedom of movement, permanently mounted equipment	10 ... 30	✓	--	--	--
DIN VDE 0100-708	Electrical installations on camping sites, fixed feeding points for every socket outlet and every final circuit	10 ... 30	✓	--	--	✓
DIN VDE 0100-710	Medical premises in TN-S system, depending on application group 1 or 2 and equipment	10 ... 30	✓	--	✓	--
		≤ 300	✓	--	✓	--
DIN VDE 0100-712	Solar PV power supply systems (without simple separation)	≤ 300	--	--	✓	--
DIN VDE 0100-723	Classrooms with experiment equipment	10 ... 30	--	--	✓	--
DIN VDE 0100-739	Additional protection against direct contact in homes	10 ... 30	✓	--	--	--
EN 50178 (VDE 0160)	Fitting of power installations with electronic equipment	General requirements for correct selection when using residual current protection	✓	✓	✓	--
EN 50293 (VDE 0832-100)	Traffic signal systems • Class T1 • Class U1	 ≤ 300 ≤ 30	 ✓ ✓	 -- --	 -- --	 ✓ ✓
	Food processing and chemical industry	≤ 30 (recommended)	✓	--	--	✓

Note:

For reasons of basic fire protection, we recommend the use of residual current protective devices with maximum 300 mA rated residual current.

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Notes

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5/7 NEOZED fuse links
5/8 MINIZED switch disconnectors and MINIZED fuse switch disconnectors
5/9 NEOZED fuse bases and accessories

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5/34 LV HRC fuse links
5/43 LV HRC signal detectors
5/45 LV HRC fuse bases and accessories

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NEW

Direct reference to the products in the Industry Mall from the selection and ordering data tables:

Article No.
www.siemens.com/product?Article No.
3VA2025-5HL36-0AA0

Paper catalog:
To get more product information enter the Web address plus Article No.

PDF catalog:
Get more product information with just a mouse click.

For further technical product information:

Configuration Manual

Fuse Systems
Article No.: 3ZW1012-3NW10-0AC1

Siemens Industry Online Support:

www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
Download
FAQ
Manual
Product note
Software archive
Technical data

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Introduction

Overview

Devices		Page	Application	Standards	Used in		
					Non-residential buildings	Residential buildings	Industry
	NEOZED fuse systems	5/4	MINIZED switch disconnectors, bases, fuse links from 2 A to 63 A of operational class gG and accessories. Everything you need for a complete system.	Fuse system: IEC 60269-3; DIN VDE 0636-3 Safety switching devices: IEC/EN 60947-3 DIN VDE 0638; EN 60947-3 (VDE 0660-107)	✓	✓	✓
	DIAZED fuse systems	5/12	Fuse links from 2 A to 100 A in various operational classes, base versions with classic screw base connections. A widely used fuse system.	IEC 60269-3; DIN VDE 0635; DIN VDE 0636-3; CEE 16	✓	✓	✓
Cylindrical fuse systems							
	Cylindrical fuse links and cylindrical fuse holders	5/18	Line protection or protection of switching devices. The fuse holders with touch protection ensure the safe "no-voltage" replacement of fuse links. Auxiliary switches can be retrofitted.	IEC 60269-1, -2, -3; NF C 60-200; NF C 63-210, -211; NBN C 63269-2, CEI 32-4, -12 Fuse holders: File No. E171267	✓	✓	✓
	Fuse holders in size 10 x 38 mm and Class CC	5/22	For installing fused loaded motor starter combinations.	IEC 60269-1,-2; IEC 60947-4; UL 4248-1, File No. E171267 CSA 250269, 6225-01 Auxiliary switches: UL 508, File No. E334003	✓	--	✓
	Class CC fuse systems	5/26	These comply with the American standard and have UL and CSA approval, for customers exporting OEM products and machine builders. Modern design with touch protection according to BGV A3 for use in "branch circuit protection".	Fuse holders: UL 4248-1, E171267 CSA 22.2 Fuse links: UL 248-4, File No. E258218, CSA 231237, 1422-02 and 1422-82	✓	✓	✓
	Busbar systems	5/28	Busbars for NEOZED fuse bases, NEOZED fuse disconnectors, MINIZED switch disconnectors, DIAZED fuse systems and for the cylindrical fuse systems. Compact cylindrical fuse holders for busbars	EN 60439-1 (VDE 0660-500) UL 4248-1, E337131	✓	✓	✓

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Devices		Page	Application	Standards	Used in		
					Non-residential buildings	Residential buildings	Industry
3NA, 3ND LV HRC fuse systems							
	LV HRC fuse links	5/34	Fuse links from 2 A to 1250 A for selective line protection and system protection in non-residential buildings, industry and power utilities.	IEC 60269-1, -2; EN 60269-1; DIN VDE 0636-2; CSA 16325 - 1422-02	✓	✓	✓
	LV HRC signal detectors	5/43	Signal detectors for when a fuse is tripped on all LV HRC fuse links with combination or front indicators with non-insulated grip lugs. Plus the comprehensive accessory range required for LV HRC fuse systems.	--	✓	✓	✓
	LV HRC fuse bases and accessories	5/45	Fuse bases for screw or snap-on mounting onto standard mounting rails, available as 1-pole or 3-pole version.	IEC 60269-1, -2; EN 60269-1; DIN VDE 0636-2 UL 4248-1, File No. E171267-IZLT2 (only downstream from the branch protection) CSA C22.2 No. 4248.1-07	✓	✓	✓
SITOR semiconductor fuses							
	LV HRC design	5/53	Fuse links in LV HRC design and a huge variety of models support a wide range of applications from 500 V to 1500 V and 150 A to 1600 A. Fuses with slotted blade contacts, bolt-on links or female thread and special designs.	UL 4248-13, File No. E167357-JFHR2	--	--	✓
	Cylindrical fuse design	5/63	Fuse links, fuse holders – usable as fuse switch disconnectors and fuse bases up to 600/690 V AC and 400/700 V DC from 1 A to 100 A in the sizes 10 × 38 mm, 14 × 51 mm and 22 × 58 mm.	Fuse links: UL 4248-13, File No. E167357-JFHR2 CSA 248170, 1422-30 Fuse holders: UL 4248-1, File No. E171267- IZLT CSA 248170, 6225-01	--	--	✓
	NEOZED, DIAZED design	5/67	NEOZED fuse links for 400 V AC and 250 V DC and DIAZED for 500 V AC and 500 V DC.	--	--	--	✓
Photovoltaic fuses							
	PV cylindrical fuses	5/70	Fuses with a rated voltage of 1000 V DC and 1500 V and gPV operational class for the protection of photovoltaic modules, their connecting cables and other components.	IEC 60269-6	✓	✓	✓
	PV cumulative fuses	5/72	Fuses with a rated voltage of 1000 V and 1500 V DC, a rated current of 63 A to 630 A and operational class gPV for the protection of connecting cables and other components.	IEC60269-6	✓	✓	✓

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Introduction

Overview

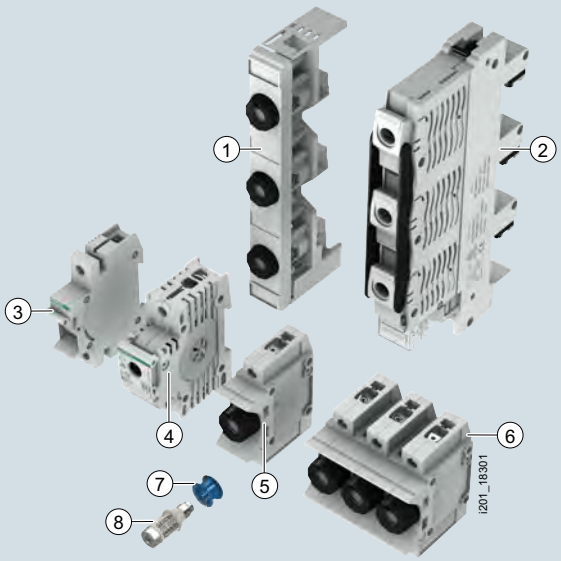
The NEOZED fuse system is primarily used in distribution technology and industrial switchboard assemblies. The system is easy to use and is also approved for domestic installation.

The MINIZED switch disconnectors are primarily used in switchboard assemblies and control engineering. They are approved for switching loads as well as for safe switching in the event of short circuits. The MINIZED D02 is also suitable for use upstream of the meter in household applications in compliance with the recommendations of the VDEW according to TAB.

Due to its compact design, the MINIZED D01 fuse switch disconnector is primarily used in control engineering.

The NEOZED fuse bases are the most cost-effective solution for using NEOZED fuses. All NEOZED bases must be fed from the bottom to ensure that the threaded ring is insulated during removal of the fuse link. The terminals of the NEOZED bases are available in different versions and designs to support the various installation methods.

Benefits



1. NEOZED D02 bus-mounting base for 60 mm busbar system, with NEOZED screw cap
2. NEOZED D02 bus-mounting switch disconnector for 60 mm busbar system
3. MINIZED D01 fuse switch disconnector
4. MINIZED D02 switch disconnector
5. NEOZED comfort base, 1-pole (fuse base with touch protection BGV A3), with NEOZED screw cap
6. NEOZED comfort base, 3-pole (fuse base with touch protection BGV A3), with NEOZED screw cap
7. NEOZED adapter sleeve
8. NEOZED fuse link

Compared to the older DIAZED fuse system, the NEOZED fuse system is significantly more modern:

- Much more compact which saves space in the distribution board
- Modern devices like the MINIZED switching devices, which combine the functions of a switch disconnector and a fuse base
- Wide range of accessories, such as busbars for one, two, or three-phase wiring
- Modern terminals for MINIZED D02 and NEOZED comfort bases: Visible, clear and controllable connection simplifies cable entry

Double terminal chambers permit connection of two wires of different cross-sections

- Lower power loss of the fuse links

Even when compared to the internationally prevalent cylindrical fuse system, the NEOZED fuse system has considerable advantages:

- Non-interchangeability – thanks to use of adapter sleeves (i.e. it is not possible to insert a fuse for larger currents). This is a requirement of numerous wiring regulations in Germany and other European countries.
- Switching devices with load switching characteristics allow the safe switching of load currents up to 63 A

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Technical specifications

		NEOZED fuse links 5SE2
Standards		IEC 60269-3; DIN VDE 0636-3
Operational class		gG
Rated voltage U_n	V AC	400
	V DC	250
Rated current I_n	A	2 ... 100
Rated breaking capacity	kA AC	50
	kA DC	8
Non-interchangeability		Using adapter sleeves
Resistance to climate	°C	Up to 45 at 95 % rel. humidity
Ambient temperature	°C	-5 ... +40, humidity 90 % at 20

		MINIZED switch disconnectors	MINIZED fuse switch disconnectors	Fuse bases, made of ceramic			Comfort bases	Fuse bases
		D02 5SG71	D01 5SG76	D01 5SG15 5SG55	D02 5SG16 5SG56	D03 5SG18	D01/02 5SG1.01 5SG5.01	 5SG1.30 5SG1.31 5SG5.30
Standards		DIN VDE 0638; EN 60947-3 (VDE 0660-107) IEC/EN 60947-3		IEC 60269-3; DIN VDE 0636-3				
Main switch characteristic EN 60204-1		Yes	--	--				
Insulation characteristic EN 60664-1		Yes	--	--				
Rated voltage U_n	V AC	230/400, 240/415		400				
• 1P	V DC	65	48	250				
• 2P in series	V DC	130	110	250				
Rated current I_n	A	63	16	16	63	100	16/63	16/63
Rated insulation voltage	V AC	500	690	--				
Rated impulse withstand voltage	kV AC	6	6	--				
Overvoltage category		IV	IV	--				
Utilization category acc. to VDE 0638								
• AC-22	A	63	16	--				
Utilization category acc. to EN 60947-3								
• AC-22 A	A	--	16	--				
• AC-22 B	A	63	--	--				
• AC-23 B	A	35	--	--				
• DC-22 B	A	63	--	--				
Sealable When switched on		Yes		Yes, with sealable screw caps				
Mounting position		Any, preferably vertical						
Reduction factor of I_n with 18 pole								
• Side-by-side mounting		0.9	--					
• On top of one another, with vertical standard mounting rail		0.87	--					
Degree of protection acc. to IEC 60529		IP20, with connected conductors[1)]						
Terminals With touch protection acc. to BGV A3		Yes		No			Yes	
Ambient temperature	°C	-5 ... +40, humidity 90 % at 20						
Terminal versions		Box terminals	Box terminal	B	K, S	K/S	Box terminal	Box terminal
Conductor cross-sections								
• Solid and stranded	mm^2	1.5 ... 35	1.5 ... 16	1.5 ... 4	2.5 ... 25	10 ... 50	0.75 ... 35	1.5 ... 35
• Flexible, with end sleeve	mm^2	1.5 ... 35	1.5 … 10	1.5 … 4	1.5 … 16	10 … 35	--	--
Tightening torque	Nm	2.5 ... 3	2.5	1.2	2	3.5/2.5	3.5	3

1) Degree of protection IP20 is tested according to regulations using a straight test finger (from the front), with the device mounted and equipped with a cover, housing or some other enclosure.

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More information

Fuse bases D01 with terminal version BB

- Incoming feeders, clamp-type terminal B
- Outgoing feeders, clamp-type terminal B

Fuse bases D02, with terminal version KS

- Incoming feeders, screw head contact K
- Outgoing feeders, saddle terminal S

Fuse bases D02, with terminal version SS

- Incoming feeders, saddle terminal S
- Outgoing feeders, saddle terminal S

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Selection and ordering data

	Size	I_n	Identification color	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A		MW							kg
	NEOZED fuse links, rated voltage 400 V AC/250 V DC, operational class gG										
	D01	2	Pink	--	►	**5SE2302**		1	10 units	1BM	0.006
		4	Brown		►	**5SE2304**		1	10 units	1BM	0.006
		6	Green		►	**5SE2306**		1	10/500 units	1BM	0.007
		10	Red	--	►	**5SE2310**		1	10/500 units	1BM	0.007
		13	Black			**5SE2013-2A**		1	10 units	1BM	0.007
		16	Gray		►	**5SE2316**		1	10/500 units	1BM	0.007
	D02	20	Blue	--	►	**5SE2320**		1	10 units	1BM	0.012
		25	Yellow		►	**5SE2325**		1	10 units	1BM	0.012
		32	Violet			**5SE2332**		1	10 units	1BM	0.014
		35	Black	--	►	**5SE2335**		1	10 units	1BM	0.014
		40	Black			**5SE2340**		1	10 units	1BM	0.013
		50	White		►	**5SE2350**		1	10 units	1BM	0.014
		63	Copper		►	**5SE2363**		1	10 units	1BM	0.015
	D03	80	Blue	--	►	**5SE2280**		1	10 units	1BM	0.038
		100	Red		►	**5SE2300**		1	10 units	1BM	0.040

* You can order this quantity or a multiple thereof.

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MINIZED switch disconnectors and MINIZED fuse switch disconnectors

Selection and ordering data

	Size	Number of poles	I_n	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
			A	MW							kg
	MINIZED switch disconnectors with fuses using draw-out technology with touch protection to BGV A3 (adapter sleeves not included in the scope of delivery)										
	D02	1P	63	1.5	▶	**5SG7113**		1	1 unit	1BM	0.135
		1P+N	63	3		**5SG7153**		1	1 unit	1BM	0.255
		2P	63	3		**5SG7123**		1	1 unit	1BM	0.269
		3P	63	4.5	▶	**5SG7133**		1	1 unit	1BM	0.381
		3P+N	63	6		**5SG7163**		1	1 unit	1BM	0.491
	Versions for Austria only, with permanently fitted adapter sleeves, incl. fuse link										
	D02	3P	25	4.5		**5SG7133-8BA25**		1	1 unit	1BM	0.421
			35			**5SG7133-8BA35**		1	1 unit	1BM	0.423
			50			**5SG7133-8BA50**		1	1 unit	1BM	0.449
	Reducers										
	For fuse links D01 in MINIZED switch disconnectors D02					**5SH5527**		1	10/100 units	1CU	0.001
	Auxiliary switches (AS)										
	For MINIZED D02 switch disconnectors										
	1 NO + 1 NC			0.5	▶	**5ST3010**		1	1 unit	1AD	0.055
	2 NO					**5ST3011**		1	1 unit	1AD	0.066
	2 NC					**5ST3012**		1	1 unit	1AD	0.067
	Technical specifications see chapter "Miniature Circuit Breakers"–> Additional components"										
	Auxiliary switches (AS) with TEST button										
	For MINIZED D02 switch disconnectors										
	1 NO + 1 NC			0.5		**5ST3010-2**		1	1 unit	1AD	0.071
	2 NO					**5ST3011-2**		1	1 unit	1AD	0.068
	2 NC					**5ST3012-2**		1	1 unit	1AD	0.071
	For technical specifications see chapter "Miniature Circuit Breakers"–> Additional components"										
	MINIZED fuse switch disconnectors Using draw-out technology with touch protection acc. to BGV A3										
	D01	1P	6[1]	1		**5SG7611-0KK06**		1	12 units	1BM	0.079
		3P	6[1]	3		**5SG7631-0KK06**		1	4 units	1BM	0.238
		1P	10	1		**5SG7611-0KK10**		1	12 units	1BM	0.077
		3P	10	3		**5SG7631-0KK10**		1	4 units	1BM	0.237
		1P	16	1		**5SG7611-0KK16**		1	12 units	1BM	0.076
		1P+N	16	2		**5SG7651-0KK16**		1	6 units	1BM	0.153
		2P	16	2		**5SG7621-0KK16**		1	6 units	1BM	0.158
		3P	16	3		**5SG7631-0KK16**		1	4 units	1BM	0.236
		3P+N	16	4		**5SG7661-0KK16**		1	3 units	1BM	0.317

[1] For 2 A, 4 A, 6 A fuses.

For busbars, see page 5/30.

* You can order this quantity or a multiple thereof.

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Selection and ordering data

	Size	Number of poles	I_n A	Matching cover[1]	Terminals[2]	Mounting width MW	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	NEOZED comfort bases made of molded plastic With touch protection according to BGV A3												
	D01	1P	16	--		1.5	▶	**5SG1301**		1	3 units	1BM	0.134
	D02		63	--			▶	**5SG1701**		1	3 units	1BM	0.130
	D01	3P	16	--		4.5	▶	**5SG5301**		1	1 unit	1BM	0.397
	D02		63	--			▶	**5SG5701**		1	1 unit	1BM	0.392
	NEOZED fuse bases made of molded plastic												
	For snap-on mounting on standard mounting rails, with cover												
	D01	1P	16	(A1)		1.5		**5SG1330**		1	6 units	1BM	0.075
	D02		63	(A1)		1.5		**5SG1730**		1	6 units	1BM	0.089
	For snap-on mounting on standard mounting rails, without cover												
	D01	1P	16	A1		1.5		**5SG1331**		1	6 units	1BM	0.069
	D02		63	A1		1.5		**5SG1731**		1	6 units	1BM	0.083
	For snap-on mounting on standard mounting rails, with cover												
	D01	3P	16			4.5		**5SG5330**		1	2 units	1BM	0.226
	D02		63			4.5		**5SG5730**		1	2 units	1BM	0.268
	NEOZED fuse bases made of ceramic												
	For snap-on mounting on standard mounting rails, with cover												
	D01	1P	16	(A4)	BB	1.5	▶	**5SG1553**		1	6 units	1BM	0.072
	D02		63	(A10)	SS	1.5		**5SG1653**		1	6 units	1BM	0.092
	D02		63	(A10)	KS	1.5	▶	**5SG1693**		1	6 units	1BM	0.085
	For snap-on mounting on standard mounting rails, without cover												
	D01	1P	16	A4, A8	BB	1.5		**5SG1595**		1	6 units	1BM	0.064
	D02		63	A10, A8	SS	1.5		**5SG1655**		1	6 units	1BM	0.085
	D02		63	A10, A8	KS	1.5		**5SG1695**		1	6 units	1BM	0.077
	D03		100	A6, A9	KS	2.5		**5SG1812**		1	10 units	1BM	0.204
	For snap-on mounting on standard mounting rails, with cover												
	D01	3P	16		BB	4.5	▶	**5SG5553**		1	2 units	1BM	0.215
	D02		63		SS	4.5	▶	**5SG5653**		1	2 units	1BM	0.290
	D02		63		KS	4.5		**5SG5693**		1	2 units	1BM	0.265

[1] Covers with brackets are part of the scope of delivery.
Covers without brackets are not part of the scope of delivery.

[2] For terminal versions, see page 5/6.

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NEOZED fuse bases and accessories

	Size	I_n	Matching cover	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A		MW							kg
	NEOZED covers										
	Made of molded plastic, plug-in, for fuse bases made of molded plastic										
	D01, D02		A1	1.5		5SH5244		1	15 units	1BM	0.007
	For fuse bases made of ceramic										
	D01		A4	1.5		5SH5251		1	15 units	1BM	0.009
	D02		A10	1.5		5SH5253		1	15 units	1BM	0.009
	Screw-on										
	D03		A6	2.5		5SH5233		1	20 units	1BM	0.021
	NEOZED caps										
	Made of molded plastic, plug-in										
	D01, D02		A8			5SH5235		1	5 units	1BM	0.029
	Screw-on										
	D03		A9			5SH5234		1	10 units	1BM	0.065

* You can order this quantity or a multiple thereof.

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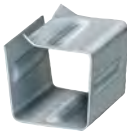
	Size	For fuse links A	Identification color	Mounting width MW	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	NEOZED screw caps										
	Molded plastic, with inspection hole										
	D01				►	**5SH4116**		1	10/1000 units	1BM	0.009
	D02				►	**5SH4163**		1	10/200 units	1BM	0.011
	Ceramic										
	D01, sealable					**5SH4316**		1	20 units	1BM	0.016
	D02, sealable					**5SH4363**		1	20 units	1BM	0.022
	D03					**5SH4100**		1	10 units	1BM	0.074
	Ceramic, with inspection hole										
	D01				►	**5SH4317**		1	20 units	1BM	0.017
	D02				►	**5SH4362**		1	20 units	1BM	0.017
	NEOZED adapter sleeves										
	D01	2	Pink		►	**5SH5002**		1	50 units	1BM	0.001
		4	Brown			**5SH5004**		1	50 units	1BM	0.001
		6	Green		►	**5SH5006**		1	50 units	1BM	0.001
		10/13	Red		►	**5SH5010**		1	50 units	1BM	0.001
	D02	20	Blue		►	**5SH5020**		1	50 units	1BM	0.001
		25	Yellow		►	**5SH5025**		1	50 units	1BM	0.001
		32	Violet			**5SH5032**		1	50 units	1BM	0.002
		35/40	Black		►	**5SH5035**		1	50 units	1BM	0.001
		50	White			**5SH5050**		1	50 units	1BM	0.001
	D03	80	Silver			**5SH5080**		1	25 units	1BM	0.002
	For fuse links D01 in base D02 and MINIZED D02 switch disconnectors										
	D02	2	Pink			**5SH5402**		1	10 units	1BM	0.002
		4	Brown			**5SH5404**		1	10 units	1BM	0.002
		6	Green			**5SH5406**		1	10 units	1BM	0.002
		10/13	Red			**5SH5410**		1	10 units	1BM	0.002
		16	Gray			**5SH5416**		1	10 units	1BM	0.002
	NEOZED adapter sleeve fitters										
						5SH5100		1	1/10 units	1BM	0.029
	NEOZED retaining springs										
	For fuse links D01 in screw caps										
	D02	2 ... 16				**5SH5400**		1	25 units	1BM	0.002

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* You can order this quantity or a multiple thereof.

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Overview

The DIAZED fuse system is one of the oldest fuse systems in the world. It was developed by Siemens as far back as 1906. It is still the standard fuse system in many countries to this day. It is particularly widely used in the harsh environments of industrial applications.

The series is available with rated voltages from 500 V to 750 V.

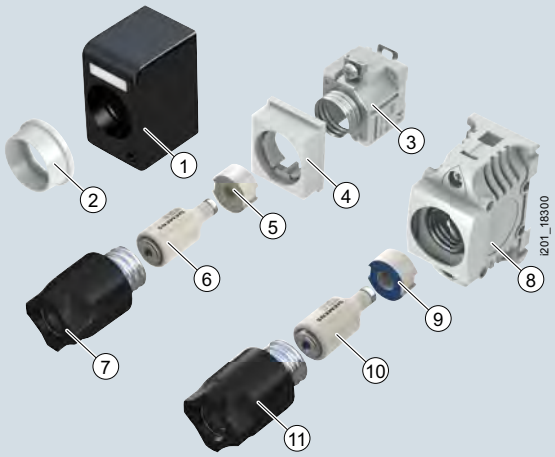
All DIAZED bases must be fed from the bottom to ensure an insulated threaded ring when the fuse link is being removed. Reliable contact of the fuse links is only ensured when used together with DIAZED screw adapters.

The terminals of the DIAZED bases are available in different versions and designs to support the various installation methods.

The high-performing EZR bus-mounting system for screw fixing is an outstanding feature. The busbars, which are particularly suited for bus-mounting bases, have a load capacity of up to 150 A with lateral infeed.

DIAZED stands for **Dia**metral gestuftes **z**weiteiliges Sicherungssystem mit **Ed**isongewinde (diametral two-step fuse system with Edison screw).

Benefits



1 DIAZED cap for fuse bases
2 DIAZED collar for fuse bases
3 DIAZED fuse bases
4 DIAZED cover for fuse bases
5 9 DIAZED screw adapter
6 10 DIAZED fuse link
7 11 DIAZED screw cap
8 DIAZED fuse base (with touch protection BGV A3)

Technical specifications

			5SA, 5SB, 5SC, 5SD, 5SF
Standards			IEC 60269-3; DIN VDE 0635; DIN VDE 0636-3; CEE 16
Operational class	Acc. to IEC 60269; DIN VDE 0636		gG
Characteristic	Acc. to DIN VDE 0635		Slow and quick
Rated voltage U_n		V AC V DC	500, 690, 750 500, 600, 750
Rated current I_n		A	2 ... 100
Rated breaking capacity		kA AC kA DC	50, 40 at E16 8, 1.6 at E16
Overvoltage category			III II (DIAZED fuse bases made of molded plastic for use at 690 V AC / 600 V DC)
Mounting position			Any, preferably vertical
Non-interchangeability			Using screw adapter or adapter sleeves
Degree of protection	Acc. to IEC 60529		IP20, with connected conductors[1)]
Resistance to climate		°C	Up to 45, at 95 % rel. humidity
Ambient temperature		°C	-5 ... +40, humidity 90 % at 20

1) Degree of protection IP20 is tested according to regulations using a straight test finger (from the front), with the device mounted and equipped with a cover, housing or some other enclosure.

		Terminal version								
		B		K			S		R	
Size		DII	DIII	NDz	DII	DIII	DIII	DIV	DII	DIII
Conductor cross-sections										
• Rigid, min.	mm^2	1.5	2.5	1.0	1.5	2.5	2.5	10	1.5	1.5
• Rigid, max.	mm^2	10	25	6	10	25	25	50	35	35
• Flexible, with end sleeve	mm^2	10	25	6	10	25	25	50	35	35
Tightening torque										
• Screw M4	Nm	1.2							--	
• Screw M5	Nm	2.0							--	
• Screw M6	Nm	2.5							3.0	
• Screw M8	Nm	3.5							--	

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Selection and ordering data

	Size	U_n	I_n	Identification color	Thread	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC/V DC	A									kg
	DIAZED fuse links											
	Operational class gG											
	DII	500/500	2	Pink	E27	▶	**5SB211**		1	25 units	1BM	0.026
			4	Brown		▶	**5SB221**		1	25 units	1BM	0.026
			6	Green		▶	**5SB231**		1	25 units	1BM	0.026
			10	Red		▶	**5SB251**		1	25 units	1BM	0.027
			16	Gray		▶	**5SB261**		1	25 units	1BM	0.028
			20	Blue		▶	**5SB271**		1	25 units	1BM	0.030
			25	Yellow		▶	**5SB281**		1	25 units	1BM	0.032
	DIII	500/500	32	Violet	E33		**5SB4010**		1	25 units	1BM	0.049
			35	Black			**5SB411**		1	25 units	1BM	0.050
			50	White			**5SB421**		1	25 units	1BM	0.051
			63	Copper			**5SB431**		1	25 units	1BM	0.054
	DIV	500/400	80	Silver	R1¼"		**5SC211**		1	3 units	1BM	0.114
			100	Red			**5SC221**		1	3 units	1BM	0.117
	Characteristic: Slow											
	TNDz	500/500	2	Pink	E16		**5SA211**		1	10 units	1BM	0.011
			4	Brown			**5SA221**		1	10 units	1BM	0.011
			6	Green			**5SA231**		1	10 units	1BM	0.012
			10	Red			**5SA251**		1	10 units	1BM	0.012
			16	Gray			**5SA261**		1	10 units	1BM	0.014
			20	Blue			**5SA271**		1	10 units	1BM	0.015
			25	Yellow			**5SA281**		1	10 units	1BM	0.012
	For operational class gG, use 5SF1 and 5SF5 fuse base made of ceramic **For 2 A ... 25 A, use screw adapter DII**											
	DIII	690/600	2	Pink	E33		**5SD8002**		1	5 units	1BM	0.068
			4	Brown			**5SD8004**		1	5 units	1BM	0.070
			6	Green			**5SD8006**		1	5 units	1BM	0.069
			10	Red			**5SD8010**		1	5 units	1BM	0.069
			16	Gray			**5SD8016**		1	5 units	1BM	0.071
			20	Blue			**5SD8020**		1	5 units	1BM	0.074
			25	Yellow			**5SD8025**		1	5 units	1BM	0.074
			35	Black			**5SD8035**		1	5 units	1BM	0.076
			50	White			**5SD8050**		1	5 units	1BM	0.080
			63	Copper			**5SD8063**		1	5 units	1BM	0.081

* You can order this quantity or a multiple thereof.

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DIAZED fuse systems

	Size	U_n	I_n	Identification color	Thread	Terminals	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC/V DC	A										kg
	DIAZED fuse links												
	Characteristic: Quick, also for direct current railway facilities For 2 A ... 25 A, use screw adapter DII												
	DIII	750/750	2	Pink	E33			5SD601		1	5 units	1BM	0.068
			4	Brown				5SD602		1	5 units	1BM	0.074
			6	Green				5SD603		1	5 units	1BM	0.069
			10	Red				5SD604		1	5 units	1BM	0.069
			16	Gray				5SD605		1	5 units	1BM	0.071
			20	Blue				5SD606		1	5 units	1BM	0.074
			25	Yellow				5SD607		1	5 units	1BM	0.077
			35	Black				5SD608		1	5 units	1BM	0.077
			50	White				5SD610		1	5 units	1BM	0.080
			63	Copper				5SD611		1	5 units	1BM	0.083
	DIAZED fuse bases made of ceramic												
	1P, for standard mounting rail												
	NDz	500/500	25		E16	KK[2]		5SF1012		1	5 units	1BM	0.065
	DII		25		E27	BB[2]	▶	5SF1005		1	5 units	1BM	0.099
	DIII[1]		63		E33	BS[2]	▶	5SF1205		1	5 units	1BM	0.144
	DIII[1]		63		E33	SS[2]		5SF1215		1	5 units	1BM	0.144
	1P, for screw fixing												
	NDz	500/500	25		E16	KK[2]		5SF101		1	5 units	1BM	0.062
	DII		25		E27	BB[2]		5SF1024		1	5 units	1BM	0.098
	DIII[1]		63		E33	BS[2]		5SF1224		1	5 units	1BM	0.143
	DIAZED fuse bases made of molded plastic With touch protection according to BGV A3												
	1P, for standard mounting rail or screw fixing												
	DII	500/500	25		E27	RR	▶	5SF1060		1	3/108 units	1BM	0.154
	DIII[1]		63		E33	RR	▶	5SF1260		1	3/132 units	1BM	0.193
	3P, for standard mounting rail or screw fixing												
	DII	500/500	25		E27	RR	▶	5SF5068		1	1/36 units	1BM	0.454
	DIII[1]		63		E33	RR	▶	5SF5268		1	1/44 units	1BM	0.580
	DIAZED EZR bus-mounting bases												
	1P, to snap onto EZR busbars for screw fixing												
	DII	500/500	25	E27		B[2]		5SF6005		1	5 units	1BM	0.084
	DIII	500/500	63	E33		B[2]		5SF6205		1	5 units	1BM	0.127

[1] Also for 690 V AC/600 V DC. For overvoltage category, see page 5/12.

[2] For terminal versions, see page 5/17.

* You can order this quantity or a multiple thereof.

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	Size	U_n	I_n	Thread	Terminals	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC/V DC	A									kg
	DIAZED components 750 V											
	DIAZED fuse bases 1P, for screw fixing with fine thread and cap											
	DIII	750/750	63	E33S	KK[1]		5SF4230		1	1 unit	1BM	0.501
	DIAZED screw caps made of ceramic, with fine thread											
	DIII	750/750	63	E33S			5SH1161		1	5 units	1BM	0.116
	DIAZED screw caps											
	Molded plastic, with inspection hole, black, not for SILIZED fuse links											
	NDz	500/500	25	E16			5SH1112		1	20 units	1BM	0.012
	DII		25	E27		►	5SH1221		1	5/200 units	1BM	0.024
	DIII		63	E33		►	5SH1231		1	5/5000 units	1BM	0.033
	Ceramic											
	DII	500/500	25	E27		►	5SH112		1	50/30000 units	1BM	0.035
	DIII		63	E33		►	5SH113		1	30 units	1BM	0.063
	Ceramic, with inspection hole, sealable											
	DII	500/500	25	E27			5SH122		1	50/5000 units	1BM	0.040
	DIII		63	E33			5SH123		1	30/5000 units	1BM	0.066
	Ceramic, extended version											
	DIII	690/600	63	E33			5SH1170		1	5 units	1BM	0.105

[1] For terminal versions, see page 5/17.

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DIAZED fuse systems

	Size	Thread	For fuse links A	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	DIAZED screw adapters									
	NDz	E16	2		5SH328		1	20 units	1BM	0.003
			4		5SH331		1	20 units	1BM	0.001
			6		5SH305		1	20 units	1BM	0.001
			10		5SH306		1	20 units	1BM	0.002
			16		5SH307		1	20 units	1BM	0.001
	Also for 5SF230 to 750 V									
	DII	E27	2	▶	5SH310		1	25/1500 units	1BM	0.014
			4	▶	5SH311		1	25/1500 units	1BM	0.012
			6	▶	5SH312		1	25/1500 units	1BM	0.015
			10	▶	5SH313		1	25/1500 units	1BM	0.014
			16	▶	5SH314		1	25/1500 units	1BM	0.014
			20	▶	5SH315		1	25/1500 units	1BM	0.015
			25	▶	5SH316		1	25/1500 units	1BM	0.013
	Also for 5SF230 to 750 V									
	DIII	E33	32		5SH327		1	25 units	1BM	0.024
			35	▶	5SH317		1	25/850 units	1BM	0.024
			50	▶	5SH318		1	25/850 units	1BM	0.022
			63	▶	5SH320		1	25/850 units	1BM	0.020
	DIAZED adapter sleeves for screw caps									
	For DII fuse links in DIII base				5SH302		1	10 units	1BM	0.011
	DIAZED adapter sleeve fitters									
	DII/DIII				5SH3703		1	10 units	1BM	0.046
	DIAZED caps made of molded plastic									
	NDz	E16			5SH201		1	5 units	1BM	0.044
	DII	E27			5SH202		1	5 units	1BM	0.052
	DIII	E33			5SH222		1	5 units	1BM	0.070

* You can order this quantity or a multiple thereof.

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	Size	Thread	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	DIAZED cover rings								
	Ceramic DII and DIII, also for EZR bus-mounting base								
	DII	E27		5SH332		1	10 units	1BM	0.022
	DIII	E33		5SH334		1	10 units	1BM	0.037
	Made of molded plastic, also for EZR bus-mounting base								
	DII	E27		5SH3401		1	5/60 units	1BM	0.013
	DIII	E33		5SH3411		1	5/60 units	1BM	0.015

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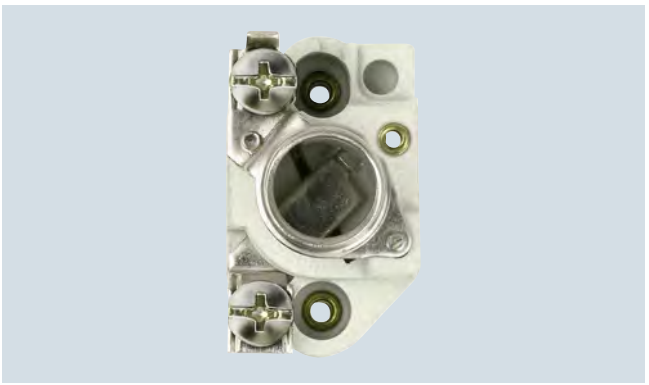
More information

DIII fuse bases with terminal version BS
- Outgoing feeders (top), saddle terminal S
- Incoming feeders (bottom), clamp-type terminal B



NDZ fuse bases with terminal version KK
- Outgoing feeders (top), screw head contact K
- Incoming feeders (bottom), screw head contact K

DIII fuse bases with terminal version BB
- Outgoing feeders (top), clamp-type terminal B
- Incoming feeders (bottom), clamp-type terminal B

DIII fuse bases with terminal version SS
- Outgoing feeders (top), saddle terminal S
- Incoming feeders (bottom), saddle terminal S

*** You can order this quantity or a multiple thereof.**

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Cylindrical fuse links and cylindrical fuse holders

Overview

Cylindrical fuses are standard in Europe. There are a range of different cylindrical fuse links and holders that comply with the standards IEC 60269-1, -2 and -3, and which are suitable for use in industrial applications. In South West Europe they are also approved for use in residential buildings.

The cylindrical fuse holders are also approved according to UL 512. The cylindrical fuse holders are tested and approved as fuse disconnectors according to the switching device standard IEC 60947-3. They are not suitable for switching loads.

Cylindrical fuse holders can be supplied with or without signal detectors. In the case of devices with signal detector, a small electronic device with LED is located behind an inspection window in the plug-in module. If the inserted fuse link is tripped, this is indicated by the LED flashing.

The switching state of the fuse holder can be signaled over a laterally retrofitted auxiliary switch, which enables the integration of the fuses in the automation process.

Benefits

- Devices with pole number 1P+N are available in a single modular width. This reduces the footprint by 50 %
- The sliding catch for type ranges 8 x 32 mm and 10 x 38 mm enables the removal of individual devices from the assembly
- Space for a spare fuse in the plug-in module enables the fast replacement of fuses. This saves time and money and increases system availability
- A flashing LED signals that a fuse link has been tripped. This enables fast detection during runtime

Technical specifications

			Cylindrical fuse links						
			3NW63..	**3NW60..**	**3NW61..**	**3NW62..**	**3NW80..**	**3NW81..**	**3NW82..**
Size		mm × mm	8 × 32	10 × 38	14 × 51	22 × 58	10 × 38	14 × 51	22 × 58
Standards			IEC 60269-1, -2, -3; NF C 60-200; NF C 63-210, -211; NBN C 63269-2, CEI 32-4, -12						
Operational class			gG				aM		
Rated voltages U_n		V AC	400	400 or 500					
Rated current I_n		A	2 ... 20	0.5 ... 32	4 ... 50	8 ... 100	0.5 ... 32	2 ... 50	10 ... 100
Rated breaking capacity									
• 500 V version		kA AC	--	120	100		120	100	
• 400 V version		kA AC	20	120	20		120	20	
Mounting position			Any, preferably vertical						

			Cylindrical fuse holders			
			3NW73..	**3NW70..**	**3NW71..**	**3NW72..**
Size		mm × mm	8 × 32	10 × 38	14 × 51	22 × 58
Standards			IEC 60269-1, -2, -3; NF C 60-200, NF C 63-210, -211; NBN C 63269-2-1; CEI 32-4, -12; UL 4248-1			
Approvals	Acc. to UL		--			--
	Acc. to CSA		--		--	--
Rated voltage U_n		V AC	400	690		
	Acc. to UL/CSA	V AC	400	600		
Rated current I_n		A AC	20	32	50	100
Rated breaking capacity		kA	20	100		
Breaking capacity						
• Utilization category			AC-20B (switching without load), DC-20B			
No-voltage changing of fuse links			Yes			
Sealable when installed			Yes			
Mounting position			Any, preferably vertical			
Degree of protection	Acc. to IEC 60529		IP20, with connected conductors[1]			
Terminals with touch protection according to BGV A3 at incoming and outgoing feeder			Yes			
Ambient temperature		°C	-5 ... +40, humidity 90 % at +20			
Conductor cross-sections						
• Rigid		mm^2	0.5 ... 10		2.5 ... 10	4 ... 10
• Stranded		mm^2	0.5 ... 10		2.5 ... 25	4 ... 50
• Finely stranded, with end sleeve		mm^2	0.5 ... 10[2]		2.5 ... 16	4 ... 35
• AWG (American Wire Gauge)		AWG	--	10 ... 20	6 ... 10	--
Tightening torque		Nm	1.2		2.0	2.5

1) Degree of protection IP20 is tested according to regulations using a straight test finger (from the front), with the device mounted and equipped with a cover, housing or some other enclosure.

2) Max. cross-section 10 mm^2 with K28 crimper from Klauke.

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Selection and ordering data

	Size	I_n	U_n	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm × mm	A	V AC							kg
	Cylindrical fuse links, operational class gG									
	8 × 32	2	400		3NW6302-1		1	10 units	1BM	0.005
		4			3NW6304-1		1	10 units	1BM	0.005
		6			3NW6301-1		1	10 units	1BM	0.005
		10			3NW6303-1		1	10 units	1BM	0.004
		16			3NW6305-1		1	10 units	1BM	0.005
		20			3NW6307-1		1	10 units	1BM	0.005
	10 × 38	0.5	500		3NW6000-1		1	10 units	1BM	0.007
		1			3NW6011-1		1	10 units	1BM	0.008
		2		▶	3NW6002-1		1	10 units	1BM	0.008
		4		▶	3NW6004-1		1	10 units	1BM	0.008
		6		▶	3NW6001-1		1	10 units	1BM	0.008
		8			3NW6008-1		1	10 units	1BM	0.008
		10		▶	3NW6003-1		1	10 units	1BM	0.008
		12			3NW6006-1		1	10/100 units	1BM	0.008
		16		▶	3NW6005-1		1	20 units	1BM	0.008
		20			3NW6007-1		1	20 units	1BM	0.009
		25			3NW6010-1		1	20 units	1BM	0.009
		32	400		3NW6012-1		1	20 units	1BM	0.009
	14 × 51	4	500		3NW6104-1		1	10 units	1BM	0.018
		6			3NW6101-1		1	10 units	1BM	0.012
		8			3NW6108-1		1	10/100 units	1BM	0.018
		10			3NW6103-1		1	10 units	1BM	0.021
		12			3NW6106-1		1	10/100 units	1BM	0.017
		16			3NW6105-1		1	10 units	1BM	0.021
		20			3NW6107-1		1	10 units	1BM	0.021
		25			3NW6110-1		1	10 units	1BM	0.021
		32			3NW6112-1		1	10 units	1BM	0.022
		40			3NW6117-1		1	10 units	1BM	0.022
		50	400		3NW6120-1		1	10 units	1BM	0.022
	22 × 58	16	500		3NW6205-1		1	10 units	1BM	0.052
		20			3NW6207-1		1	10 units	1BM	0.054
		25			3NW6210-1		1	10 units	1BM	0.045
		32			3NW6212-1		1	10 units	1BM	0.053
		40			3NW6217-1		1	10 units	1BM	0.048
		50			3NW6220-1		1	10 units	1BM	0.053
		63			3NW6222-1		1	10 units	1BM	0.055
		80			3NW6224-1		1	10 units	1BM	0.055
		100	400		3NW6230-1		1	10 units	1BM	0.055
	Cylindrical fuse links, operational class aM									
	10 × 38	0.5	500		3NW8000-1		1	10 units	1BM	0.008
		1			3NW8011-1		1	10 units	1BM	0.008
		2			3NW8002-1		1	10 units	1BM	0.008
		4			3NW8004-1		1	10 units	1BM	0.008
		6			3NW8001-1		1	10 units	1BM	0.008
		8			3NW8008-1		1	10 units	1BM	0.008
		10			3NW8003-1		1	10 units	1BM	0.008
		12			3NW8006-1		1	10/100 units	1BM	0.008
		16			3NW8005-1		1	20 units	1BM	0.009
		20	400		3NW8007-1		1	20 units	1BM	0.009
		25			3NW8010-1		1	20 units	1BM	0.009
		32			3NW8012-1		1	20 units	1BM	0.008
	14 × 51	2	500		3NW8102-1		1	10/50 units	1BM	0.018
		4			3NW8104-1		1	10 units	1BM	0.018
		6			3NW8101-1		1	10/50 units	1BM	0.019
		8			3NW8108-1		1	10/50 units	1BM	0.018
		10			3NW8103-1		1	10 units	1BM	0.022
		12			3NW8106-1		1	10/50 units	1BM	0.021
		16			3NW8105-1		1	10 units	1BM	0.021
		20			3NW8107-1		1	10 units	1BM	0.021
		25			3NW8110-1		1	10 units	1BM	0.186
		32			3NW8112-1		1	10 units	1BM	0.019
		40			3NW8117-1		1	10 units	1BM	0.021
		50	400		3NW8120-1		1	10 units	1BM	0.019

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Cylindrical fuse links and cylindrical fuse holders

	Size	I_n	U_n	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm × mm	A	V AC							kg
	22 × 58	16	500		3NW8205-1		1	10/50 units	1BM	0.045
		20			3NW8207-1		1	10 units	1BM	0.054
		25			3NW8210-1		1	10 units	1BM	0.055
		32			3NW8212-1		1	10 units	1BM	0.054
		40			3NW8217-1		1	10 units	1BM	0.049
		50			3NW8220-1		1	10 units	1BM	0.054
		63			3NW8222-1		1	10 units	1BM	0.046
		80			3NW8224-1		1	10 units	1BM	0.056
		100	400		3NW8230-1		1	10 units	1BM	0.050

	Number of poles	I_n	For fuse links of size	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	mm × mm	MW							kg
	Cylindrical fuse holders with signal detector										
	1P										
		20	8 × 32	1		3NW7314		1	1 unit	1BM	0.069
		32	10 × 38	1		3NW7014		1	1 unit	1BM	0.067
		50	14 × 51	1.5		3NW7112		1	1 unit	1BM	0.101
		100	22 × 58	2		3NW7212		1	1 unit	1BM	0.146
	1P+N										
		20	8 × 32	1		3NW7354		1	1 unit	1BM	0.092
		32	10 × 38	1		3NW7054		1	1 unit	1BM	0.082
		50	14 × 51	3		3NW7152		1	1 unit	1BM	0.231
		100	22 × 58	4		3NW7252		1	1 unit	1BM	0.360
	2P										
		20	8 × 32	2		3NW7324		1	1 unit	1BM	0.141
		32	10 × 38	2		3NW7024		1	1 unit	1BM	0.140
		50	14 × 51	3		3NW7122		1	1 unit	1BM	0.222
		100	22 × 58	4		3NW7222		1	1 unit	1BM	0.329
	3P										
		20	8 × 32	3		3NW7334		1	1 unit	1BM	0.203
		32	10 × 38	3		3NW7034		1	1 unit	1BM	0.196
		50	14 × 51	4.5		3NW7132		1	1 unit	1BM	0.315
		100	22 × 58	6		3NW7232		1	1 unit	1BM	0.495
	3P+N										
		20	8 × 32	3		3NW7364		1	1 unit	1BM	0.218
		32	10 × 38	3		3NW7064		1	1 unit	1BM	0.216
		50	14 × 51	6		3NW7162		1	1 unit	1BM	0.439
		100	22 × 58	8		3NW7262		1	1 unit	1BM	0.686
	Cylindrical fuse holders without signal detector										
	1P										
		20	8 × 32	1		3NW7313		1	1 unit	1BM	0.067
		32	10 × 38	1	▶	3NW7013		1	1/12 units	1BM	0.006
		50	14 × 51	1.5	▶	3NW7111		1	1 unit	1BM	0.106
		100	22 × 58	2	▶	3NW7211		1	1 unit	1BM	0.167
	1P+N										
		20	8 × 32	1		3NW7353		1	1 unit	1BM	0.081
		32	10 × 38	1	▶	3NW7053		1	1 unit	1BM	0.079
		50	14 × 51	3		3NW7151		1	1 unit	1BM	0.234
		100	22 × 58	4		3NW7251		1	1 unit	1BM	0.365
	2P										
		20	8 × 32	2		3NW7323		1	1 unit	1BM	0.137
		32	10 × 38	2	▶	3NW7023		1	1/6 units	1BM	0.123
		50	14 × 51	3	▶	3NW7121		1	1 unit	1BM	0.214
		100	22 × 58	4	▶	3NW7221		1	1 unit	1BM	0.316

* You can order this quantity or a multiple thereof.

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	Number of poles	I_n	For fuse links of size	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	mm × mm	MW							kg
	Cylindrical fuse holders without signal detector										
	3P										
		20	8 × 32	3		3NW7333		1	1 unit	1BM	0.207
		32	10 × 38	3	▶	3NW7033		1	1/4 units	1BM	0.187
		50	14 × 51	4.5	▶	3NW7131		1	1 unit	1BM	0.306
		100	22 × 58	6	▶	3NW7231		1	1 unit	1BM	0.503
	3P+N										
		20	8 × 32	3		3NW7363		1	1 unit	1BM	0.210
		32	10 × 38	3	▶	3NW7063		1	1 unit	1BM	0.215
		50	14 × 51	6		3NW7161		1	1 unit	1BM	0.434
		100	22 × 58	8		3NW7261		1	1 unit	1BM	0.685
	Auxiliary switches										
	For indicating disconnection of the fuse link, solely for application of striker fuse links. For retrofitting using the factory-fitted brackets. Contact: 250 V AC, 5 A Minimum contact load: 12 V, 25 mA										
	For fuse bases		14 × 51	0.5		3NW7901		1	1 unit	1BM	0.055
	For fuse bases		22 × 58			3NW7902		1	1 unit	1BM	0.050
	For indicating the switching state of the fuse holder. For retrofitting using the factory-fitted brackets. Contact: 230 V AC, 6 A/110 V DC, 1 A Minimum contact load: 12 V, 25 mA Terminals 1.5 mm^2 - 0.5 Nm										
	For fuse holders		10 × 38	0.5		3NW7903		1	1 unit	1BM	0.042

More information

Mounting

Fuse holders, sizes 8 × 32 mm und 10 × 38 mm, have a sliding catch that enables the removal of individual devices from the assembly.

The infeed can be from the top or the bottom. Because the cylindrical fuse holders are fitted with the same anti-slip terminals at the top and the bottom, the devices can also be bus-mounted at the top or the bottom.

Auxiliary switches

Auxiliary switches are available for the cylindrical fuse holders. These are simply clipped onto the base using the factory-fitted brackets.

Sizes 8 × 32 mm und 10 × 38 mm:
The auxiliary switches support the remote display of the switching state ON or OFF of the fuse holder.

Sizes 14 × 51 mm und 22 × 58 mm:
The auxiliary switches support the remote display of fuse failure. However, fuse links with strikers are required for this function. When the fuse is tripped, a small striking pin – the striker – shoots out of the front of the fuse. Over an armature link in the auxiliary switch, the kinetic energy of this striker is used to switch a mini switch, which then initializes this signal over a floating contact.

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Fuse holders in size 10 x 38 mm and Class CC

Overview

A key feature of our three-pole fuse holders is their ultra compact design. With a width of only 45 mm, they are ideal for use with fused motor starter combinations. Because the contactor and the fuse holder have the same 45 mm width, they are easy to mount on top of one another. The strong current-limiting fuses ensure a type 2 protection level (coordination according to IEC 60947-4, no damage protection) for the contactor.

The UL version has an SCCR value of 200 kA. The accessories are generally UL-certified.

Customers can mount an auxiliary switch which signals the switching state or prevents the fuse holder from switching off under load by interrupting the contactor control, thus increasing safety for the operator and process. Busbars and a matching three-phase feeder terminal complete the product range.

Benefits

- Compact design, especially for motor starter combinations
- For IEC fuses of size 10 x 38 mm up to 32 A and Class CC UL fuses up to 30 A
- Meets the requirements of UL 508 with regard to clearances
- UL-approved microswitches, busbars and adapters for 60 mm busbar systems
- Optical signal detector for fast fault locating

Compact fuse holder Class CC with signal detector and mounted auxiliary switch.

Installation configuration of a cylindrical fuse holder and a SIRIUS contactor on busbar device for the 60 mm busbar system.

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Technical specifications

		Cylindrical fuse holders 3NW70..-1	Fuse holders 3NW75..-1HG
Size	mm × mm	10 × 38	Class CC
Standards		IEC 60269; UL4248-1; CSA	UL4248-1; CSA
Approvals • Acc. to UL • Acc. to CSA		 , UL File Number E171267 	 , UL File Number E171267
Rated voltage U_n	V AC	690	600
Rated current I_n	A AC	32	30
Rated short-circuit strength	kA	120 (at 500 V) 80 (at 690 V)	200
Breaking capacity • Utilization category		 AC-20B (switching without load)	 --
Rated impulse withstand voltage	kV	6	
Overvoltage category		III	
Pollution degree		2	
Max. power dissipation of the fuse link	W	3	
No-voltage changing of fuse links	°C	-5 ... +40, humidity 90 % at +20	
Sealable when installed		Yes	
Lockable with padlock		Yes	
Mounting position		Any, preferably vertical	
Current direction		Any	
Degree of protection Acc. to IEC 60529		IP20, with connected conductors[1)]	
Terminals with touch protection according to BGV A3 at incoming and outgoing feeder		Yes	
Ambient temperature	°C	-5 ... +40, humidity 90 % at +20	
Conductor cross-sections • Finely stranded, with end sleeve • AWG cables (American Wire Gauge)	 mm^2 AWG	 1 ... 4 18 ... 10	
Tightening torque • Terminal screws	Nm lbs/in. 	1.5 13 PZ2	

1) Degree of protection IP20 is tested according to regulations using a straight test finger (from the front), with the device mounted and equipped with a cover, housing or some other enclosure.

		Auxiliary switches 3NW7903-1							
Standards		IEC 60947							
Approvals		, , UL 508, UL File Number E334003							
Utilization category		AC-12	DC-13			AC-15			Acc. to UL
Rated voltage U_n	V AC V DC	250 --	-- 24	-- 120	-- 240	24 --	120 --	240 --	240 --
Rated current I_n	A	5	2	0.5	0.25	4	3	1.5	5

		Busbars 5ST260.	
For cylindrical fuse holders		3NW70..-1	3NW75..-1HG
Pin spacing	mm	15	
Standards		EN 60974-1 (VDE 0660-100), IEC 60947-1:2004, UL 508, CSA 22.2	
Approvals		, UL 4248-1, UL File Number E337131	
Busbar material		E-Cu 58 F25	
Partition material		PA66-V0	
Lamp wire resistance/1.5 mm^2	°C	960	
Insulation coordination		Overvoltage category III, degree of pollution 2	
Rated voltage U_n • Acc. to UL • Acc. to IEC	 V AC V AC	 -- 690	 600 --
Maximum busbar current I_n • Acc. to UL • Acc. to IEC	 A A	 -- 80	 65 --

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Fuse holders in size 10 x 38 mm and Class CC

		Terminals 5ST2600	
For cylindrical fuse holders		3NW70..-1	3NW75..-1HG
Pin spacing	mm	15	
Standards		IEC 60999:2000, UL 508	
Approvals		UL, UL 4248-1, UL File Number E337131	
Enclosure/cover material		PA66-V0	
Lamp wire resistance/1 mm²	°C	960	
Temperature resistance PA66-V0, HDT B ISO 179, UL 94-V0/1.5	°C	200	
Insulation coordination		Overvoltage category III, degree of pollution 2	
Max. operational voltage U_{max}			
• Acc. to UL	V AC	--	600
• Acc. to IEC	V AC	690	--
Maximum electrical load I_{max}			
• Acc. to UL	A	--	65
• Acc. to IEC	A	80	--
Rated current I_n	A	63	
Conductor cross-sections			
• Solid/stranded	mm²	2.5 ... 35	
• Finely stranded, with end sleeve	mm²	2.5 ... 25	
Tightening torque of clamping screw	Nm	2.5 ... 3.5	

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Selection and ordering data

	Number of poles	I_n	For fuse links of size	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	mm x mm	MW							kg
3NW7 cylindrical fuse holders											
	Cylindrical fuse holders										
	3P	32	10 x 38	2.5							
	Without signal detector					3NW7033-1		1	1 unit	1BM	0.188
	With signal detector					3NW7034-1		1	1 unit	1BM	0.194
	Fuse holders class CC										
	3P	30	Class CC	2.5							
	Without signal detector					3NW7533-1HG		1	1 unit	1DN	0.196
	With signal detector					3NW7534-1HG		1	1 unit	1DN	0.201
Accessories											
	Auxiliary switches										
	AC-12, 5 A, max. 250 V, 1 NO, 1 NC			2.5		3NW7903-1		1	1 unit	1BM	0.017

	Version	I_n	Pin spacing	Length	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	mm	mm							kg
5ST2 60. busbar system											
	Busbars										
	2 x 3P	63	15	45		5ST2601		1	10 units	1AD	0.038
	3 x 3P			90		5ST2602		1	10 units	1AD	0.061
	4 x 3P			135		5ST2603		1	10 units	1AD	0.084
	5 x 3P			180		5ST2604		1	10 units	1AD	0.107
Accessories											
	Terminals										
	For conductor cross-section 2.5 mm² ... 35 mm²					5ST2600		1	10 units	1AD	0.046

		Length of adapter	Width of adapter	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	mm							kg
Device adapters										
	Busbar device adapters[1] with connecting cables (above)									
	Size S00, rated voltage 690 V AC, rated current 25 A, 1 support rail (35 mm), connection cable AWG 12									
		200	45	►	8US1251-5DS10		1	1 unit	1CU	0.285
		260		►	8US1251-5DT10		1	1 unit	1CU	0.312
Accessories										
	Mounting rails for busbar device adapter									
	For assembly of additional devices		45		8US1998-7CB45		1	10 units	1CU	0.015

[1] For further device adapters and accessories, see chapter "Busbar Systems".

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Class CC fuse systems

Overview

Class CC fuses are used for "branch circuit protection".

The characteristic of the fuse links is designed and tested to comply with the US National Electrical Code NEC 210.20(A). This means that when subject to continuous operation, only 80 % of the rated current is permissible as operational current.

An operational current of 100 % of the rated current (30 A) is only permissible short-time.

The devices are prepared for the inscription labels of the ALPHA FIX terminal blocks 8WH8120-7AA15 and 8WH8120-7XA05.

There are three different series:

- Characteristic: Slow 3NW1...-0HG
  For the protection of control transformers, reactors, inductances. Significantly slower than the minimum requirements specified by UL for Class CC Fuses of 12 s at 2 × I_n.
- Characteristic: Quick 3NW2 ...-0HG
  For a wide range of applications, for the protection of lighting installations, heating, control systems.
- Characteristic: Slow, current-limiting, 3NW3...-0HG
  Slow for overloads and quick for short circuits. High current limitation for the protection of motor circuits.

Note:

For class CC compact fuse holders for motor starter combinations, see page 5/25.

Benefits

- For switchboard assemblies and machine manufacturers who export their systems to the USA or Canada
- Easier export due to UL and CSA approvals for typical applications
- Modern design with touch protection to BGV A3 ensures safe installation

Technical specifications

		Class CC fuse holders 3NW75.3-0HG
Standards **Approvals**		UL 4248-1; CSA C22.2 UL 4248-1; UL File Number E171267; CSA C22.2
Rated voltage U_n	V AC	600
Rated current I_n	A	30
Rated conditional short-circuit current	kA	200
Breaking capacity • Utilization category		AC-20B (switching without load)
Max. power dissipation of fuse links • With cable, 6 mm² • With cable, 10 mm²	 W W	 3 4.3
Rated impulse withstand voltage	kV	6
Overvoltage category		II
Pollution degree		2
No-voltage changing of fuse links		Yes
Sealable when installed		Yes
Mounting position		Any
Current direction		Any
Degree of protection acc. to IEC 60529		IP20[1)]
Terminals with touch protection according to BGV A3 at incoming and outgoing feeder		Yes
Ambient temperature	°C	45
Conductor cross-sections • Solid and stranded • AWG conductor cross-section, solid and stranded	 mm² AWG	 1.5 ... 16 15 ... 5
Tightening torque	Nm	2.5 (22 lbs/in.)

1) Degree of protection IP20 is tested according to regulations using a straight test finger (from the front), with the device mounted and equipped with a cover, housing or some other enclosure.

		Class CC fuse links 3NW1...-0HG	3NW2...-0HG	3NW3...-0HG
Standards **Approvals**		UL 248-4; CSA C22.2 UL 248-4; UL File Number E258218; CSA C22.2		
Characteristic		Slow	Quick	Slow, current limiting
Rated voltage	V AC	600	600	600
	V DC	--	--	150 (3 .... 15 A) 300 (< 3 A, > 15 A)
Rated breaking capacity	kA AC	200		

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Selection and ordering data

	Number of poles	U_n	I_n	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V	A	MW							kg
	Class CC fuse holders										
	1P	600	30	1		3NW7513-0HG		1	12 units	1DN	0.054
	2P	600	30	2		3NW7523-0HG		1	6 units	1DN	0.103
	3P	600	30	3		3NW7533-0HG		1	4 units	1DN	0.155

	I_n [1]	DT	Characteristic: Slow Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Characteristic: Quick Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A											kg
	Class CC fuse links											
	0.6 (6/10)		3NW1006-0HG		1DN		--					
	0.8 (8/10)		3NW1008-0HG		1DN		--					
	1		3NW1010-0HG		1DN		3NW2010-0HG		1	10 units	1DN	0.009
	1.5 (1 ½)		3NW1015-0HG		1DN		--					
	2		3NW1020-0HG		1DN		3NW2020-0HG		1	10 units	1DN	0.008
	2.5		3NW1025-0HG		1DN		--					
	3		3NW1030-0HG		1DN		3NW2030-0HG		1	10 units	1DN	0.008
	4		3NW1040-0HG		1DN		3NW2040-0HG		1	10 units	1DN	0.008
	5		3NW1050-0HG		1DN		3NW2050-0HG		1	10 units	1DN	0.009
	6		3NW1060-0HG		1DN		3NW2060-0HG		1	10 units	1DN	0.008
	7.5		3NW1075-0HG		1DN		--					
	8		3NW1080-0HG		1DN		3NW2080-0HG		1	10 units	1DN	0.008
	10		3NW1100-0HG		1DN		3NW2100-0HG		1	10 units	1DN	0.008
	12		--				3NW2120-0HG		1	10 units	1DN	0.008
	15		3NW1150-0HG		1DN		3NW2150-0HG		1	10 units	1DN	0.008
	20		3NW1200-0HG		1DN		3NW2200-0HG		1	10 units	1DN	0.008
	25		3NW1250-0HG		1DN		3NW2250-0HG		1	10 units	1DN	0.008
	30		3NW1300-0HG		1DN		3NW2300-0HG		1	10 units	1DN	0.008

[1] Values in brackets, American English wording.

	I_n	DT	Characteristic: slow, current-limiting Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A							kg
	Class CC fuse links							
	1		3NW3010-0HG		1	10 units	1DN	0.008
	2		3NW3020-0HG		1	10 units	1DN	0.001
	3		3NW3030-0HG		1	10 units	1DN	0.008
	4		3NW3040-0HG		1	10 units	1DN	0.008
	5		3NW3050-0HG		1	10 units	1DN	0.008
	6		3NW3060-0HG		1	10 units	1DN	0.008
	8		3NW3080-0HG		1	10 units	1DN	0.008
	10		3NW3100-0HG		1	10 units	1DN	0.008
	12		3NW3120-0HG		1	10 units	1DN	0.008
	15		3NW3150-0HG		1	10 units	1DN	0.008
	20		3NW3200-0HG		1	10 units	1DN	0.008
	25		3NW3250-0HG		1	10 units	1DN	0.008
	30		3NW3300-0HG		1	10 units	1DN	0.008

* You can order this quantity or a multiple thereof.

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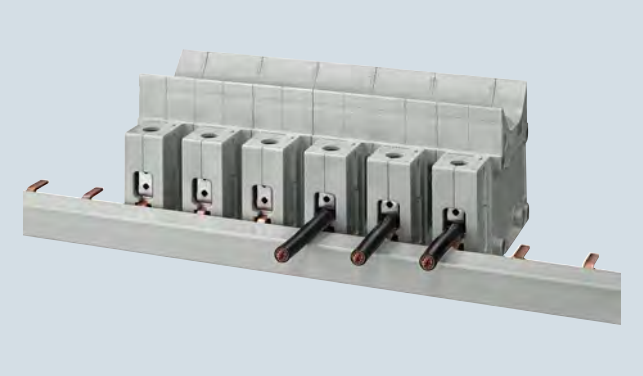
Overview

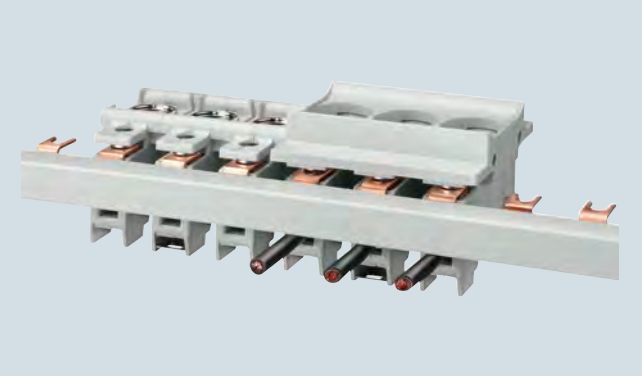
Busbars with pin-type connections can be used for NEOZED safety switching devices and fuse bases. Busbars in 10 mm^2 and 16 mm^2 versions are available.

Busbars with fork plugs are used for the most frequently used NEOZED fuse bases made of ceramic.

Benefits

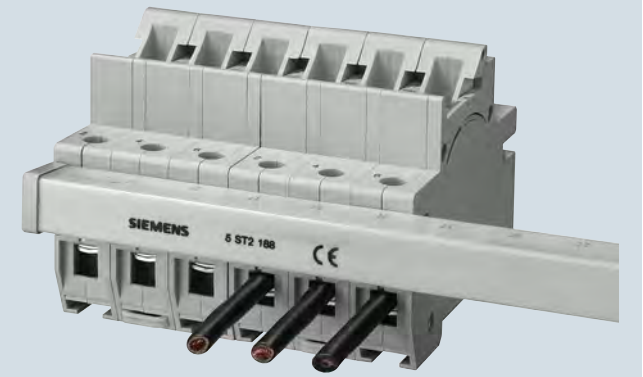


- Clear and visible conductor connection that can be easily checked when using the NEOZED D02 comfort base and which facilitates cable entry

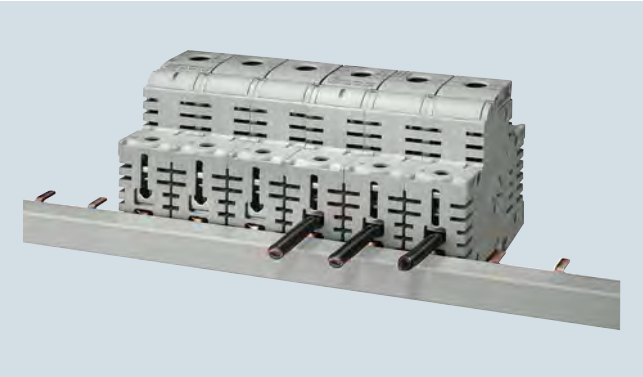


- Bus-mounting of NEOZED fuse bases made of molded plastic on 3-phase busbar with fork plug, which can be cut to length

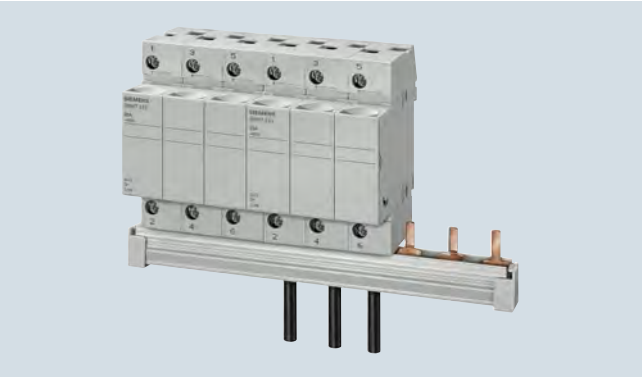
- Bus-mounting of NEOZED fuse bases made of ceramic on 3-phase busbar with fork plug, which can be cut to length



- Bus-mounting of MINIZED D01 fuse switch disconnectors on 3-phase busbar with fork plug, can be cut to length



- Clear and visible conductor connection that can be easily checked when using MINIZED D02 switch disconnectors. This facilitates cable entry and saves time



- Bus-mounting of cylindrical fuse holders 8 × 32 mm and 10 × 38 mm with three-phase pin busbar which can be cut to length

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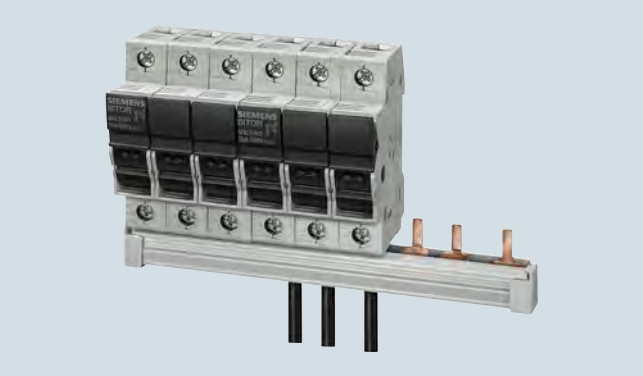

- Bus-mounting of SITOR cylindrical fuse holders 10 mm x 38 mm with the same terminal connection as Class CC fuse holders with 3-phase pin busbar which can be cut to length

- Bus mounting with infeed through a connection terminal directly on the fuse holder up to a conductor cross-section of 25 mm²

Technical specifications

			5ST, 5SH
Standards			EN 60439-1 (VDE 0660-500): 2005-01
Busbar material			SF-Cu F 24
Partition material			Plastic, Cycoloy 3600, Heat-resistant over 90 °C, flame-retardant, self-extinguishing, dioxin and halogen-free
Rated operational voltage U_c		V AC	400
Rated current I_n			
• Cross-section 10 mm²		A	63
• Cross-section 16 mm²		A	80
Rated impulse withstand voltage U_{imp}		kV	4
Test pulse voltage (1.2/50)		kV	6.2
Rated conditional short-circuit current I_{cc}		kA	25
Resistance to climate			
• Constant atmosphere	Acc. to DIN 50015		23/83; 40/92; 55/20
• Humid heat	Acc. to IEC 60068-2-30		28 cycles
Insulation coordination			
• Overvoltage category			III
• Pollution degree			2
Maximum busbar current I_S/phase			
• Infeed at the start of the busbar			
- Cross-section 10 mm²		A	63
- Cross-section 16 mm²		A	80
• Infeed at the center of the busbar			
- Cross-section 10 mm²		A	100
- Cross-section 16 mm²		A	130

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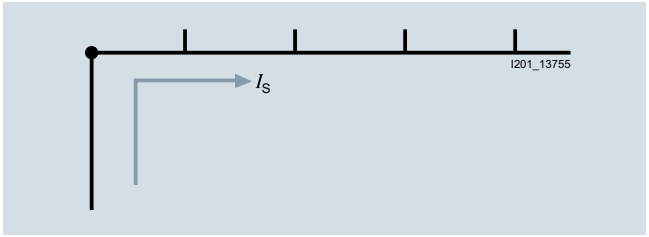
Busbar systems

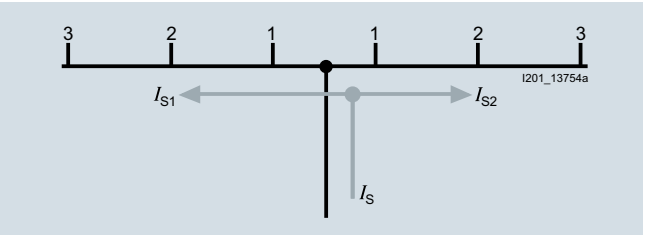
5ST37. . - . HG busbars acc. to UL 508

		5ST37..-0HG	5ST37..-2HG	5ST3770-0HG	5ST3770-1HG
Standards		UL 508, CSA C22.2 No. 14-M 95			
Approvals		UL 508 File No. E328403 CSA			
Operational voltage					
• Acc. to IEC	V AC	690			
• Acc. to UL 489	V AC	600			
Rated conditional short-circuit current	kA	10 (RMS symmetrical 600 V for three cycles)			
• Dielectric strength	kV/mm	25			
• Surge strength	kV	> 9.5			
Rated current	A	--	--	115	
Maximum busbar current I_S/phase					
• Infeed at the start of the busbar	A	80	100	--	--
• Infeed at the center of the busbar	A	160	200	--	--
Insulation coordination					
• Overvoltage category		III			
• Pollution degree		2			
Busbar cross-section	mm^2 Cu	18	25	--	--
Infeed		Any			
Conductor cross-sections	AWG mm^2	-- --	-- --	10 ... 1/0 6 ... 35	14 ... 1 1.5 ... 50
Terminals					
• Terminal tightening torque	Nm lbs/in.	-- --	-- --	5 50	3.5 35

Infeed at the start of the busbar



Infeed along the busbar or midpoint infeed



The sum of the output current per branch must not be greater than the busbar current $I_{S1.2}$ / phase.

Selection and ordering data

	Phases	Conductor cross-section	Load capacity up to	Pin spacing	Length	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm^2	A	MW	mm							kg
Busbars												
	For MINIZED D02 switch disconnectors **For NEOZED D01/D02 comfort bases** made of molded plastic 5SG1301, 5SG1701, 5SG5301, 5SG5701 **For NEOZED D01/D02 fuse bases** made of ceramic terminal version S (saddle terminal) **For cylindrical fuse holder 14 × 51 mm** **For cylindrical fuse holder SITOR 14 × 51 mm** Can be cut to length, without end caps											
	Single-phase	16	130	1.5	1016	►	5ST3703		1	1 unit	1AD	0.185
	Three-phase	16	120	1.5	1016		5ST3714		1	1 unit	1AD	0.540

* You can order this quantity or a multiple thereof.

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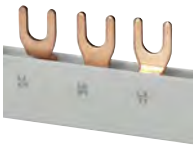
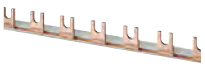
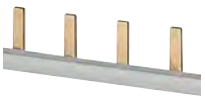
	Phases	Conductor cross-section	Load capacity up to	Pin spacing	Length	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm^2	A	MW	mm							kg
	For MINIZED D01 fuse switch disconnectors											
	Can be cut to length, without end caps											
	Single-phase	16	120	1	1000		5ST2190		1	1 unit	1AD	0.222
	Two-phase						5ST2191		1	1 unit	1AD	0.448
	Three-phase						5ST2192		1	1 unit	1AD	0.582
	Can be cut to length, with 2 end caps											
	Single-phase	16	120	1	220		5ST2186		1	1 unit	1AD	0.048
	Two-phase						5ST2187		1	1 unit	1AD	0.092
	Three-phase						5ST2188		1	1 unit	1AD	0.112
	For NEOZED D01/D02 fuse bases											
	• 5SG1.30, 5SG1.31, 5SG5.30 made of molded plastic • Made of ceramic, terminal version B and K (clamp-type terminal, screw head contact)											
	Non-insulated											
	Single-phase	36	168	1.5			5SH5322		1	1 unit	1BM	0.260
	Can be cut to length, without end caps											
	Single-phase	24	160	1.5	1000		5SH5517		1	1 unit	1BM	0.342
	Three-phase	16	120	1.5	1000	▶	5SH5320		1	1 unit	1BM	0.562
	For cylindrical fuse holder 8 × 32 mm and 10 × 38 mm **For cylindrical fuse holder SITOR 10 × 38 mm** **For class CC fuse holder** [1]											
	Can be cut to length, without end caps											
	Single-phase	16	120	1	1016	▶	5ST3701		1	1 unit	1AD	0.190
	Two-phase		120	1		▶	5ST3705		1	1 unit	1AD	0.452
	Three-phase	16	120	1	1016	▶	5ST3710		1	1 unit	1AD	0.610
	Can be cut to length, with end caps											
	Single-phase	16		1	214	▶	5ST3700		1	1 unit	1AD	0.042
	Two-phase			1		▶	5ST3704		1	1 unit	1AD	0.097
	Three-phase			1		▶	5ST3708		1	1 unit	1AD	0.116
	End caps for busbars											
	For single-phase 5ST2190 busbars						5ST2196		1	10 units	1AD	0.001
	For 2-phase 5ST2191 busbars and for 3-phase 5ST2192 busbars						5ST2197		1	10 units	1AD	0.001
	For single-phase 5ST37, 5SH55 busbars					▶	5ST3748		1	10 units	1AD	0.001
	For two-phase and three-phase 5ST37 and 5SH5320 busbars					▶	5ST3750		1	10 units	1AD	0.002

[1] For UL-approved busbars, see page 5/33.

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Busbar systems

	Phases	Conductor cross-section	Load capacity up to	Length	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm^2	A	mm							kg
	Touch protection for free connection of pin busbars										
	Yellow (RAL1004) 5 x 1 pin				►	**5ST3655**		1	10 units	1AD	0.008
	Terminals										
	For NEOZED fuse bases D01/D02 made of ceramic For DIAZED fuse bases DII/DIII made of ceramic										
	Terminal version S For con-ductors	2 ... 25				**5SH5327**		1	10/300 units	1BM	0.013
	Terminal versions B and K For con-ductors	6 ... 25				**5SH5328**		1	10/300 units	1BM	0.013
	For the infeed of fork-type or pin busbars For con-ductors	6 ... 35				**5ST2157**		1	5 units	1AD	0.030
	Busbars **For single-pole DIAZED fuse bases made of ceramic with terminal versions BB and BS**										
	Size DII, for 19 bases Single-phase	24	80	1000		**5SH3500**		1	1/25 units	1BM	0.120
	Size DIII, for 25 bases Single-phase	39	120	1000		**5SH3501**		1	1/25 units	1BM	0.200
	Bus-mounting terminals For DIAZED EZR bus-mounting bases										
	Non-insulated										
	For con-ductors	1.5 ... 16				**8JH4122**		1	10 units	1BR	0.010
	For con-ductors	10 ... 35				**8JH4124**		1	10 units	1BR	0.024

* You can order this quantity or a multiple thereof.

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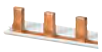
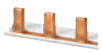
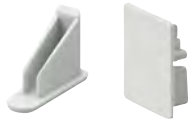
5ST37. . - . HG busbars acc. to UL 508

		Pin spacing	Length	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		MW	mm							kg
	**5ST37..-.HG busbars acc. to UL 508, 18 mm², can be cut, without end caps**									
	Single-phase									
	• For fuse holders 10 x 38 mm class CC (3NC1091, 3NW7513-0HG) or MCBs 1P (5SY)	1	1000		5ST3701-0HG		1	1 unit	1AE	0.320
	• For fuse holders 14 x 51 mm (3NC1491, 3NW7111) or MCBs 1P (5SY, 5SP) with AS or FC	1.5	1000		5ST3703-0HG		1	1 unit	1AE	0.277
	Two-phase									
	• For fuse holders 10 x 38mm/ class CC (3NC1092, 3NW7523-0HG) or MCBs 2P (5SY)	1	1000		5ST3705-0HG		1	1 unit	1AE	0.640
	Three-phase									
	• For fuse holders 10 x 38 mm/class CC (3NC1093, 3NW7533-0HG) or MCBs 3P (5SY)	1	1000		5ST3710-0HG		1	1 unit	1AE	0.820
	• For fuse holders 14 x 51 mm (3NC1493, 3NW7131) or MCBs 1P (5SY, 5SP) with AS or FC	1.5	1000		5ST3714-0HG		1	1 unit	1AE	0.780
	**5ST37..-.HG busbars acc. to UL 508, 25 mm², can be cut, without end caps**									
	Single-phase									
	• For fuse holders 14 x 51 mm (3NC1491, 3NW7111) or MCBs 1P (5SP)	1.5	1000		5ST3701-2HG		1	1 unit	1AE	0.340
	Two-phase									
	• For fuse holders 14 x 51 mm (3NC1492, 3NW7121) or MCBs 2P (5SP)	1.5	1000		5ST3705-2HG		1	1 unit	1AE	0.770
	Three-phase									
	• For fuse holders 14 x 51 mm (3NC1493, 3NW7131) or MCBs 3P (5SP)	1.5	1000		5ST3710-2HG		1	1 unit	1AE	1.090
	**End caps for 5ST37..-.HG**									
	• For single-phase busbars				5ST3748-0HG		1	10 units	1AE	0.001
	• For two- and three-phase busbars				5ST3750-0HG		1	10 units	1AE	0.002
	Terminals according to UL 508									
	Infeed to device									
	• 35 mm²				5ST3770-0HG		1	10 units	1AE	0.033
	Infeed to busbar									
	• 50 mm²				5ST3770-1HG		1	10 units	1AE	0.033
	Touch protection cover for busbars according to UL 508									
	• 5 x 1 pin				5ST3655-0HG		1	10 units	1AE	0.011

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* You can order this quantity or a multiple thereof.

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LV HRC fuse links

Overview

LV HRC fuse systems (NH type) are used for installation systems in non-residential, commercial and industrial buildings as well as in switchboard assemblies of power utilities. They therefore protect essential building parts and systems.

LV HRC fuse systems (NH type) are fuse systems designed for operation by experts. There are no constructional requirements for non-interchangeability of rated current and touch protection.

The components and auxiliary equipment are designed in such a way as to ensure the safe replacement of LV HRC fuse systems or isolation of systems.

LV HRC fuse links are available in the sizes 000, 00, 0, 1, 2, 3, 4 and 4a.

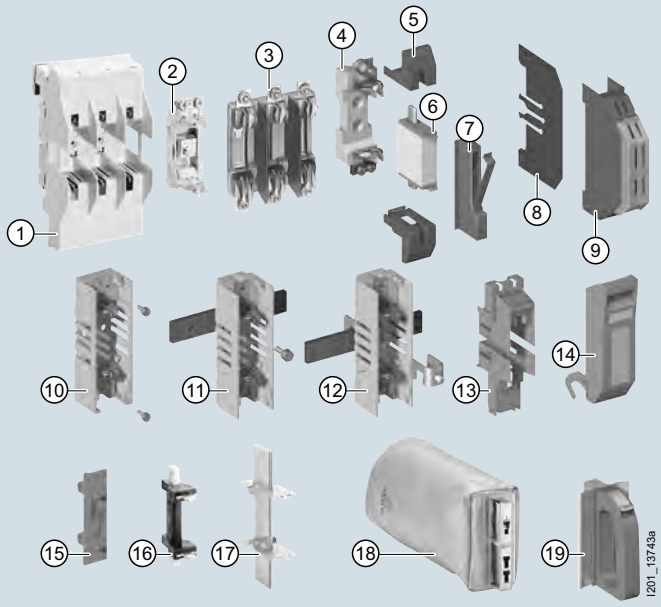
LV HRC fuse links are available in the following operational classes:

- gG for cable and line protection
- aM for short-circuit protection of switching devices in motor circuits
- gR or aR for protection of power semiconductors
- gS: The new gS operational class combines cable and line protection with semiconductor protection

LV HRC fuse links of size 000 can also be used in LV HRC fuse bases, LV HRC fuse switch disconnectors, LV HRC fuse strips as well as LV HRC in-line fuse switch disconnectors of size 00.

The fuse links 300 A, 355 A and 425 A comply with the standard but do not have the VDE mark.

LV HRC components:



1 LV HRC fuse base from the SR60 busbar system
2 LV HRC fuse base for busbar mounting
3 LV HRC fuse base, 3-pole
4 LV HRC fuse base, 1-pole
5 LV HRC contact covers
6 LV HRC fuse link
7 LV HRC signal detector
8 LV HRC partition
9 LV HRC protective cover
LV HRC fuse bases with swivel mechanisms,
10 - for screw fixing on mounting plate
11 - for screw fixing on busbar system
12 - for claw fixing on busbar
13 LV HRC protective cover for LV HRC fuse bases with swivel mechanism
14 LV HRC swivel mechanism
15 LV HRC fuse base cover
16 LV HRC isolating blade with insulated grip lugs
17 LV HRC isolating blade with non-insulated grip lugs
18 LV HRC fuse puller with sleeve
19 LV HRC fuse puller

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Benefits

- LV HRC fuse links with combination alarm signal the tripping of a fuse by a clear color change from red to white. This enables fast identification and replacement of the tripped fuse links. This increases system availability
- The insulated grip lugs made of metal are integrated in the top and bottom covers of the fuse link in molded plastic and provide greater safety during replacement. The mark shown below indicates that the grip lugs are insulated

- In the standard series with front indicator, the front-mounted red indicator signals the tripping of a fuse
- LV HRC fuse links are always equipped with silver-plated contact pins. This means that they are non-corroding and have less contact resistance. This ensures the long-term operational safety of the plant

Technical specifications

		LV HRC fuse links					
		Operational class gG					Operational class aM
		3NA6...-4 3NA6...-4KK 3NA383.-8	3NA6... 3NA6...-7 3NA7... 3NA7...-7	3NA3... 3NA3...-7	3NA6...-6 3NA7...-6	3NA3...-6	3ND1 3ND2
Standards **Approvals**		IEC 60269-1, -2; EN 60269-1; DIN VDE 0636 DIN VDE 0636-2; CSA 22.2 No.106, File Number 016325_0_00 (CSA approval of fuses 500 V for 600 V)					
Rated voltage U_n							
• Sizes 000 and 00	V AC V DC	400 --	500 250	500 250	690[1] 250	690[1] 250	500 --
• Sizesn 1 and 2	V AC V DC	400 --	500 440	500 440	690[1] 440	690[1] 440	690 --
• Size 3	V AC V DC	-- --	-- --	500 440	-- --	690[1] 440	690 --
• Sizes 4 and 4a (IEC design)	V AC V DC	-- --	-- --	500 440	-- --	-- --	-- --
Rated current I_n	A	10 ... 400	2 ... 400	2 ... 1250	2 ... 315	2 ... 500	6 ... 630
Rated breaking capacity	kA AC	120					
	kA DC	--	25				--
Contact pins		Non-corroding, silver-plated					
Resistance to climate	°C	-20 ... +50 at 95 % relative humidity					

[1] Manufacturer's confirmation for 690 V +10 % rated voltage available on request.

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Selection and ordering data

	Size	Mounting width	I_n	U_n	DT	Insulated grip lugs Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	A	V AC/V DC							kg
	LV HRC fuse links with combination alarm, operational class gG										
	000	21	10	400/--		3NA6803-4		1	3 units	1BM	0.130
			16			3NA6805-4		1	3 units	1BM	0.131
			20			3NA6807-4		1	3 units	1BM	0.131
			25			3NA6810-4		1	3 units	1BM	0.132
			32			3NA6812-4		1	3 units	1BM	0.131
			35			3NA6814-4		1	3 units	1BM	0.131
			40			3NA6817-4		1	3 units	1BM	0.132
			50			3NA6820-4		1	3 units	1BM	0.130
			63			3NA6822-4		1	3 units	1BM	0.131
			80			3NA6824-4		1	3 units	1BM	0.131
			100			3NA6830-4		1	3 units	1BM	0.132
	00	30	80	400/--		3NA6824-4KK		1	3 units	1BM	0.194
			100			3NA6830-4KK		1	3 units	1BM	0.204
			125			3NA6832-4		1	3 units	1BM	0.202
			160			3NA6836-4		1	3 units	1BM	0.203
	1	30	35	400/--		3NA6114-4		1	3 units	1BM	0.288
			40			3NA6117-4		1	3 units	1BM	0.274
			50			3NA6120-4		1	3 units	1BM	0.277
			63			3NA6122-4		1	3 units	1BM	0.286
			80			3NA6124-4		1	3 units	1BM	0.275
			100			3NA6130-4		1	3 units	1BM	0.276
			125			3NA6132-4		1	3 units	1BM	0.286
			160			3NA6136-4		1	3 units	1BM	0.287
		47.2	200			3NA6140-4		1	3 units	1BM	0.443
			224			3NA6142-4		1	3 units	1BM	0.449
			250			3NA6144-4		1	3 units	1BM	0.450
	2	47.2	50	400/--		3NA6220-4		1	3 units	1BM	0.467
			63			3NA6222-4		1	3 units	1BM	0.455
			80			3NA6224-4		1	3 units	1BM	0.449
			100			3NA6230-4		1	3 units	1BM	0.458
			125			3NA6232-4		1	3 units	1BM	0.467
			160			3NA6236-4		1	3 units	1BM	0.465
			200			3NA6240-4		1	3 units	1BM	0.458
			224			3NA6242-4		1	3 units	1BM	0.459
			250			3NA6244-4		1	3 units	1BM	0.464
		57.8	300			3NA6250-4		1	3 units	1BM	0.659
			315			3NA6252-4		1	3 units	1BM	0.663
			355			3NA6254-4		1	3 units	1BM	0.658
			400			3NA6260-4		1	3 units	1BM	0.655

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	Size	Mounting width	I_n	U_n	DT	Non-insulated grip lugs Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Insulated grip lugs Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	A	V AC/ V DC											kg
	LV HRC fuse links with combination alarm, operational class gG														
	000	21	2	500/		3NA7802		1BM		3NA6802		1	3 units	1BM	0.131
			4	250		3NA7804		1BM		3NA6804		1	3 units	1BM	0.131
			6			3NA7801		1BM		3NA6801		1	3 units	1BM	0.131
			10			3NA7803		1BM		3NA6803		1	3 units	1BM	0.130
			16		▶	3NA7805		1BM	▶	3NA6805		1	3 units	1BM	0.128
			20		▶	3NA7807		1BM	▶	3NA6807		1	3 units	1BM	0.129
			25		▶	3NA7810		1BM	▶	3NA6810		1	3 units	1BM	0.132
			32			3NA7812		1BM		3NA6812		1	3 units	1BM	0.130
			35		▶	3NA7814		1BM	▶	3NA6814		1	3 units	1BM	0.131
			40			3NA7817		1BM		3NA6817		1	3 units	1BM	0.132
			50		▶	3NA7820		1BM	▶	3NA6820		1	3 units	1BM	0.131
			63		▶	3NA7822		1BM	▶	3NA6822		1	3 units	1BM	0.129
			80		▶	3NA7824		1BM	▶	3NA6824		1	3 units	1BM	0.131
			100		▶	3NA7830		1BM	▶	3NA6830		1	3 units	1BM	0.133
	00	30	80	500/		3NA7824-7		1BM		3NA6824-7		1	3 units	1BM	0.202
			100	250		3NA7830-7		1BM		3NA6830-7		1	3 units	1BM	0.206
			125		▶	3NA7832		1BM	▶	3NA6832		1	3 units	1BM	0.202
			160		▶	3NA7836		1BM		3NA6836		1	3 units	1BM	0.202
	1	30	16	500/		3NA7105		1BM		3NA6105		1	3 units	1BM	0.278
			20	440		3NA7107		1BM		3NA6107		1	3 units	1BM	0.288
			25			3NA7110		1BM		3NA6110		1	3 units	1BM	0.282
			35			3NA7114		1BM		3NA6114		1	3 units	1BM	0.289
			40			3NA7117		1BM		3NA6117		1	3 units	1BM	0.269
			50			3NA7120		1BM		3NA6120		1	3 units	1BM	0.294
			63			3NA7122		1BM		3NA6122		1	3 units	1BM	0.287
			80			3NA7124		1BM	▶	3NA6124		1	3 units	1BM	0.288
			100			3NA7130		1BM	▶	3NA6130		1	3 units	1BM	0.290
			125		▶	3NA7132		1BM	▶	3NA6132		1	3 units	1BM	0.289
			160		▶	3NA7136		1BM	▶	3NA6136		1	3 units	1BM	0.287
		47.2	200		▶	3NA7140		1BM	▶	3NA6140		1	3 units	1BM	0.447
			224			3NA7142		1BM		3NA6142		1	3 units	1BM	0.443
			250		▶	3NA7144		1BM	▶	3NA6144		1	3 units	1BM	0.450
	2	47.2	35	500/		3NA7214		1BM		3NA6214		1	3 units	1BM	0.463
			50	440		3NA7220		1BM		3NA6220		1	3 units	1BM	0.463
			63			3NA7222		1BM		3NA6222		1	3 units	1BM	0.465
			80			3NA7224		1BM		3NA6224		1	3 units	1BM	0.459
			100			3NA7230		1BM		3NA6230		1	3 units	1BM	0.462
			125			3NA7232		1BM		3NA6232		1	3 units	1BM	0.463
			160		▶	3NA7236		1BM	▶	3NA6236		1	3 units	1BM	0.464
			200		▶	3NA7240		1BM	▶	3NA6240		1	3 units	1BM	0.463
			224			3NA7242		1BM		3NA6242		1	3 units	1BM	0.464
			250		▶	3NA7244		1BM	▶	3NA6244		1	3 units	1BM	0.463
		57.8	300			--				3NA6250		1	3 units	1BM	0.658
			315		▶	3NA7252		1BM	▶	3NA6252		1	3 units	1BM	0.658
			355			--				3NA6254		1	3 units	1BM	0.664
			400		▶	3NA7260		1BM	▶	3NA6260		1	3 units	1BM	0.661

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LV HRC fuse links

	Size	Mounting width	I_n	U_n	DT	Non-insulated grip lugs Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	A	V AC/V DC							kg
	LV HRC fuse links with front indicator, operational class gG										
	000	21	2	500/250	▶	3NA3802		1	3 units	1BM	0.127
			4		▶	3NA3804		1	3 units	1BM	0.130
			6		▶	3NA3801		1	3 units	1BM	0.131
			10		▶	3NA3803		1	3 units	1BM	0.130
			16		▶	3NA3805		1	3 units	1BM	0.131
			20		▶	3NA3807		1	3 units	1BM	0.130
			25		▶	3NA3810		1	3 units	1BM	0.130
			32		▶	3NA3812		1	3 units	1BM	0.130
			35		▶	3NA3814		1	3/90 units	1BM	0.131
			40		▶	3NA3817		1	3 units	1BM	0.130
			50		▶	3NA3820		1	3/90 units	1BM	0.131
			63		▶	3NA3822		1	3/90 units	1BM	0.131
			80		▶	3NA3824		1	3/90 units	1BM	0.130
			100		▶	3NA3830		1	3/90 units	1BM	0.131
			125	400/250	▶	3NA3832-8		1	3/60 units	1BM	0.126
			160		▶	3NA3836-8		1	3/60 units	1BM	0.125
	00	30	35	500/250		3NA3814-7		1	3 units	1BM	0.203
			50			3NA3820-7		1	3 units	1BM	0.204
			63			3NA3822-7		1	3 units	1BM	0.195
			80			3NA3824-7		1	3 units	1BM	0.205
			100			3NA3830-7		1	3 units	1BM	0.201
			125		▶	3NA3832		1	3 units	1BM	0.206
			160		▶	3NA3836		1	3 units	1BM	0.207
	0	30	6	500/440		3NA3001		1	3 units	1BM	0.268
			10			3NA3003		1	3 units	1BM	0.274
			16			3NA3005		1	3 units	1BM	0.262
			20			3NA3007		1	3 units	1BM	0.270
			25			3NA3010		1	3 units	1BM	0.255
			32			3NA3012		1	3 units	1BM	0.272
			35			3NA3014		1	3 units	1BM	0.270
			40			3NA3017		1	3 units	1BM	0.275
			50			3NA3020		1	3 units	1BM	0.273
			63			3NA3022		1	3 units	1BM	0.270
			80			3NA3024		1	3 units	1BM	0.265
			100			3NA3030		1	3 units	1BM	0.242
			125			3NA3032		1	3 units	1BM	0.270
			160			3NA3036		1	3 units	1BM	0.272
	1	30	16	500/440		3NA3105		1	3 units	1BM	0.264
			20			3NA3107		1	3 units	1BM	0.283
			25			3NA3110		1	3 units	1BM	0.281
			35			3NA3114		1	3 units	1BM	0.287
			40			3NA3117		1	3 units	1BM	0.270
			50			3NA3120		1	3 units	1BM	0.285
			63		▶	3NA3122		1	3 units	1BM	0.290
			80		▶	3NA3124		1	3 units	1BM	0.278
			100		▶	3NA3130		1	3 units	1BM	0.278
			125		▶	3NA3132		1	3 units	1BM	0.287
			160		▶	3NA3136		1	3 units	1BM	0.283
		47.2	200		▶	3NA3140		1	3 units	1BM	0.446
			224			3NA3142		1	3 units	1BM	0.448
			250		▶	3NA3144		1	3 units	1BM	0.449

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	Size	Mounting width	I_n	U_n	DT	Non-insulated grip lugs Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	A	V AC/V DC							kg
	LV HRC fuse links with front indicator, operational class gG										
	2	47.2	35	500/440		3NA3214		1	3 units	1BM	0.462
			50			3NA3220		1	3 units	1BM	0.462
			63			3NA3222		1	3 units	1BM	0.449
			80			3NA3224		1	3 units	1BM	0.462
			100			3NA3230		1	3 units	1BM	0.464
			125			3NA3232		1	3 units	1BM	0.462
			160		►	3NA3236		1	3 units	1BM	0.465
			200		►	3NA3240		1	3 units	1BM	0.465
			224		►	3NA3242		1	3 units	1BM	0.460
			250		►	3NA3244		1	3 units	1BM	0.467
		57.8	300			3NA3250		1	3 units	1BM	0.655
			315		►	3NA3252		1	3 units	1BM	0.664
			355		►	3NA3254		1	3 units	1BM	0.665
			400		►	3NA3260		1	3 units	1BM	0.667
	3	57.8	200	500/440		3NA3340		1	3 units	1BM	0.654
			224			3NA3342		1	3 units	1BM	0.651
			250			3NA3344		1	3 units	1BM	0.656
			300			3NA3350		1	3 units	1BM	0.657
			315		►	3NA3352		1	3 units	1BM	0.657
			355			3NA3354		1	3 units	1BM	0.658
			400		►	3NA3360		1	3 units	1BM	0.660
		71.2	425			3NA3362		1	3 units	1BM	0.941
			500		►	3NA3365		1	3 units	1BM	0.942
			630		►	3NA3372		1	3 units	1BM	0.939
	Can only be used for 3NH3530 LV HRC fuse base										
	4 (IEC design)	101.8	630	500/440		3NA3472		1	1 unit	1BM	2.546
			800			3NA3475		1	1 unit	1BM	2.609
			1000			3NA3480		1	1 unit	1BM	2.647
			1250			3NA3482		1	1 unit	1BM	2.577
	Only for LV HRC base 3NH7520 or usable for fuse switch disconnectors with in-line design 3NJ5643-0BB00										
	4a	101.8	500	500/440		3NA3665		1	1 unit	1BM	2.604
			630			3NA3672		1	1 unit	1BM	2.674
			800			3NA3675		1	1 unit	1BM	2.661
			1000			3NA3680		1	1 unit	1BM	2.646
			1250			3NA3682		1	1 unit	1BM	2.659

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LV HRC fuse links

	Size	Mounting width	I_n	U_n	DT	Non-insulated grip lugs Article No. www.siemens.com/product?Article No.	Price per PU	PG	DT	Insulated grip lugs Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	A	V AC/ V DC											kg
	LV HRC fuse links with combination alarm, operational class gG														
	000	21	2	690[1]/		3NA7802-6		1BM		3NA6802-6		1	3 units	1BM	0.123
			4	250		3NA7804-6		1BM		3NA6804-6		1	3 units	1BM	0.132
			6			3NA7801-6		1BM		3NA6801-6		1	3 units	1BM	0.121
			10			3NA7803-6		1BM		3NA6803-6		1	3 units	1BM	0.133
			16			3NA7805-6		1BM		3NA6805-6		1	3 units	1BM	0.131
			20			3NA7807-6		1BM		3NA6807-6		1	3 units	1BM	0.127
			25			3NA7810-6		1BM		3NA6810-6		1	3 units	1BM	0.130
			32			3NA7812-6		1BM		3NA6812-6		1	3 units	1BM	0.127
			35			3NA7814-6		1BM		3NA6814-6		1	3 units	1BM	0.132
			40		▶	3NA7817-6KJ		1BM	▶	3NA6817-6KJ		1	3 units	1BM	0.131
			50		▶	3NA7820-6KJ		1BM	▶	3NA6820-6KJ		1	3 units	1BM	0.131
	00	30	40	690[1]/		3NA7817-6		1BM		3NA6817-6		1	3 units	1BM	0.188
			50	250		3NA7820-6		1BM		3NA6820-6		1	3 units	1BM	0.199
			63			3NA7822-6		1BM		3NA6822-6		1	3 units	1BM	0.202
			80			3NA7824-6		1BM		3NA6824-6		1	3 units	1BM	0.200
			100			3NA7830-6		1BM		3NA6830-6		1	3 units	1BM	0.194
	1	30	50	690[1]/		3NA7120-6		1BM		3NA6120-6		1	3 units	1BM	0.285
			63	440		3NA7122-6		1BM		3NA6122-6		1	3 units	1BM	0.284
			80			3NA7124-6		1BM		3NA6124-6		1	3 units	1BM	0.288
			100			3NA7130-6		1BM		3NA6130-6		1	3 units	1BM	0.286
			125			3NA7132-6		1BM		3NA6132-6		1	3 units	1BM	0.285
			160			3NA7136-6		1BM		3NA6136-6		1	3 units	1BM	0.288
		47.2	200			3NA7140-6		1BM		3NA6140-6		1	3 units	1BM	0.448
	2	47.2	80	690[1]/		3NA7224-6		1BM		3NA6224-6		1	3 units	1BM	0.440
			100	440		3NA7230-6		1BM		3NA6230-6		1	3 units	1BM	0.209
			125			3NA7232-6		1BM		3NA6232-6		1	3 units	1BM	0.438
			160			3NA7236-6		1BM		3NA6236-6		1	3 units	1BM	0.457
			200			3NA7240-6		1BM		3NA6240-6		1	3 units	1BM	0.461
		57.8	224			3NA7242-6		1BM		3NA6242-6		1	3 units	1BM	0.655
			250			3NA7244-6		1BM		3NA6244-6		1	3 units	1BM	0.647
			300			3NA7250-6		1BM		3NA6250-6		1	3 units	1BM	0.655
			315			3NA7252-6		1BM		3NA6252-6		1	3 units	1BM	0.658

[1] Manufacturer's confirmation for 690 V +10 % rated voltage available on request.

* You can order this quantity or a multiple thereof.

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	Size	Mounting width	I_n	U_n	DT	Non-insulated grip lugs Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	A	V AC/V DC							kg
	LV HRC fuse links with front indicator, operational class gG										
	000	21	2	690[1]/250	▶	3NA3802-6		1	3 units	1BM	0.128
			4		▶	3NA3804-6		1	3 units	1BM	0.129
			6		▶	3NA3801-6		1	3 units	1BM	0.131
			10		▶	3NA3803-6		1	3 units	1BM	0.132
			16		▶	3NA3805-6		1	3 units	1BM	0.130
			20		▶	3NA3807-6		1	3 units	1BM	0.131
			25		▶	3NA3810-6		1	3 units	1BM	0.132
			32			3NA3812-6		1	3 units	1BM	0.111
			35		▶	3NA3814-6		1	3 units	1BM	0.131
			40		▶	3NA3817-6KJ		1	3 units	1BM	0.131
			50		▶	3NA3820-6KJ		1	3 units	1BM	0.131
	00	30	40	690[1]/250		3NA3817-6		1	3 units	1BM	0.177
			50		▶	3NA3820-6		1	3 units	1BM	0.207
			63		▶	3NA3822-6		1	3 units	1BM	0.205
			80		▶	3NA3824-6		1	3 units	1BM	0.204
			100		▶	3NA3830-6		1	3 units	1BM	0.203
	1	30	50	690[1]/440		3NA3120-6		1	3 units	1BM	0.279
			63			3NA3122-6		1	3 units	1BM	0.289
			80			3NA3124-6		1	3 units	1BM	0.275
			100		▶	3NA3130-6		1	3 units	1BM	0.291
			125		▶	3NA3132-6		1	3 units	1BM	0.272
			160		▶	3NA3136-6		1	3 units	1BM	0.290
		47.2	200		▶	3NA3140-6		1	3 units	1BM	0.445
	2	47.2	80	690[1]/440		3NA3224-6		1	3 units	1BM	0.456
			100			3NA3230-6		1	3 units	1BM	0.468
			125			3NA3232-6		1	3 units	1BM	0.456
			160		▶	3NA3236-6		1	3 units	1BM	0.463
			200		▶	3NA3240-6		1	3 units	1BM	0.470
		57.8	224			3NA3242-6		1	3 units	1BM	0.615
			250		▶	3NA3244-6		1	3 units	1BM	0.655
			300			3NA3250-6		1	3 units	1BM	0.657
			315		▶	3NA3252-6		1	3 units	1BM	0.657
	3	57.8	250	690[1]/440		3NA3344-6		1	3 units	1BM	0.643
			315			3NA3352-6		1	3 units	1BM	0.651
		71.2	355			3NA3354-6		1	3 units	1BM	1.037
			400		▶	3NA3360-6		1	3 units	1BM	1.038
			425			3NA3362-6		1	3 units	1BM	1.048
			500		▶	3NA3365-6		1	3 units	1BM	0.982

[1] Manufacturer's confirmation for 690 V +10 % rated voltage available on request.

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LV HRC fuse links

	Size	Mounting width	I_n	U_n	DT	Non-insulated grip lugs Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	A	V AC/V DC							kg
	LV HRC fuse links with front indicator, operational class aM										
	000	21	6	500/--		3ND1801		1	3 units	1BM	0.130
			10			3ND1803		1	3 units	1BM	0.119
			16			3ND1805		1	3 units	1BM	0.127
			20			3ND1807		1	3 units	1BM	0.131
			25			3ND1810		1	3 units	1BM	0.125
			32			3ND1812		1	3 units	1BM	0.131
			35			3ND1814		1	3 units	1BM	0.131
			40			3ND1817		1	3 units	1BM	0.131
			50			3ND1820		1	3 units	1BM	0.128
			63			3ND1822		1	3 units	1BM	0.111
			80			3ND1824		1	3 units	1BM	0.131
			100		►	3ND1830-8		1	3 units	1BM	0.132
	00	30	100	500/--		3ND1830		1	3 units	1BM	0.183
			125			3ND1832		1	3 units	1BM	0.204
			160			3ND1836		1	3 units	1BM	0.200
	1	30	63	690/--		3ND2122		1	3 units	1BM	0.281
			80			3ND2124		1	3 units	1BM	0.291
			100			3ND2130		1	3 units	1BM	0.286
		47.2	125			3ND2132		1	3 units	1BM	0.449
			160			3ND2136		1	3 units	1BM	0.447
			200			3ND2140		1	3 units	1BM	0.447
			250			3ND2144		1	3 units	1BM	0.409
	2	47.2	125	690/--		3ND2232		1	3 units	1BM	0.465
			160			3ND2236		1	3 units	1BM	0.464
			200			3ND2240		1	3 units	1BM	0.467
			250			3ND2244		1	3 units	1BM	0.416
		57.8	315			3ND2252		1	3 units	1BM	0.661
			355			3ND2254		1	3 units	1BM	0.663
			400			3ND2260		1	3 units	1BM	0.655
	3	57.8	315	690/--		3ND2352		1	3 units	1BM	0.597
			355			3ND2354		1	3 units	1BM	0.662
			400			3ND2360		1	3 units	1BM	0.659
		71.2	500			3ND1365		1	3 units	1BM	1.038
			630			3ND1372		1	3 units	1BM	1.036

* You can order this quantity or a multiple thereof.

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Overview

LV HRC signal detectors are used for remotely indicating that the LV HRC fuse links have been tripped. Three different solutions are available:

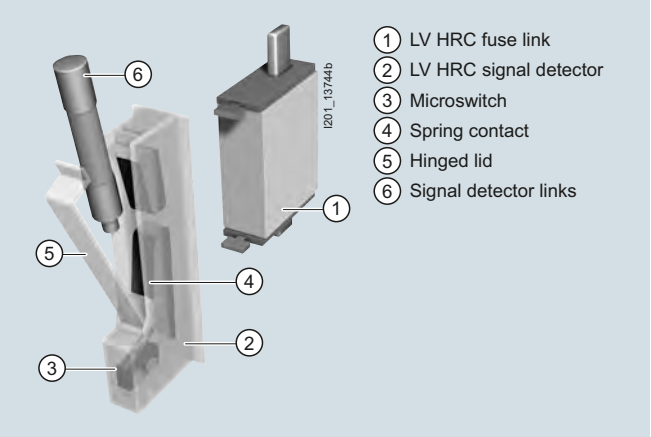
- 3NX1021 signal detectors with signal detector link
  The LV HRC signal detectors with signal detector link support monitoring of LV HRC fuse links with non-insulated grip lugs of sizes 000 to 4 at 10 A or more. The signal detector link is connected in parallel to the LV HRC fuse link. In the event of a fault, the LV HRC fuse links are released simultaneously with the LV HRC fuse detector link. A trip pin switches a floating microswitch.
- 3NX1024 signal detector top
  The signal detector top can be used with LV HRC fuse links, sizes 000, 00, 1 and 2, which are equipped with non-insulated grip lugs and have a front indicator or combination alarm. It is simply plugged into the grip lugs.
- 5TT3170 fuse monitor
  If a fuse is tripped, the front indicator springs open and switches a floating microswitch. This solution should not be used for safety-relevant systems. For this purpose, we recommend our electronic fuse monitors.

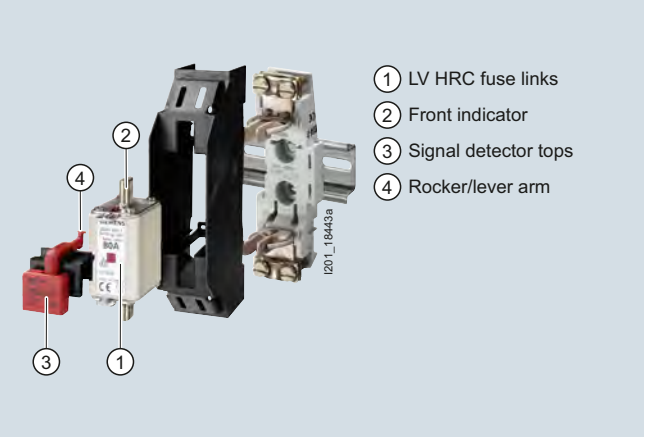
Benefits

Uniform solution for all sizes

LV HRC signal detectors reliably indicate when a fuse has tripped. Tripped fuses are quickly located. This saves time and increases system availability.

The LV HRC signal detector top is a cost-effective solution for the monitoring of Siemens LV HRC fuse links of sizes 000, 00, 1 and 2.





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LV HRC signal detectors

Selection and ordering data

		Size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
									kg
	LV HRC signal detectors Only for SIEMENS 3NA3, 3NA7, 3ND LV HRC fuse links with non-insulated grip lugs • Rated voltage up to 690 V AC/600 V DC • Contact: Microswitches 250 V AC, 6 A • Connection: Flat termination 2.3 mm	000 ... 4		3NX1021		1	1 unit	1BM	0.040
	Signal detector links • Rated voltage up to 690 V AC/600 V DC								
	Response value > 9 V; 2.5 A; for standard applications	000 ... 4		3NX1022		1	3 units	1BM	0.018
	Response value > 2 V; 7 A; only for meshed networks			3NX1023		1	3 units	1BM	0.018
	Signal detector tops Only for SIEMENS 3NA3, 3NA7, 3ND LV HRC fuse links with non-insulated grip lugs • Rated voltage up to 690 V AC/600 V DC • Contact: Microswitch 230 V AC, 5 A, 1 CO • Connection: Flat termination 2.3 mm	000, 00, 1, 2	►	3NX1024		1	1 unit	1BM	0.027

	U_e	I_n	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V AC	A	V	MW							kg
	Fuse monitors For all low-voltage fuse systems. Can be used in asymmetric systems afflicted with harmonics and regenerative feedback motors. Signal also for disconnected loads.										
	230	4	380 ... 415 3 AC	2	►	5TT3170		1	1 unit	1BK	0.149

For more information on fuse monitors, see chapter "Monitoring Devices" —> "Monitoring devices for electrical values", see page 12/9.

* You can order this quantity or a multiple thereof.

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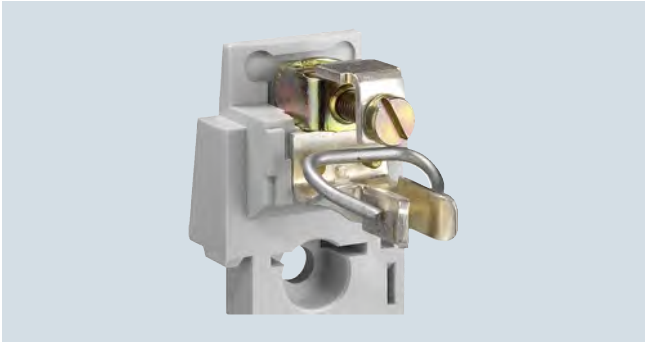
Overview

Terminals for all applications

Flat terminals with screws are suitable for connecting busbars or cable lugs. They have a torsion-proof screw connection with shim, spring washer and nut. When tightening the nut, always ensure compliance with the specified torque due to the considerable leverage effect.

The double busbar terminal differs from the flat terminal in that it supports connection of two busbars, one on the top and one at the bottom of the flat terminal.



The modern box terminal ensures efficient and reliable connection to the conductors. They support connection of conductors with or without end sleeves.

With the flat terminal with nut, terminal lug of the nut is torsion-proof. When tightening the nut, the torque must be observed because of the considerable leverage effect.

Up to three conductors can be clamped to the terminal strip.

The plug-in terminal is equipped for connecting two conductors.

One conductor can be clamped to the saddle-type terminal.

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Benefits

- The silver-plated Lyra contact provides a large contact area for the pin of the LV HRC fuse link. This improves heat transmission and lowers the temperature. It also minimizes ageing of the fuse link in the maximum load range, in particular when using SITOR semiconductor fuses
- The large contact area also facilitates replacement of LV HRC fuse links
- The spring washer tensioning the contact is mechanically galvanized. This will prevent hydrogen embrittlement. The contact is resistant to aging and there will be no dreaded annealing of contacts, which considerably improves operating safety

Technical specifications

		LV HRC fuse bases, LV HRC bus-mounting bases					
Size		**000/00**	**0**	**1**	**2**	**3**	**4**
Standards		IEC 60269-1, -2; EN 60269-1; DIN VDE 0636-2, UL 4248-1 (only downstream from the branch protection)					
Approvals		KEMA, UL File No: E171267-IZLT2					
Rated current I_n	A	160	160	250	400	630	1250
Rated voltage U_n	V AC	690[1)]	690[1)]				690
	V DC	250	440				440
Rated short-circuit strength	kA AC	120					
	kA DC	25					
Max. power dissipation of fuse links	W	12	25	32	45	60	90
Flat terminal							
Screw		M8		M10		M12	
Nut		M8	--				
Max. tightening torque	Nm	14		38			65
Plug-in terminal							
Conductor cross-section	mm^2	2.5 ... 50		--			
Saddle-type terminal							
Conductor cross-section	mm^2	6 ... 70	--				
Box terminal							
Conductor cross-section	mm^2	2.5 ... 50					
Terminal strips							
Conductor cross-section, 3-wire	mm^2	1.5 ... 16	--				
Max. torque for attachment of LV HRC fuse base	Nm	2		2.5			--

[1)] Extended rated voltage up to 1000 V (except LV HRC bus-mounting bases).

		LV HRC fuse bases with swivel mechanism			
Size		**000/00**	**1**	**3**	**4a**
Rated voltage U_n	V AC	690			
	V DC	440			
Max. power dissipation of fuse links	W	12	32	48	110
Flat terminal					
Screw		M8	M10	M12	M16
Nut		M8	--		
Max. tightening torque	Nm	14	38		65

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Selection and ordering data

	Size	I_n	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A								kg
	LV HRC fuse bases									
	Made of molded plastic, for standard rail mounting or screw fixing									
	000/00		1P							
		160	With flat terminals, screw	►	**3NH3051**		1	1/10 units	1BM	0.140
		125	With box terminals, up to 50 mm^2	►	**3NH3053**		1	1/10 units	1BM	0.120
	Made of ceramic for screw fixing									
	000/00	160	1P							
			With flat terminals, screw	►	**3NH3030**		1	3 units	1BM	0.218
			With plug-in terminals		**3NH3031**		1	3 units	1BM	0.271
			With saddle-type terminals	►	**3NH3032**		1	3 units	1BM	0.219
			3P (incl. two partitions)							
			With flat terminals	►	**3NH4030**		1	1 unit	1BM	0.709
			With saddle-type terminals		**3NH4032**		1	1 unit	1BM	0.721
	Made of ceramic for screw fixing									
	0	160	1P							
			With flat terminals		**3NH3120**		1	3 units	1BM	0.423
	Made of ceramic for screw fixing									
	1	250	1P							
			With flat terminals	►	**3NH3230**		1	3 units	1BM	0.761
			With double busbar terminals		**3NH3220**		1	3 units	1BM	0.771
	Ceramic supports on base plate for screw fixing									
	1	250	3P (incl. two partitions)							
			With flat terminals		**3NH4230**		1	1 unit	1BM	2.069
	Made of ceramic for screw fixing									
	2	400	1P							
			With flat terminals	►	**3NH3330**		1	1 unit	1BM	0.803
			With double busbar terminals		**3NH3320**		1	1 unit	1BM	0.818
	Made of ceramic for screw fixing									
	3	630	1P							
			With flat terminals	►	**3NH3430**		1	1 unit	1BM	1.072
			With double busbar terminals		**3NH3420**		1	1 unit	1BM	1.091

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LV HRC fuse bases and accessories

	Size	I_n	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A								kg
	LV HRC fuse bases									
	Ceramic supports on base plate for screw fixing (IEC design)									
	4	1250	1P With flat terminals		**3NH3530**		1	1 unit	1BM	3.259
	LV HRC fuse bases with swivel mechanism With flat terminals[1)]									
	000/00	160	1P With screw fixing for mounting plate		**3NH7030**		1	1 unit	1BM	0.412
	1	250	1P With screw fixing for mounting plate		**3NH7230**		1	1 unit	1BM	1.091
	Can also be used for fuse links of size 2									
	3	630	1P With screw fixing for mounting plate		**3NH7330**		1	1 unit	1BM	2.075

1) Size 000/00 with additionally enclosed saddle-type terminals

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	Size	I_n A	Version		Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	LV HRC fuse bases with swivel mechanism									
	4a	1250	1P With screw fixing for mounting plate		**3NH7520**		1	1 unit	1BM	5.171
	LV HRC protective covers for LV HRC fuse bases									
	As touch protection for contact pieces									
	000/00			►	**3NX3105**		1	2/20 units	1BM	0.016
	0				**3NX3114**		1	2/40 units	1BM	0.001
	1			►	**3NX3106**		1	2/20 units	1BM	0.022
	2			►	**3NX3107**		1	2/12 units	1BM	0.024
	3			►	**3NX3108**		1	2/10 units	1BM	0.029
	LV HRC partitions for LV HRC fuse bases									
	As intermediate phase and end barrier									
			Type							
	000/00		3NH30/3NH40	►	**3NX2023**		1	2 units	1BM	0.024
	0		3NH31		**3NX2030**		1	2 units	1BM	0.039
	1		3NH32	►	**3NX2024**		1	2 units	1BM	0.051
	2		3NH33	►	**3NX2025**		1	2 units	1BM	0.066
	3		3NH34	►	**3NX2026**		1	2 units	1BM	0.074
	LV HRC protective covers									
	000/00		1P and 3P		**3NX3115**		1	10 units	1BM	0.052
	000/00		When using fuse links with non-insulated grip lugs		**3NX3116**		1	10 units	1BM	0.022

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LV HRC fuse bases and accessories

	Size	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Fuse base covers								
	For LV HRC fuse bases, red, with inscription "Isolating point"								
	000/00			3NX1003		1	3 units	1BM	0.037
	1, 2, 3			3NX1004		1	3 units	1BM	0.089
	Fuse pullers								
	000 ... 3	For LV HRC fuse links							
		Without sleeve	►	3NX1013		1	1 unit	1BM	0.309
		With sleeve	►	3NX1014		1	1 unit	1BM	0.558
	Isolating blades For LV HRC fuse bases and fuse switch disconnectors								
	With insulated grip lugs								
	000/00	Silver-plated	►	3NG1002		1	3/30 units	1BM	0.076
	0			3NG1102		1	1/10 units	1BM	0.111
	1		►	3NG1202		1	1/10 units	1BM	0.169
	2		►	3NG1302		1	1/5 units	1BM	0.229
	3		►	3NG1402		1	1/5 units	1BM	0.267
	With non-insulated grip lugs								
	4	Tinned		3NG1503		1	3 units	1BM	0.689
	4a	Nickel-plated		3NG1505		1	1/5 units	1BM	0.721

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SITOR semiconductor fuses for 3NH bases: Assignment table

3NH bases are generally suitable for all LV HRC type fuses. LV HRC type fuses for SITOR semiconductor protection can also be used, although it must be noted that, compared to cable and line protection fuses, these get much hotter during operation. The following table contains the permissible load currents of the SITOR semiconductor fuses for installation in 3NH.

For installation in a base, it may therefore be necessary to operate the fuse under I_n (derating).

The values were determined using the conductor cross-sections specified in the table. If using smaller cross-sections, a considerably higher derating is required due to the lower heat dissipation.

SITOR semiconductor fuse data						**Permissible load currents of fuse when installed in: 3NH**		
Type[1]	Rated current I_n	Rated voltage U_n	Operational class	Size	Required conductor cross-section	Type	Size	Permissible load current[2]
--	A	V AC	--	--	mm² Cu	--	--	A
3NC2423-0C/3C	150	500	gR	3	70	3NH3430/20	3	150
3NC2425-0C/3C	200	500	gR	3	95	3NH3430/20	3	190
3NC2427-0C/3C	250	500	gR	3	120	3NH3430/20	3	240
3NC2428-0C/3C	300	500	gR	3	185	3NH3430/20	3	285
3NC2431-0C/3C	350	500	gR	3	240	3NH3430/20	3	330
3NC2432-0C/3C	400	500	aR	3	240	3NH3430/20	3	400
3NC3336-1U	630	1000	aR	3	2 x (40 x 5)	3NH3430/20	3	560
3NC3337-1U	710	1000	aR	3	2 x (50 x 5)	3NH3430/20	3	600
3NC3338-1U	800	1000	aR	3	2 x (40 x 8)	3NH3430/20	3	660
3NC3340-1U	900	1000	aR	3	2 x (40 x 8)	3NH3430/20	3	750
3NC3341-1U	1000	1000	aR	3	2 x (50 x 8)	3NH3430/20	3	850
3NC3342-1U	1100	800	aR	3	2 x (50 x 8)	3NH3430/20	3	900
3NC3343-1U	1250	800	aR	3	2 x (50 x 8)	3NH3430/20	3	950
3NC3430-1U	315	1250	aR	3	2 x 95	3NH3430/20	3	310
3NC3432-1U	400	1250	aR	3	2 x 120	3NH3430/20	3	390
3NC3434-1U	500	1250	aR	3	2 x 150	3NH3430/20	3	460
3NC3436-1U	630	1250	aR	3	2 x (40 x 5)	3NH3430/20	3	560
3NC3438-1U	800	1100	aR	3	2 x (40 x 8)	3NH3430/20	3	690
3NC8423-0C/3C	150	690	gR	3	70	3NH3430/20	3	135
3NC8425-0C/3C	200	690	gR	3	95	3NH3430/20	3	180
3NC8427-0C/3C	250	690	gR	3	120	3NH3430/20	3	250
3NC8431-0C/3C	350	690	gR	3	240	3NH3430/20	3	315
3NC8434-0C/3C	500	690	gR	3	2 x 150	3NH3430/20	3	450
3NC8444-3C	1000	600	aR	3	2 x (60 x 6)	3NH3430/20	3	800
3NE1020-2	80	690	gR	00	25	3NH3030/4030	00	80
3NE1021-0	100	690	gS	00	35	3NH3030/4030	00	100
3NE1021-2	100	690	gR	00	35	3NH3030/4030	00	100
3NE1022-0	125	690	gS	00	50	3NH3030/4030	00	125
3NE1022-2	125	690	gR	00	50	3NH3030/4030	00	125
3NE1224-0	160	690	gS	1	70	3NH3230/4230	1	160
3NE1224-2/-3	160	690	gR	1	70	3NH3230/4230	1	160
3NE1225-0	200	690	gS	1	95	3NH3230/4230	1	200
3NE1225-2/-3	200	690	gR	1	95	3NH3230/4230	1	200/190
3NE1227-0	250	690	gS	1	120	3NH3230/4230	1	250
3NE1227-2/-3	250	690	gR	1	120	3NH3230/4230	1	250/235
3NE1230-0	315	690	gS	1	2 x 70	3NH3330/20	2	315
3NE1230-2/-3	315	690	gR	1	2 x 70	3NH3330/20	2	315
3NE1331-0	350	690	gS	2	2 x 95	3NH3330/20	2	350
3NE1331-2/-3	350	690	gR	2	2 x 95	3NH3330/20	2	350
3NE1332-0	400	690	gS	2	2 x 95	3NH3330/20	2	400
3NE1332-2/-3	400	690	gR	2	2 x 95	3NH3330/20	2	400
3NE1333-0	450	690	gS	2	2 x 120	3NH3430/20	3	450
3NE1333-2/-3	450	690	gR	2	2 x 120	3NH3430/20	3	450
3NE1334-0	500	690	gS	2	2 x 120	3NH3430/20	3	500
3NE1334-2/-3	500	690	gR	2	2 x 120	3NH3430/20	3	500
3NE1435-0	560	690	gS	3	2 x 150	3NH3430/20	3	560
3NE1435-2/-3	560	690	gR	3	2 x 150	3NH3430/20	3	560
3NE1436-0	630	690	gS	3	2 x 185	3NH3430/20	3	630
3NE1436-2/-3	630	690	gR	3	2 x 185	3NH3430/20	3	630
3NE1437-0	710	690	gS	3	2 x (40 x 5)	3NH3430/20	3	710
3NE1437-1	710	600	gR	3	2 x (40 x 5)	3NH3430/20	3	690
3NE1437-2/-3	710	690	gR	3	2 x (40 x 5)	3NH3430/20	3	710
3NE1438-0	800	690	gS	3	2 x (50 x 5)	3NH3430/20	3	800
3NE1438-1	800	600	gR	3	2 x (50 x 5)	3NH3430/20	3	750
3NE1438-2/-3	800	690	gR	3	2 x (50 x 5)	3NH3430/20	3	800
3NE1447-2/-3	670	690	gR	3	2 x (40 x 5)	3NH3430/20	3	670
3NE1448-2/-3	850	690	gR	3	2 x (40 x 8)	3NH3430/20	3	850
3NE1802-0	40	690	gS	000	10	3NH3030/4030	00	40
3NE1803-0	35	690	gS	000	6	3NH3030/4030	00	35
3NE1813-0	16	690	gS	000	1.5	3NH3030/4030	00	16
3NE1814-0	20	690	gS	000	2.5	3NH3030/4030	00	20

[1] For permissible load currents for 3NE8…-0MK, see Configuration Manual "Fuse Systems" or on request.

[2] In the case of cyclic loads, the currents may have to be further reduced (precise values on request).

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LV HRC fuse bases and accessories

SITOR semiconductor fuse data						Permissible load currents of fuse when installed in: 3NH		
Type[1]	Rated current I_n	Rated voltage U_n	Operational class	Size	Required conductor cross-section	Type	Size	Permissible load current[2]
--	A	V AC	--	--	mm² Cu	--	--	A
3NE1815-0	25	690	gS	000	4	3NH3030/4030	00	25
3NE1817-0	50	690	gS	000	10	3NH3030/4030	00	50
3NE1818-0	63	690	gS	000	16	3NH3030/4030	00	63
3NE1820-0	80	690	gS	000	25	3NH3030/4030	00	80
3NE3221	100	1000	aR	1	35	3NH3230/4230	1	100
3NE3222	125	1000	aR	1	50	3NH3230/4230	1	125
3NE3224	160	1000	aR	1	70	3NH3230/4230	1	160
3NE3225	200	1000	aR	1	95	3NH3230/4230	1	200
3NE3227	250	1000	aR	1	120	3NH3230/4230	1	250
3NE3230-0B	315	1000	aR	1	185	3NH3330/20	2	305
3NE3231	350	1000	aR	1	240	3NH3330/20	2	335
3NE3232-0B	400	1000	aR	1	240	3NH3330/20	2	380
3NE3233	450	1000	aR	1	2 x 150	3NH3330/20	2	425
3NE3332-0B	400	1000	aR	2	240	3NH3430/20	3	400
3NE3333	450	1000	aR	2	2 x 150	3NH3430/20	3	450
3NE3334-0B	500	1000	aR	2	2 x 150	3NH3430/20	3	500
3NE3335	560	1000	aR	2	2 x 185	3NH3430/20	3	560
3NE3336	630	1000	aR	2	2 x 185	3NH3430/20	3	630
3NE3337-8	710	900	aR	2	2 x (40 x 5)	3NH3430/20	3	680
3NE3338-8	800	800	aR	2	2 x 240	3NH3430/20	3	700
3NE3340-8	900	690	aR	2	2 x (40 x 8)	3NH3430/20	3	750
3NE4101	32	1000	gR	0	6	3NH3120/4230	0/1	32
3NE4102	40	1000	gR	0	10	3NH3120/4230	0/1	40
3NE4117	50	1000	gR	0	10	3NH3120/4230	0/1	50
3NE4118	63	1000	aR	0	16	3NH3120/4230	0/1	63
3NE4120	80	1000	aR	0	25	3NH3120/4230	0/1	80
3NE4121	100	1000	aR	0	35	3NH3120/4230	0/1	100
3NE4122	125	1000	aR	0	50	3NH3120/4230	0/1	125
3NE4124	160	1000	aR	0	70	3NH3120/4230	0/1	160
3NE4327-0B	250	800	aR	2	150	3NH3330/20	2	240
3NE4330-0B	315	800	aR	2	240	3NH3330/20	2	300
3NE4333-0B	450	800	aR	2	2 x (30 x 5)	3NH3430/20	3	425
3NE4334-0B	500	800	aR	2	2 x (30 x 5)	3NH3430/20	3	475
3NE4337	710	800	aR	2	2 x (50 x 5)	3NH3430/20	3	630
3NE8015-1	25	690	gR	00	4	3NH3030/4030	00	25
3NE8003-1	35	690	gR	00	6	3NH3030/4030	00	35
3NE8017-1	50	690	gR	00	10	3NH3030/4030	00	50
3NE8018-1	63	690	gR	00	16	3NH3030/4030	00	63
3NE8020-1	80	690	aR	00	25	3NH3030/4030	00	80
3NE8021-1	100	690	aR	00	35	3NH3030/4030	00	100
3NE8022-1	125	690	aR	00	50	3NH3030/4030	00	125
3NE8024-1	160	690	aR	00	70	3NH3030/4030	00	160

[1] For permissible load currents for 3NE8…-0MK, see Configuration Manual "Fuse Systems" or on request.

[2] In the case of cyclic loads, the currents may have to be further reduced (precise values on request).

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Overview

SITOR semiconductor fuses protect power semiconductors from the effects of short circuits because the super quick-response disconnect characteristic is far quicker than with conventional LV HRC fuses. They protect high-quality devices and system components, such as converters with fuses in the input and the DC link, UPS systems and soft starters for motors.

Panel mounting requirements have given rise to various connection versions and designs.

The fuses with blade contacts comply with IEC 60269-2 and are suitable for installation in 3NH LV HRC fuse bases, in LV HRC fuse switch disconnectors and switch disconnectors with fuses. They also include fuses with slotted blade contacts for screw fixing with 110 mm mounting dimension, whose sizes are according to IEC 60269-4.

Fuses with slotted blade contacts for screw fixing with 80 mm or 110 mm mounting dimension are often screwed directly onto busbars for optimum heat dissipation. Even better heat transmission is provided by the compact fuses with M10 or M12 female thread, which are also mounted directly onto busbars.

Bolt-on links with 80 mm mounting dimension are another panel-mounting version for direct busbar mounting.

The fuses for SITOR thyristor sets, railway rectifiers or electrolysis systems were developed specially for these applications.

3NH LV HRC fuse bases suitable for use with SITOR semiconductor fuses and safety switching devices can also be found in this chapter, see page 5/45 ff.

Fuse characteristics, configuration notes and the assignments of SITOR semiconductor fuses to the fuse bases and 3NP and 3KL safety switching devices can be found in the Configuration Manual, "Fuse Systems" at:
www.siemens.com/lowvoltage/manuals.

The new size 3 type ranges have a round ceramic body instead of a square one. These series are characterized by small I^2t values with low power dissipation and high capability under alternating load. The dimensions and functional values correspond to the current standards IEC 60269-4/EN 60269-4.

Note:

The ordering data of the fuses are listed in ascending order of the rated voltage in the selection tables.

Benefits

- SITOR semiconductor fuses have a high varying load factor, which ensures a high level of operational safety and plant availability – even when subject to constant load change
- The use of SITOR semiconductor fuses in 3NH LV HRC fuse bases or Siemens switch disconnectors has been tested with regard to heat dissipation and maximum current loading. This makes planning and dimensioning easier and prevents consequential damage
- Our high standard of quality ensures good compliance with the characteristic curve and accuracy. This ensures long-term protection of devices

Operational classes

Fuses are categorized according to function and operational classes. SITOR semiconductor fuses, in LV HRC design, are available in the following operational classes:

- aR: For the short-circuit protection of power semiconductors (partial range protection)
- gR: For the protection of power semiconductors (full range protection)
- gS: The gS operational class combines cable and line protection with semiconductor protection (full range protection)

Parallel-connected fuses

Parallel-connected fuses offer maximum current and energy limiting that is clearly better than in the case of comparable single fuses. They also fulfill the special requirements for UL-certified fuses according to which fuses must be connected in parallel at the factory. Here is the original wording of the NEC document: *240.8 Fuses and circuit breakers shall be permitted to be connected in parallel where they are factory assembled in parallel and listed as a unit. Individual fuses, circuit breakers, or combinations thereof shall not otherwise be connected in parallel.*

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Selection and ordering data

Size	I_n	U_n	Operational class	Breaking I^2t value	Power loss	Varying load factor *WL*	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	V AC/ V DC		A^2s	W								kg
LV HRC design													
With slotted blade contacts with 2 oblong slots for M10 screw fixing, mounting dimension: 110 mm, or for installation in 3NA3 LV HRC fuse bases or switch disconnectors													
3	150	500	gR	33000	35	0.85		3NC2423-0C		1	3 units	1DM	0.979
	200			64000	40	0.85		3NC2425-0C		1	3 units	1DM	0.980
	250			99000	50	0.85		3NC2427-0C		1	3 units	1DM	0.981
	300			132000	65	0.85		3NC2428-0C		1	3 units	1DM	1.210
	350			249000	60	0.85		3NC2431-0C		1	3 units	1DM	0.981
	400		aR	390000	50	0.85		3NC2432-0C		1	3 units	1DM	0.986
With slotted blade contacts for M10 screw fixing, mounting dimension: 110 mm, or for installation in 3NA3 LV HRC fuse bases or switch disconnectors													
3	150	500	gR	33000	35	0.85		3NC2423-3C		1	3 units	1DM	0.969
	200			64000	40	0.85		3NC2425-3C		1	3 units	1DM	0.992
	250			99000	50	0.85		3NC2427-3C		1	3 units	1DM	0.999
	300			132000	65	0.85		3NC2428-3C		1	3 units	1DM	0.971
	350			249000	60	0.85		3NC2431-3C		1	3 units	1DM	0.981
	400		aR	390000	50	0.85		3NC2432-3C		1	3 units	1DM	0.968
1	160	690	gR	18600	32	1.0		3NE1224-3		1	3 units	1DM	0.605
	200			51800	35	1.0		3NE1225-3		1	3 units	1DM	0.587
	250			80900	37	1.0		3NE1227-3		1	3 units	1DM	0.610
	315			168000	40	1.0		3NE1230-3		1	3 units	1DM	0.601
2	350	690	gR	177000	43	1.0		3NE1331-3		1	3 units	1DM	0.751
	400			224000	50	1.0		3NE1332-3		1	3 units	1DM	0.680
	450			276500	58	1.0		3NE1333-3		1	3 units	1DM	0.755
	500			398000	64	1.0		3NE1334-3		1	3 units	1DM	0.745
3	150	690	gR	17600	40	0.85		3NC8423-3C		1	3 units	1DM	1.001
	200			38400	55	0.85		3NC8425-3C		1	3 units	1DM	1.000
	250			70400	72	0.85		3NC8427-3C		1	3 units	1DM	0.999
	350			176000	95	0.85		3NC8431-3C		1	3 units	1DM	1.003
	500			448000	130	0.85		3NC8434-3C		1	3 units	1DM	0.994
	1000	600	aR	2480000	140	0.95		3NC8444-3C		1	3 units	1DM	1.011
With slotted blade contacts for M12 screw fixing, mounting dimension: 110 mm, or for installation in 3NA3 LV HRC fuse bases or switch disconnectors													
3	560	690	gR	890000	60	1.0		3NE1435-3		1	3 units	1DM	1.094
	630			1390000	60	1.0		3NE1436-3		1	3 units	1DM	1.077
	670			1640000	64	1.0		3NE1447-3		1	3 units	1DM	1.088
	710			1818000	72	1.0		3NE1437-3		1	3 units	1DM	1.093
	800			2475000	84	1.0		3NE1438-3		1	3 units	1DM	0.001
	850			3640000	76	1.0		3NE1448-3		1	3 units	1DM	1.100
With M8 bolt-on links, mounting dimension: 80 mm, for screwing onto busbars or onto 3NH5423 fuse base NEW													
1	100	690/ 440	aR	3200	25	On req.		3NE8221-3MK		1	3 units	1DM	0.410
	125			6000	28	On req.		3NE8222-3MK		1	3 units	1DM	0.410
	160			10500	35	On req.		3NE8224-3MK		1	3 units	1DM	0.412
	200			17500	42	On req.		3NE8225-3MK		1	3 units	1DM	0.412
	250			28500	53.5	On req.		3NE8227-3MK		1	3 units	1DM	0.412
	315			53500	61	On req.		3NE8230-3MK		1	3 units	1DM	0.413
	350			66000	69	On req.		3NE8231-3MK		1	3 units	1DM	0.411
	400			110000	70.5	On req.		3NE8232-3MK		1	3 units	1DM	0.412
	450			180000	71	On req.		3NE8233-3MK		1	3 units	1DM	0.411
	500			215000	84	On req.		3NE8234-3MK		1	3 units	1DM	0.413
	550			290000	87	On req.		3NE8235-3MK		1	3 units	1DM	0.412
	630			440000	96	On req.		3NE8236-3MK		1	3 units	1DM	0.412

* You can order this quantity or a multiple thereof.

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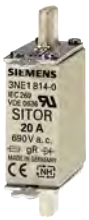
	Size	I_n	U_n	Operational class	Breaking I^2t value	Power loss	Varying load factor *WL*	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	V AC		A^2s	W								kg
	LV HRC design													
	With slotted blade contacts for M12 screw fixing, mounting dimension: 80 mm													
	3	630	690	aR	244000	120	0.85		3NC3236-1U		1	3 units	1DM	0.810
		710			346000	130	0.85		3NC3237-1U		1	3 units	1DM	0.813
		800			498000	135	0.9		3NC3238-1U		1	3 units	1DM	0.811
		900			677000	145	0.9		3NC3240-1U		1	3 units	1DM	0.808
		1 000			975000	155	0.95		3NC3241-1U		1	3 units	1DM	0.811
		1 100			1382000	165	0.95		3NC3242-1U		1	3 units	1DM	0.808
		1 250			1990000	175	0.95		3NC3243-1U		1	3 units	1DM	0.813
		1 400	500		2100000	200	0.95		3NC3244-1U		1	3 units	1DM	0.815
		1 600			2860000	240	0.9		3NC3245-1U		1	3 units	1DM	0.811
	With slotted blade contacts with 2 oblong slots for M10 screw fixing, mounting dimension: 110 mm, or for installation in 3NA3 LV HRC fuse bases or switch disconnectors													
	3	150	690	gR	17600	40	0.85		3NC8423-0C		1	3 units	1DM	0.998
		200			38400	55	0.85		3NC8425-0C		1	3 units	1DM	1.007
		250			70400	72	0.85		3NC8427-0C		1	3 units	1DM	1.006
		350			176000	95	0.85		3NC8431-0C		1	3 units	1DM	1.001
		500			448000	130	0.85		3NC8434-0C		1	3 units	1DM	1.007
	With blade contacts for mounting in 3NA3 LV HRC fuse bases or switch disconnectors													
	3	710	600	gR	2460000	65	1.0		3NE1437-1		1	3 units	1DM	1.088
		800			3350000	72	1.0		3NE1438-1		1	3 units	1DM	1.088
	000	16	690	gS	200	4.0	1.0	▶	3NE1813-0		1	3 units	1DM	0.134
		20			430	5.0	1.0	▶	3NE1814-0		1	3 units	1DM	0.132
		25			780	5.0	1.0	▶	3NE1815-0		1	3 units	1DM	0.135
		35			1700	3.5	1.0	▶	3NE1803-0		1	3 units	1DM	0.134
		40			3000	3.0	1.0	▶	3NE1802-0		1	3 units	1DM	0.136
		50			4400	6.0	1.0	▶	3NE1817-0		1	3 units	1DM	0.134
		63			9000	7.0	1.0	▶	3NE1818-0		1	3 units	1DM	0.133
		80			18000	8.0	1.0	▶	3NE1820-0		1	3 units	1DM	0.135
	00	100	690	gS	33000	10	1.0	▶	3NE1021-0		1	3 units	1DM	0.201
		125			63000	11	1.0	▶	3NE1022-0		1	3 units	1DM	0.197
	1	160	690	gS	60000	24	1.0	▶	3NE1224-0		1	3 units	1DM	0.578
		200			100000	27	1.0	▶	3NE1225-0		1	3 units	1DM	0.582
		250			200000	30	1.0	▶	3NE1227-0		1	3 units	1DM	0.573
		315			310000	38	1.0		3NE1230-0		1	3 units	1DM	0.582
	2	350	690	gS	430000	42	1.0	▶	3NE1331-0		1	3 units	1DM	0.761
		400			590000	45	1.0	▶	3NE1332-0		1	3 units	1DM	0.753
		450			750000	53	1.0		3NE1333-0		1	3 units	1DM	0.756
		500			950000	56	1.0		3NE1334-0		1	3 units	1DM	0.759
	3	560	690	gS	1700000	50	1.0		3NE1435-0		1	3 units	1DM	1.084
		630			2350000	55	1.0		3NE1436-0		1	3 units	1DM	1.081
		710			3400000	58	1.0		3NE1437-0		1	3 units	1DM	1.086
		800			5000000	58	1.0		3NE1438-0		1	3 units	1DM	1.124

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* You can order this quantity or a multiple thereof.

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LV HRC design

Size	I_n	U_n	Operational class	Breaking I^2t value	Power loss	Varying load factor *WL*	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	V AC/V DC		A^2s	W								kg
LV HRC design													
With blade contacts for mounting in 3NH3 LV HRC fuse bases or switch disconnectors NEW													
000	6	690/ 440	gR	37	2.7	On req.		3NE8810-0MK		1	3 units	1DM	0.140
	10			50	4.5	On req.		3NE8812-0MK		1	3 units	1DM	0.140
	16			73	6.7	On req.		3NE8813-0MK		1	3 units	1DM	0.140
	20			90	8	On req.		3NE8814-0MK		1	3 units	1DM	0.140
	25			150	8.1	On req.		3NE8815-0MK		1	3 units	1DM	0.140
	32			350	10.5	On req.		3NE8801-0MK		1	3 units	1DM	0.140
	40			480	12	On req.		3NE8802-0MK		1	3 units	1DM	0.140
	50			1050	14.5	On req.		3NE8817-0MK		1	3 units	1DM	0.140
	63			1960	23	On req.		3NE8818-0MK		1	3 units	1DM	0.140
	80		aR	2200	23.3	On req.		3NE8820-0MK		1	3 units	1DM	0.140
	100			3650	27	On req.		3NE8821-0MK		1	3 units	1DM	0.140
	125			7800	30	On req.		3NE8822-0MK		1	3 units	1DM	0.140
	160	500/ 440		14000	34	On req.		3NE8824-0MK		1	3 units	1DM	0.140
With blade contacts for mounting in 3NA3 LV HRC fuse bases or switch disconnectors													
00	25	690	gR	180	7	0.95	▶	3NE8015-1		1	3 units	1DM	0.201
	35			400	9	0.95	▶	3NE8003-1		1	3 units	1DM	0.203
	50			700	14	0.90	▶	3NE8017-1		1	3 units	1DM	0.200
	63			1400	16	0.95	▶	3NE8018-1		1	3 units	1DM	0.203
	80			5800	10.5	1.0		3NE1020-2		1	3 units	1DM	0.204
	100			11000	12	1.0		3NE1021-2		1	3 units	1DM	0.199
	125			23000	13.5	1.0		3NE1022-2		1	3 units	1DM	0.204
	80		aR	2400	19	0.95	▶	3NE8020-1		1	3 units	1DM	0.203
	100			4200	22	0.95	▶	3NE8021-1		1	3 units	1DM	0.203
	125			6500	28	0.95	▶	3NE8022-1		1	3 units	1DM	0.201
	160			13000	38	0.95	▶	3NE8024-1		1	3 units	1DM	0.200
1	100	690/ 440	aR NEW	6050	25.5	On req.		3NE8221-0MK		1	3 units	1DM	0.476
	125			8900	28.5	On req.		3NE8222-0MK		1	3 units	1DM	0.475
	160			16200	37	On req.		3NE8224-0MK		1	3 units	1DM	0.480
	200			26000	49	On req.		3NE8225-0MK		1	3 units	1DM	0.478
	250			59000	52	On req.		3NE8227-0MK		1	3 units	1DM	0.477
	315			120000	68	On req.		3NE8230-0MK		1	3 units	1DM	0.478
	160	690	gR	18600	32	1.0		3NE1224-2		1	3 units	1DM	0.601
	200			51800	35	1.0		3NE1225-2		1	3 units	1DM	0.608
	250			80900	37	1.0		3NE1227-2		1	3 units	1DM	0.606
	315			168000	40	1.0		3NE1230-2		1	3 units	1DM	0.604
2	350	690/ 440	aR NEW	83500	68.6	On req.		3NE8331-0MK		1	3 units	1DM	0.540
	400			136000	72.8	On req.		3NE8332-0MK		1	3 units	1DM	0.540
	450			207000	80.1	On req.		3NE8333-0MK		1	3 units	1DM	0.540
	500			318000	77.5	On req.		3NE8334-0MK		1	3 units	1DM	0.540
	550			399000	86.4	On req.		3NE8335-0MK		1	3 units	1DM	0.540
	630			740000	90.7	On req.		3NE8336-0MK		1	3 units	1DM	0.540
	350	690	gR	177000	43	1.0		3NE1331-2		1	3 units	1DM	0.778
	400			224000	50	1.0		3NE1332-2		1	3 units	1DM	0.764
	450			276500	58	1.0		3NE1333-2		1	3 units	1DM	0.795
	500			398000	64	1.0		3NE1334-2		1	3 units	1DM	0.796
3	560	690	gR	890000	60	1.0		3NE1435-2		1	3 units	1DM	1.144
	630			1390000	60	1.0		3NE1436-2		1	3 units	1DM	1.134
	670			1640000	64	1.0		3NE1447-2		1	3 units	1DM	1.130
	710			1818000	72	1.0		3NE1437-2		1	3 units	1DM	1.130
	800			2475000	84	1.0		3NE1438-2		1	3 units	1DM	1.125
	850			3640000	76	1.0		3NE1448-2		1	3 units	1DM	1.136
0	32	1000	gR	280	12	0.9	▶	3NE4101		1	3 units	1DM	0.277
	40			500	13	0.9	▶	3NE4102		1	3 units	1DM	0.269
	50			800	16	0.9	▶	3NE4117		1	3 units	1DM	0.271
	63		aR	1500	20	0.9	▶	3NE4118		1	3 units	1DM	0.269
	80			3000	22	0.9	▶	3NE4120		1	3 units	1DM	0.270
	100			6000	24	0.9	▶	3NE4121		1	3 units	1DM	0.277
	125			14000	30	0.9	▶	3NE4122		1	3 units	1DM	0.276
	160			29000	35	0.9	▶	3NE4124		1	3 units	1DM	0.275

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	Size	I_n	U_n	Operational classes	Breaking I^2t value	Power loss	Varying load factor *WL*	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	V AC/ V DC		A^2s	W								kg
		LV HRC design												
		With M8 bolt-on links, mounting dimension: 80 mm, for screwing onto busbars												
	000	20	690/ 700[1]	gR	83	7	0.9		3NE8714-1		1	10 units	1DM	0.139
		25			140	9	0.9		3NE8715-1		1	10 units	1DM	0.136
		32			285	10	0.9		3NE8701-1		1	10 units	1DM	0.141
		40			490	12	0.9		3NE8702-1		1	10 units	1DM	0.145
		50			815	15	0.9		3NE8717-1		1	10 units	1DM	0.136
		63		aR	1550	16	0.95		3NE8718-1		1	10 units	1DM	0.138
		80			2700	18	0.9	►	3NE8720-1		1	10 units	1DM	0.143
		100			4950	19	0.95	►	3NE8721-1		1	10 units	1DM	0.144
		125			9100	23	0.95	►	3NE8722-1		1	10 units	1DM	0.142
		160			17000	31	0.9	►	3NE8724-1		1	10 units	1DM	0.137
		200			30000	36	0.9	►	3NE8725-1		1	10 units	1DM	0.139
		250			55000	42	0.9	►	3NE8727-1		1	10 units	1DM	0.134
		315			85500	54	0.85	►	3NE8731-1		1	10 units	1DM	0.141
		With M10 bolt-on links, mounting dimension: 80 mm, for screwing onto busbars or onto 3NH5323 fuse base NEW												
	00	80	690/ 440	gR	3200	23.0	On req.		3NE8020-3MK		1	3 units	1DM	0.230
		100			5200	29.0	On req.		3NE8021-3MK		1	3 units	1DM	0.230
		350		aR	135000	58.8	On req.		3NE8031-3MK		1	3 units	1DM	0.220
		400			170000	74.5	On req.		3NE8032-3MK		1	3 units	1DM	0.220

[1] DC voltage acc. to UL.

	Size	I_n	U_n	Operational classes	Breaking I^2t value	Power loss	Varying load factor *WL*	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	V AC/ V DC		A^2s	W								kg
		LV HRC design												
		Parallel-connected fuses with slotted blade contacts for M12 screw fixing, mounting dimension: 110 mm (lateral 90 mm)												
	2 x 3	1000	690	gR	1400 000	138	1.0		3NB3350-1KK26		1	1 unit	1DM	2.475
		1100			3000 000	110			3NB3351-1KK26		1	1 unit	1DM	2.475
	2 x 3	1250			4100 000	104	1.0		3NB3352-1KK26		1	1 unit	1DM	2.480
		1350			4800 000	126			3NB3354-1KK26		1	1 unit	1DM	2.290
		1400			5200 000	127			3NB3355-1KK26		1	1 unit	1DM	2.480
	2 x 3	1600			6900 000	152	1.0		3NB3357-1KK26		1	1 unit	1DM	2.468
		1700			10000 000	143			3NB3358-1KK26		1	1 unit	1DM	2.486
	3 x 3	1700			6400000	179	1.0		3NB3358-1KK27		1	1 unit	1DM	3.460
		1900			8200 000	196			3NB3362-1KK27		1	1 unit	1DM	3.460
		With slotted blade contacts for M10 screw fixing, mounting dimension: 110 mm, or for installation in 3NA3 LV HRC fuse bases or switch disconnectors												
	2	250	800	aR	29700	105	0.85	►	3NE4327-0B		1	3 units	1DM	0.779
		315			60700	120	0.85	►	3NE4330-0B		1	3 units	1DM	0.760
		450			191000	140	0.85	►	3NE4333-0B		1	3 units	1DM	0.756
		500			276000	155	0.85	►	3NE4334-0B		1	3 units	1DM	0.774
		710			923000	155	0.95	►	3NE4337		1	3 units	1DM	0.768

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LV HRC design

Size	I_n	U_n	Operational classes	Breaking I^2t value	Power loss	Varying load factor *WL*	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	V AC/ V DC		A^2s	W								kg
With slotted blade contacts for screw fixing M10, 110 mm mounting dimension, or for installation in 3NH3 LV HRC fuse bases or fuse switch disconnectors or on 3NH5463 fuse base													
1	32[1]	1000/ 600	gR NEW	4500	9	On req.		3NE3201-0MK		1	3 units	1DM	0.595
	40[1]			6000	13	On req.		3NE3202-0MK		1	3 units	1DM	0.589
	50[1]			8000	18	On req.		3NE3217-0MK		1	3 units	1DM	0.581
	63[1]			9000	25	On req.		3NE3218-0MK		1	3 units	1DM	0.577
	100	1000	aR	4800	28	0.95		3NE3221		1	3 units	1DM	0.571
	125			7200	36	0.95		3NE3222		1	3 units	1DM	0.589
	160			13000	42	1.0	▶	3NE3224		1	3 units	1DM	0.576
	200			30000	42	1.0	▶	3NE3225		1	3 units	1DM	0.591
	250			48000	50	1.0	▶	3NE3227		1	3 units	1DM	0.596
	315			80000	60	0.95	▶	3NE3230-0B		1	3 units	1DM	0.589
	350			100000	75	0.95		3NE3231		1	3 units	1DM	0.596
	400			135000	85	0.9		3NE3232-0B		1	3 units	1DM	0.581
	450			175000	95	0.9	▶	3NE3233		1	3 units	1DM	0.590
	500[1]	1000/ 600	NEW	500000	105	On req.		3NE3234-0MK08		1	3 units	1DM	0.550
	550[1]		NEW	700000	110	On req.		3NE3235-0MK08		1	3 units	1DM	0.550
	630[1]		NEW	850000	127	On req.		3NE3236-0MK08		1	3 units	1DM	0.550
[1] No grip lugs and therefore not suitable for mounting in 3NH3 LV HRC fuse bases or switch disconnectors													
2	400	1000	aR	135000	80	1.0		3NE3332-0B		1	3 units	1DM	0.738
	450			175000	90	1.0		3NE3333		1	3 units	1DM	0.741
	500			260000	90	1.0	▶	3NE3334-0B		1	3 units	1DM	0.757
	560			360000	95	1.0	▶	3NE3335		1	3 units	1DM	0.745
	630			600000	100	1.0	▶	3NE3336		1	3 units	1DM	0.816
	710	900	aR	800000	105	1.0	▶	3NE3337-8		1	3 units	1DM	0.771
	800	800		850000	130	0.95	▶	3NE3338-8		1	3 units	1DM	0.773
	900	690		920000	165	0.95	▶	3NE3340-8		1	3 units	1DM	0.784
With slotted blade contacts for M10 screw fixing, mounting dimension: 130 mm													
3	100	1000	aR	13500	25	1.0		3NE3421-0C		1	3 units	1DM	1.223
	224			54000	85	1.0		3NE3626-0C		1	3 units	1DM	1.223
	315			218000	80	1.0		3NE3430-0C		1	3 units	1DM	1.182
	400			364000	110	1.0		3NE3432-0C		1	3 units	1DM	1.192
	450			488000	110	1.0		3NE3635-0C		1	3 units	1DM	1.198
	500			870000	95	1.0		3NE3434-0C		1	3 units	1DM	1.226
	630			1280000	132	1.0		3NE3636-0C		1	3 units	1DM	1.216
	710			1950000	145	1.0		3NE3637-0C		1	3 units	1DM	1.237
With slotted blade contacts for M12 screw fixing, mounting dimension: 140 mm													
3	710	1000	aR	1950000	145	1.0		3NE3637-1C		1	3 units	1DM	0.001
With slotted blade contacts for M12 screw fixing, mounting dimension: 110 mm, or for installation in 3NA3 LV HRC fuse bases or switch disconnectors													
3	630	1000	aR	418000	145	0.85		3NC3336-1U		1	3 units	1DM	1.022
	710			569000	150	0.85		3NC3337-1U		1	3 units	1DM	1.020
	800			819000	155	0.85		3NC3338-1U		1	3 units	1DM	0.961
	900			1160000	165	0.9		3NC3340-1U		1	3 units	1DM	1.039
	1000			1670000	170	0.9		3NC3341-1U		1	3 units	1DM	0.959
	1100	800		1910000	185	0.9		3NC3342-1U		1	3 units	1DM	1.077
	1250			2600000	210	0.9		3NC3343-1U		1	3 units	1DM	0.958
3	315	1250	aR	72500	80	0.95		3NC3430-1U		1	3 units	1DM	0.951
	400			163000	95	0.95		3NC3432-1U		1	3 units	1DM	1.022
	500			290000	115	0.90		3NC3434-1U		1	3 units	1DM	0.956
	630			650000	120	0.95		3NC3436-1U		1	3 units	1DM	1.027
	800	1100		985000	145	0.90		3NC3438-1U		1	3 units	1DM	1.020

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	Size	I_n	U_n	Operational class	Breaking I^2t value	Power loss	Varying load factor *WL*	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	V AC/V DC		A^2s	W								kg
	LV HRC design													
	With slotted blade contacts for M10 screw fixing, mounting dimension: 210 mm													
	3	160	1500	aR	54000	56	1.0		**3NE5424-0C**		1	2 units	1DM	1.995
		224			138000	80	1.0		**3NE5426-0C**		1	2 units	1DM	1.986
		315			311000	115	1.0		**3NE5430-0C**		1	2 units	1DM	1.260
		350			428000	135	1.0		**3NE5431-0C**		1	2 units	1DM	1.987
		450			870000	145	0.95		**3NE5433-0C**		1	2 units	1DM	2.001
	With slotted blade contacts for M12 screw fixing, mounting dimension: 210 mm													
		450	1500	aR	870000	145	0.95		**3NE5433-1C**		1	2 units	1DM	1.991
	With slotted blade contacts for M10 screw fixing, mounting dimension: 170 mm													
	3	250	1500	aR	84000	130	1.0		**3NE5627-0C**		1	3 units	1DM	1.576
		450			590000	160	1.0		**3NE5633-0C**		1	3 units	1DM	1.595
		600			1950000	145	1.0		**3NE5643-0C**		1	3 units	1DM	1.606
	With slotted blade contacts for screw fixing M10, 170 mm mounting dimension, for bolting onto busbars or onto 3NH5473 fuse base NEW													
	2	40	1500/ 1000	gR	900	26	On req.		**3NE5302-0MK06**		1	1 unit	1DM	1.250
		50			1800	27	On req.		**3NE5317-0MK06**		1	1 unit	1DM	1.250
		63			3100	34	On req.		**3NE5318-0MK06**		1	1 unit	1DM	1.250
		80		aR	3900	42	On req.		**3NE5320-0MK06**		1	1 unit	1DM	1.250
		100			8700	45	On req.		**3NE5321-0MK06**		1	1 unit	1DM	1.250
		125			11800	59	On req.		**3NE5322-0MK06**		1	1 unit	1DM	1.250
		160			37000	54	On req.		**3NE5324-0MK06**		1	1 unit	1DM	1.250
		200			70000	56	On req.		**3NE5325-0MK06**		1	1 unit	1DM	1.250
		250			165000	59	On req.		**3NE5327-0MK06**		1	1 unit	1DM	1.250
		315			250000	76	On req.		**3NE5330-0MK06**		1	1 unit	1DM	1.250
		400	1500/ 1000		470000	89	On req.		**3NE5332-0MK06**		1	1 unit	1DM	1.250
		500			800000	109	On req.		**3NE5334-0MK06**		1	1 unit	1DM	1.250
		630			1100000	163	On req.		**3NE5336-0MK06**		1	1 unit	1DM	1.250
	2*	630	1500/ 1000	aR	1100000	163	On req.		**3NE5336-0MK66**		1	1 unit	1DM	1.250
	* Special version with extended contacts, 190 mm mounting dimension, with fastening holes													
	With slotted blade contacts for M10 screw fixing, mounting dimension: 210 mm													
	3	200	2000	aR	138000	75	1.0		**3NE7425-0U**		1	2 units	1DM	1.990
		250			218000	110	1.0		**3NE7427-0U**		1	2 units	1DM	2.005
		350			555000	120	1.0		**3NE7431-0U**		1	2 units	1DM	2.019
		400			870000	150	1.0		**3NE7432-0U**		1	2 units	1DM	0.002
		450			960000	160	1.0		**3NE7633-0U**		1	2 units	1DM	2.001
		630			1950000	220	1.0		**3NE7636-0U**		1	2 units	1DM	2.030
	With slotted blade contacts for M12 screw fixing, mounting dimension: 210 mm													
	3	450	2000	aR	960000	160	1.0		**3NE7633-1U**		1	2 units	1DM	1.990
		525			1120000	210	1.0		**3NE7648-1U**		1	2 units	1DM	2.151
		630			1950000	220	1.0		**3NE7636-1U**		1	2 units	1DM	2.028
		710			3110000	275	1.0		**3NE7637-1U**		1	2 units	1DM	2.033
	With slotted blade contacts for M12 screw fixing, mounting dimension: 260 mm													
	3	125	2500	aR	34500	78	1.0		**3NE9622-1C**		1	1 unit	1DM	2.506
		400			620000	205	1.0		**3NE9632-1C**		1	1 unit	1DM	2.439
		500			1270000	235	1.0		**3NE9634-1C**		1	1 unit	1DM	2.350
		630			2800000	275	1.0		**3NE9636-1C**		1	1 unit	1DM	2.566
	2	315	--/ 3000	aR NEW	300000	245	On req.		**3NE9330-0MK07**		1	1 unit	1DM	1.250

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LV HRC design

	Size	I_n	U_n	Operational class	Breaking I^2t value	Power loss	Varying load factor *WL*	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	V AC		A^2s	W								kg
	LV HRC design													
	With M12 female thread at both ends for direct busbar mounting, flange dimensions 52 mm													
	3	630	690	aR	244000	125	0.9		3NC3236-6U		1	3 units	1DM	0.791
		710			346000	130	0.9		3NC3237-6U		1	3 units	1DM	0.787
		800			498000	135	0.95		3NC3238-6U		1	3 units	1DM	0.789
		900			677000	140	0.95		3NC3240-6U		1	3 units	1DM	0.795
		1 000			975000	145	1.0		3NC3241-6U		1	3 units	1DM	0.791
		1 100			1382000	150	1.0		3NC3242-6U		1	3 units	1DM	0.799
		1 250			1990000	155	1.0		3NC3243-6U		1	3 units	1DM	0.799
		1 400	500		2100000	175	1.0		3NC3244-6U		1	3 units	1DM	0.802
		1 600			2860000	195	0.95		3NC3245-6U		1	3 units	1DM	0.805
	With M10 female thread at both ends for direct busbar mounting, flange dimensions 109 mm													
	3	450	1 000	aR	488000	110	1.0		3NE3635-6		1	3 units	1DM	1.234
	With M12 female thread at both ends for direct busbar mounting, flange dimensions 73 mm													
	3	630	1 000	aR	418000	130	0.90		3NC3336-6U		1	3 units	1DM	0.892
		710			569000	140	0.90		3NC3337-6U		1	3 units	1DM	0.897
		800			819000	150	0.90		3NC3338-6U		1	3 units	1DM	0.995
		900			1160000	160	0.95		3NC3340-6U		1	3 units	1DM	0.900
		1 000			1670000	165	0.95		3NC3341-6U		1	3 units	1DM	1.006
		1 100	800		1910000	175	0.95		3NC3342-6U		1	3 units	1DM	0.897
		1 250			2600000	185	0.95		3NC3343-6U		1	3 units	1DM	0.903
	3	315	1 250	aR	72500	80	0.95		3NC3430-6U		1	3 units	1DM	0.896
		400			163000	95	0.95		3NC3432-6U		1	3 units	1DM	0.899
		500			290000	115	0.90		3NC3434-6U		1	3 units	1DM	0.886
		630			650000	120	0.95		3NC3436-6U		1	3 units	1DM	1.003
		800	1100		985000	145	0.95		3NC3438-6U		1	3 units	1DM	0.995

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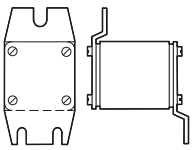
	Size	I_n	U_n	Operational classes	Breaking I^2t value	Power loss	Varying load factor *WL*	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	V AC		A^2s	W								kg
	Fuses for special applications													
	For screwing onto water-cooled busbars, for rectifiers in electrolysis systems													
	--[1]	350	800	aR	260000	80	0.9		3NC5531		1	3 units	1DM	0.632
		600	1000		888000	150	0.9		3NC5840		1	3 units	1DM	1.372
		630	800		888000	145	0.9		3NC5841		1	3 units	1DM	1.170
		800	1000		1728000	170	0.9		3NC5838		1	3 units	1DM	1.175
		710	900		620000	150	0.9		3NE6437-7		1	3 units	1DM	1.155
		1250	600		2480000	210	0.9		3NE9450-7		1	3 units	1DM	1.148
	With M10 female thread at both ends for direct busbar mounting, flange dimensions 89 (99)[2] mm, for air-cooled rectifiers in electrolysis systems													
	--[1]	710	900	aR	620000	150	0.9		3NE6437		1	3 units	1DM	0.982
		850	600	gR	2480000	85	1.0		3NE9440-6		1	3 units	1DM	0.995
		900	900	aR	1920000	170	0.9		3NE6444		1	3 units	1DM	1.153
		1250	600	aR	2480000	210	0.9		3NE9450		1	3 units	1DM	1.055
	Fuses with installation holder for SITOR 6QG10 thyristor sets													
	--[1]	200	1000	aR	44000	50	0.85		3NE3525-5		1	2 units	1DM	0.700
		450			395000	90	0.85		3NE3535-5		1	2 units	1DM	0.735
	Fuses with installation holder for SITOR 6QG11 thyristor sets													
	--[1]	50	1000	gR	1100	20	0.85		3NE4117-5		1	2 units	1DM	0.302
		100		aR	7400	35	0.85		3NE4121-5		1	2 units	1DM	0.305
		170		aR	60500	43	0.85		3NE4146-5		1	2 units	1DM	0.292
	Fuses for special applications													
	With female thread at both ends for SITOR 6QG12 thyristor sets, flange dimensions 77 mm													
	--[1]	250	800	aR	29700	105	0.85	►	3NE4327-6B		1	3 units	1DM	0.691
		315			60700	120	0.85	►	3NE4330-6B		1	3 units	1DM	0.690
		450			191000	140	0.85	►	3NE4333-6B		1	3 units	1DM	0.684
		500			276000	155	0.85	►	3NE4334-6B		1	3 units	1DM	0.678
		710			923000	155	0.95	►	3NE4337-6		1	3 units	1DM	0.687
	Special design for mounting directly in the railway supply rectifier													
	--[1]	250	680	aR	635000	25	0.9		3NC7327-2		1	3 units	1DM	0.729
		350			1430000	32	0.9		3NC7331-2		1	3 units	1DM	0.696

[1] Special design.

[2] Flange dimensions 99 mm only for 3NE6444.

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LV HRC design

	Size	I_n	U_n	Operational classes	Breaking I^2t value	P_v Power loss	Varying load factor *WL*	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	V DC		A^2s	W								kg
	Fuses for special applications													
	DC fuses with slotted blade contacts for M12 screw fixing													
	2L	400	900	gR	240000[1]	75	--		3NB1234-3KK20		1	2 units	1DM	0.991
	1L	200	1250	aR	39000[2]	50	--		3NB1126-4KK11		1	2 units	1DM	0.900
		250			80500[2]	51	--		3NB1128-4KK11		1	2 units	1DM	0.899
	2L	315			129000[2]	63	--		3NB1231-4KK11		1	2 units	1DM	0.990
		400			290000[2]	68	--		3NB1234-4KK11		1	2 units	1DM	0.001
	3L	500			600000[2]	89	--		3NB1337-4KK11		1	2 units	1DM	1.868
		800			1910000[2]	135	--		3NB1345-4KK11		1	2 units	1DM	1.887
	Parallel-connected DC fuses with slotted blade contacts for M12 screw fixing													
	2 x 3L	800	1250	aR	1150000[2]	160	--		3NB2345-4KK16		1	1 unit	1DM	3.540
		1000			2250000[2]	195	--		3NB2350-4KK16		1	1 unit	1DM	3.839
		1400			5100000[2]	250	--		3NB2355-4KK16		1	1 unit	1DM	3.540
		1600			7450000[2]	275	--		3NB2357-4KK16		1	1 unit	1DM	3.540
	3 x 3L	2100			1195000[2]	365	--		3NB2364-4KK17		1	1 unit	1DM	5.440
		2400			18100000[2]	445	--		3NB2366-4KK17		1	1 unit	1DM	5.440

[1] I^2t at U_{VSI} 1400 V, I^2t at U_n 900 V is 180000 A^2s

[2] I^2t at U_{VSI} 1500 V; I^2t at U_n 1250 V is reduced by the factor k = 0.79.

Note:

VSI is the abbreviation for Voltage Sourced Inverter. The VSI voltage U_{VSI} is a DC test voltage defined in IEC 60269-4 specially for use in applications with energy stores. The extremely steep current rise in the event of a fault is characteristic of such applications.

For SITOR 3NB1 and 3NB2 semiconductor fuses, the VSI voltage and the applicable I^2t value are specified in the "Technical specifications" table; for all other SITOR semiconductor fuses, these values are available on request.

	Version	For fuse series	I_n	U_n	Connection bolt	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm		A	V DC								kg
	Fuse bases for SITOR fuses NEW • With bolt-on links or slotted blade contacts • 1-pole											
	75	3NC18	50	690	M5		3NH5723		1	1 unit	1BM	0.187
	80	3NE87, 3NC26	315	690	M8		3NH5023		1	1 unit	1BM	0.304
		3NE80..-3MK	400	690	M10		3NH5323		1	1 unit	1BM	0.350
		3NC32..-1U, 3NE82..-3MK	1600	690	M10		3NH5423		1	1 unit	1BM	0.546
	110	3NC24, 3NC33..-1U, 3NC34..-1U, 3NC84, 3NE1…-3, 3NE32, 3NE33, 3NE34	1250	1250	M10		3NH5463		1	1 unit	1BM	0.587
	170	3NE53, 3NE56	630	1800	M10		3NH5473		1	1 unit	1BM	0.700

* You can order this quantity or a multiple thereof.

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Overview

SITOR cylindrical fuses protect power semiconductors from the effects of short-circuits because the super quick-response disconnect characteristic is far quicker than that of conventional fuses. They protect high-quality devices and system components such as semiconductor contactors, electronic relays (solid state), converters with fuses in the input and in the DC link, UPS systems and soft starters for motors up to 100 A.

The cylindrical design is approved for industrial applications. The cylindrical fuse links comply with IEC 60269.

Cylindrical fuse holders also comply with IEC 60269 and UL 512. The cylindrical fuse holders for 10 x 38 mm and 14 x 51 mm have been tested and approved as fuse switch disconnectors and the cylindrical fuse holders for 22 x 58 mm as fuse disconnectors according to the switching device standard IEC 60947-3. The utilization category and the tested current and voltage values are specified in the Table "Technical Specifications".

The cylindrical fuse holders have been specially developed for the application of SITOR fuse links with regard to heat tolerance and heat dissipation and are therefore not recommended for standard applications.

Cylindrical fuse bases do not offer the same comprehensive touch protection as the fuse holders, but have better heat dissipation. The single-pole cylindrical fuse bases for 14 × 51 mm and 22 × 58 mm allow modular expansion to multi-pole bases.

Benefits

- Cylindrical fuses have an extremely compact design and a correspondingly small footprint
- The cylindrical fuses have IEC and UL approval and are suitable for universal use worldwide
- The use of SITOR cylindrical fuses in the cylindrical fuse holders and bases has been tested with regard to heat dissipation and maximum current loading. This makes planning and dimensioning easier and prevents consequential damage
- The use of fuse holders as switch disconnectors expands the area of application of these devices and increases operating safety

Technical specifications

		Cylindrical fuse holders		
		3NC10	**3NC14**	**3NC22**
Size	mm × mm	10 × 38	14 × 51	22 × 58
Standards		UL 4248-1; CSA C22.2; IEC 60269-2, IEC 60947-3		
Approvals		UL 4248-1; UL File Number E171267; CSA C22.2 No. 39-M		
Rated voltage U_n	V AC	690; 600 acc. to UL/CSA		
Rated current I_n	A AC	32 30 acc. to UL/CSA	50 50 acc. to UL 40 acc. to CSA	100 80 acc. to UL/CSA
Rated conditional short-circuit current	kA	50	50 (100 at 400 V)	50 (100 at 500 V)
Breaking capacity • Utilization category		AC-22B (400 V)	AC-22B (400 V)	AC-20B (690 V)
Max. power dissipation of fuse links (conductor cross-section used)	W	3 (6 mm^2) 4.3 (10 mm^2)	5 (10 mm^2) 6.5 (25 mm^2)	9.5 (35 mm^2) 11 (50 mm^2)
Rated impulse withstand voltage	kV	6		
Overvoltage category		II		
Pollution degree		2		
No-voltage changing of fuse links		Yes		
Sealable when installed		Yes		
Mounting position		Any		
Current direction		Any		
Degree of protection acc. to IEC 60529		IP20, with connected conductors[1)]		
Terminals with touch protection according to BGV A3 at incoming and outgoing feeder		Yes		
Ambient temperature	°C	45		
Conductor cross-sections • Finely stranded, with end sleeve • AWG (American Wire Gauge)	 mm^2 AWG	 1.5 ... 16 15 ... 5	 1.5 ... 35 14 ... 2	 4 ... 50 10 ... 1/0
Tightening torque	Nm lbs/in.	2.5 22	2.5 ... 3 22 ... 26	3.5 ... 4 31 ... 35

[1)] Degree of protection IP20 is tested according to regulations using a straight test finger (from the front), with the device mounted and equipped with a cover, housing or some other enclosure.

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Selection and ordering data

	Size	I_n	U_n	Breaking I^2t value	P_v Power loss	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm × mm	A	V AC/ V DC	A^2s	W							kg
	Cylindrical fuse links, operational class gR NEW											
	10 × 38	6	690/440	6.5	2.5		3NC1006-0MK		1	20 units	1DM	0.009
		10		18	3.3		3NC1010-0MK		1	20 units	1DM	0.009
		12		35	4		3NC1012-0MK		1	20 units	1DM	0.009
		16		45	6		3NC1016-0MK		1	20 units	1DM	0.009
		20	690/250	110	7.8		3NC1020-0MK		1	20 units	1DM	0.009
		25		140	8.7		3NC1025-0MK		1	20 units	1DM	0.009
		32		450	12		3NC1032-0MK		1	20 units	1DM	0.009
	14 × 51	6	690/700	3.5	3.1		3NC1406-0MK		1	10 units	1DM	0.024
		10		15	4.6		3NC1410-0MK		1	10 units	1DM	0.024
		16	690/600	32	6.7		3NC1416-0MK		1	10 units	1DM	0.024
		20		68	7.4		3NC1420-0MK		1	10 units	1DM	0.024
		25		108	8.4		3NC1425-0MK		1	10 units	1DM	0.024
		32		175	12.3		3NC1432-0MK		1	10 units	1DM	0.024
		40	690/440	470	11.7		3NC1440-0MK		1	10 units	1DM	0.024
		50	690/250	830	16.3		3NC1450-0MK		1	10 units	1DM	0.024
	22 × 58	25	690/700	180	8.1		3NC2225-0MK		1	10 units	1DM	0.060
		32	690/600	420	9		3NC2232-0MK		1	10 units	1DM	0.060
		40	690/440	700	12.5		3NC2240-0MK		1	10 units	1DM	0.060
		50	690/250	1250	15.2		3NC2250-0MK		1	10 units	1DM	0.061
		63		2400	17.5		3NC2263-0MK		1	10 units	1DM	0.060
		80		4400	23		3NC2280-0MK		1	10 units	1DM	0.060
		100		11500	28.7		3NC2200-0MK		1	10 units	1DM	0.060
	Cylindrical fuse links, operational class aR											
	10 × 38[2]	3	600/700[1]	8	1.2		3NC1003		1	10 units	1DM	0.009
		6		20	1.5	▶	3NC1006		1	10 units	1DM	0.009
		8		30	2		3NC1008		1	10 units	1DM	0.009
		10		60	2.5	▶	3NC1010		1	10 units	1DM	0.009
		12		110	3		3NC1012		1	10 units	1DM	0.009
		16		150	3.5	▶	3NC1016		1	10 units	1DM	0.009
		20		200	4.8	▶	3NC1020		1	10 units	1DM	0.009
		25		250	6	▶	3NC1025		1	10 units	1DM	0.009
		32	600/--	500	7.5	▶	3NC1032		1	10 units	1DM	0.009
	14 × 51	1	660/--	1.2	5		3NC1401		1	10 units	1DM	0.021
		2		10	3	▶	3NC1402		1	10 units	1DM	0.021
		3		15	2.5		3NC1403		1	10 units	1DM	0.021
		4		25	3	▶	3NC1404		1	10 units	1DM	0.017
		5	690/800[1]	11	1.5		3NC1405		1	10 units	1DM	0.022
		6		11	1.5	▶	3NC1406		1	10 units	1DM	0.020
		10		22	4	▶	3NC1410		1	10 units	1DM	0.020
		15		70	5.5	▶	3NC1415		1	10 units	1DM	0.020
		20		100	6	▶	3NC1420		1	10 units	1DM	0.020
		25		320	7	▶	3NC1425		1	10 units	1DM	0.021
		30		400	9		3NC1430		1	10 units	1DM	0.020
		32		600	7.6	▶	3NC1432		1	10 units	1DM	0.021
		40		750	8	▶	3NC1440		1	10 units	1DM	0.020
		50		1800	9	▶	3NC1450		1	10 units	1DM	0.020
NEW		63	690/250	2100	16.7		3NC1463-0MK		1	10 units	1DM	0.024
	22 × 58	20	690/700[1]	220	4.6		3NC2220		1	5 units	1DM	0.056
		25		300	5.6		3NC2225		1	5 units	1DM	0.057
		32		450	7		3NC2232		1	5 units	1DM	0.056
		40		700	8.5		3NC2240		1	5 units	1DM	0.056
		50		1350	9.5	▶	3NC2250		1	5 units	1DM	0.052
		63		2600	11	▶	3NC2263		1	5 units	1DM	0.054
		80		5500	13.5	▶	3NC2280		1	5 units	1DM	0.057
		100		8000	16	▶	3NC2200		1	5 units	1DM	0.057
NEW		125	690/250	29000	35.3		3NC2211-0MK		1	10 units	1DM	0.060

[1] DC voltage acc. to UL.
[2] CCC approval in preparation

* You can order this quantity or a multiple thereof.

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	Size	I_n	U_n	Breaking I^2t value	P_v Power loss	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm × mm	A	V AC/ V DC	A^2s	W							kg
	Cylindrical fuse links with striking pin, operational class aR											
	14 × 51	10	690/600[1]	32	4		3NC1410-5		1	10 units	1DM	0.023
		15		63	5.5		3NC1415-5		1	10 units	1DM	0.023
		20		234	6		3NC1420-5		1	10 units	1DM	0.024
		25		378	7		3NC1425-5		1	10 units	1DM	0.023
		30		466	9		3NC1430-5		1	10 units	1DM	0.022
		32		600	7.6		3NC1432-5		1	10 units	1DM	0.023
		40		750	8		3NC1440-5		1	10 units	1DM	0.023
		50		1800	9		3NC1450-5		1	10 units	1DM	0.026
	22 × 58	20	690/500[1]	240	5		3NC2220-5		1	5 units	1DM	0.039
		25		350	6		3NC2225-5		1	5 units	1DM	0.041
		32		500	8		3NC2232-5		1	5 units	1DM	0.066
		40		800	9		3NC2240-5		1	5 units	1DM	0.039
		50		1500	9.5		3NC2250-5		1	5 units	1DM	0.064
		63		3000	11		3NC2263-5		1	5 units	1DM	0.061
		80		6000	13.5		3NC2280-5		1	5 units	1DM	0.061
	22 × 58	100	600/500[1]	8500	16		3NC2200-5		1	5 units	1DM	0.066
	Cylindrical fuse links NEW											
	Operational class gS											
	22 × 127	1	1500/ 1000	2	2		3NC2301-0MK		1	5 units	1DM	0.103
		2		4.4	2.5		3NC2302-0MK		1	5 units	1DM	0.102
		4		55	5.3		3NC2304-0MK		1	5 units	1DM	0.104
		6		150	6.4		3NC2306-0MK		1	5 units	1DM	0.102
		10		540	3.1		3NC2310-0MK		1	5 units	1DM	0.104
		16		1120	4.7		3NC2316-0MK		1	5 units	1DM	0.104
		20		2850	5.4		3NC2320-0MK		1	5 units	1DM	0.104
		25		3300	6.9		3NC2325-0MK		1	5 units	1DM	0.105
		32		9050	6.7		3NC2332-0MK		1	5 units	1DM	0.105
	Operational class gR											
	22 × 127	40	1500/ 1000	18500	9.4		3NC2340-0MK		1	5 units	1DM	0.104
	Operational class aR											
	22 × 127	50	1500/ 1000	26000	11.6		3NC2350-0MK		1	5 units	1DM	0.106
	Cylindrical fuse links, with M8 bolt-on links NEW											
	With bolt-on links: mounting dimension 75 mm, for screwing onto busbars or onto 5SH5723 fuse base											
	Operational class gR											
	18 x 88	10	690/ 440	17	4.3		3NC1810-0MK		1	3 units	1DM	0.042
		16		52	4.4		3NC1816-0MK		1	3 units	1DM	0.099
		20		90	6.5		3NC1820-0MK		1	3 units	1DM	0.043
		25		160	8.5		3NC1825-0MK		1	3 units	1DM	0.043
		32		400	8.9		3NC1832-0MK		1	3 units	1DM	0.057
		40		600	11		3NC1840-0MK		1	3 units	1DM	0.060
		50		1250	13.8		3NC1850-0MK		1	3 units	1DM	0.043
	With bolt-on links: mounting dimension 80 mm, for screwing onto busbars or onto 5SH5023 fuse base											
	Operational class gR											
	26 x 103	25	690/ 440	120	9.5		3NC2625-0MK		1	3 units	1DM	0.099
		32		220	12.3		3NC2632-0MK		1	3 units	1DM	0.099
		40		400	14.8		3NC2640-0MK		1	3 units	1DM	0.130
		50		980	17.5		3NC2650-0MK		1	3 units	1DM	0.099
		63		2050	18.8		3NC2663-0MK		1	3 units	1DM	0.099
	Operational class aR											
		80		3500	22.5		3NC2680-0MK		1	3 units	1DM	0.130
		100		5400	31.5		3NC2600-0MK		1	3 units	1DM	0.099
		125		11800	39		3NC2611-0MK		1	3 units	1DM	0.100

[1] DC voltage acc. to UL.

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Cylindrical fuse design

Fuse bases for SITOR fuses NEW
With bolt-on links or slotted blade contacts, 1-pole

Version*	For fuse series	I_n	U_n	Connection bolt	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
mm		A	V DC								kg
75	3NC18	50	690	M5		3NH5723		1	1 unit	1BM	0.187
80	3NE87, 3NC26	315	690	M8		3NH5023		1	1 unit	1BM	0.304

Cylindrical fuse holders
Can be used as fuse switch disconnectors[1)]

Size	Version	Rated voltage	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
mm × mm		V AC/V DC							kg
10 × 38	1P	690/--	▶	3NC1091		1	12 units	1DM	0.052
	2P		▶	3NC1092		1	6 units	1DM	0.104
	3P		▶	3NC1093		1	4 units	1DM	0.156
14 × 51	1P		▶	3NC1491		1	6 units	1DM	0.105
	2P		▶	3NC1492		1	3 units	1DM	0.228
	3P			3NC1493		1	2 units	1DM	0.319
22 × 58	1P		▶	3NC2291		1	1 unit	1DM	0.192
	2P		▶	3NC2292		1	3 units	1DM	0.330
	3P			3NC2293		1	2 units	1DM	0.494
22 × 127 NEW	1P	1500/1000		3NC2391-0MK		1	1 unit	1DM	0.488
	2P			3NC2392-0MK		1	1 unit	1DM	0.981
	3P			3NC2393-0MK		1	1 unit	1DM	1.488

Cylindrical fuse holders
Can be used as fuse switch disconnectors, with signaling switches for fuse links with striking pin[1)]

14 × 51	1P	690/--		3NC1491-5		1	6 units	1DM	0.121
22 × 58	1P			3NC2291-5		1	6 units	1DM	0.149

Cylindrical fuse bases

10 × 38	1P	600/--		3NC1038-1		1	10 units	1DM	0.041
	2P			3NC1038-2		1	8 units	1DM	0.071
	3P			3NC1038-3		1	6 units	1DM	0.103

Fuse tongs

10 × 38, 14 × 51, 22 × 58				3NC1000		1	1 unit	1DM	0.071

[1)] Please note the utilization category and current/voltage values; see "Technical specifications", page 5/67.

* You can order this quantity or a multiple thereof.

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Overview

SILIZED is the brand name for NEOZED fuses (D0 fuses) and DIAZED fuses (D fuses) with super quick-response characteristic for semiconductor protection. The fuses are used in combination with fuse bases, fuse screw caps and accessory parts of the standard fuse system.

SILIZED semiconductor fuses protect power semiconductors from the effects of short circuits because the super quick disconnect characteristic is far quicker than that of conventional fuses. They protect high-quality devices and system components, such as semiconductor contactors, static relays, converters with fuses in the input and in the DC link, UPS systems and soft starters for motors up to 100 A.

When using fuse bases and fuse screw caps made of molded plastic, always heed the maximum permissible power loss values due to the high power loss (power dissipation) of the SILIZED fuses.
When using these components, the following maximum permissible power loss applies:
- NEOZED D02: 5.5 W
- DIAZED DII: 4.5 W
- DIAZED DIII: 7.0 W

This enables a partial thermal permanent load of only 50 %.

The DIAZED screw adapter DII for 25 A is used for the 30 A fuse link.

Benefits

- SILIZED semiconductor fuses have an extremely compact design. This means they have a very small footprint – particularly the NEOZED version
- The rugged and well-known DIAZED design complies with IEC 60269-3. It is globally renowned and can be used in many countries
- A wide range of fuse bases and accessories is available for the NEOZED and DIAZED versions of the SILIZED semiconductor fuses. This increases the application options in many devices

Technical specifications

		5SE13 NEOZED design fuse links	5SD4 DIAZED design fuse links
Standards		DIN VDE 0636-3; IEC 60269-3; EN 60269-4 (VDE 0636-4); IEC 60269-4	
Operational class		gR	
Characteristic		Quick-acting	
Rated voltage U_n	V AC V DC	400 250	500 500
Rated current I_n	A	10 ... 63	16 ... 100
Rated breaking capacity	kA AC kA DC	50 8	
Mounting position		Any, preferably vertical	
Non-interchangeability		Using adapter sleeves	Using screw adapter or adapter sleeves
Resistance to climate	°C	Up to 45 at 95 % rel. humidity	
Ambient temperature	°C	-5 ... +40, humidity 90 % at 20	

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Selection and ordering data

	Size	I_e	U_e	Breaking I^2t value	Power loss	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	V AC/ V DC	A^2s	W							kg
	SILIZED fuse links, operational class gR											
	D01	10	400/250	73	6.9		**5SE1310**		1	10 units	1DM	0.007
		16		120	6.2		**5SE1316**		1	10 units	1DM	0.007
	D02	20		190	8.1		**5SE1320**		1	10 units	1DM	0.013
		25		215	8.2		**5SE1325**		1	10 units	1DM	0.011
		35		470	16.7		**5SE1335**		1	10 units	1DM	0.014
		50		1960	12.0		**5SE1350**		1	10 units	1DM	0.014
		63		4230	15.5		**5SE1363**		1	10 units	1DM	0.013
	DII	16	500/500	60	12.1		**5SD420**		1	5 units	1DM	0.029
		20		139	12.3		**5SD430**		1	5 units	1DM	0.030
		25		205	12.5		**5SD440**		1	5 units	1DM	0.032
		30		310	13.5		**5SD480**		1	5 units	1DM	0.031
	DIII	35		539	14.8		**5SD450**		1	5 units	1DM	0.051
		50		1250	18.5		**5SD460**		1	5 units	1DM	0.051
		63		1890	28		**5SD470**		1	5 units	1DM	0.054
	DIV	80		4200	34.3		**5SD510**		1	3 units	1DM	0.113
		100		8450	41.5		**5SD520**		1	3 units	1DM	0.114

* You can order this quantity or a multiple thereof.

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Overview

Special demands are made on fuses for application in photovoltaic systems. These fuses have a high DC rated voltage and a tripping characteristic specially designed to protect PV modules and their connecting cables (the newly defined operational class gPV). It is also crucial that the PV fuses do not age in spite of strongly alternating load currents, in order to ensure high plant availability throughout the service life of the PV system. The fuses must also be able to withstand high temperature fluctuations without damage. These requirements were only incorporated into an international standard in recent years and have now been published as IEC 60269-6.
All Siemens photovoltaic fuse systems comply with this new standard. Furthermore, they also already comply with the recently agreed corrections to the characteristic curves, which will be incorporated in the next standard update.

The IEC cylindrical fuses used as phase fuses also correspond to the characteristic curves specified in UL standard UL 2579. The non-fusing current I_{nf} and fusing current I_f test currents are crucial to the shape of the characteristic curves.

Standard	I_{nf}	I_f
Current IEC standard	1.13 x I_n	1.45 x I_n
UL standard	1.0 x I_n	1.35 x I_n
Future IEC standard	1.05 x I_n	1.35 x I_n
Siemens fuses	1.13 x I_n	1.35 x I_n

These test currents of gPV phase fuses to 32 A apply for a conventional test duration of one hour; at I_{nf}, the fuse must not trip within an hour, at I_f, it must trip within an hour.

The PV cylindrical fuses of size 10 mm x 38 mm offer an especially space-saving solution for the protection of the strings.

The fuse holders of size 10 x 38 mm can be supplied in single-pole and two-pole versions with and without signal detectors. In the case of devices with signal detector, a small electronic device with LED is located behind an inspection window in the plug-in module. If the inserted fuse link is tripped, this is indicated by the LED flashing. The devices have a sliding catch that enables removal of individual devices from the assembly. The infeed can be from the top or the bottom. Because the cylindrical fuse holders are fitted with the same anti-slip terminals at the top and the bottom, the devices can also be bus-mounted at the top or the bottom.

The PV fuses in LV HRC design are usually used as cumulative fuses upstream of the inverter. In addition, they can also be used for protecting groups (PV subarrays). For the PV cumulative fuses of size 1, standard LV HRC fuse bases are available. For PV cumulative fuses of size 1L, 1XL, 2L, 2XL and 3L, we have developed a special 3NH7...-4 fuse base with a swiveling mechanism which combines maximum touch protection with maximum user-friendliness. This makes it possible to change fuses safely and without the need for any tools, such as a fuse handle. This provides safe and fast access even in an emergency.

Our cylindrical fuse holders and fuse bases with swiveling mechanism comply with the IEC 60269-2 standard and are considered fuse disconnectors as defined in the IEC 60947 switchgear and controlgear standard. Under no circumstances are they suitable for switching loads.

To ensure that PV fuses are correctly selected and dimensioned, the specific operating conditions and the PV module data must be taken into account when calculating voltage and current ratings.

Benefits

- Protection of the modules and their connecting cables in the event of reverse currents
- Safe tripping in case of fault currents reduces the risk of fire due to DC electric arcs
- Safe separation when the fuse holder/fuse base is open

PV cylindrical fuse system, 3NW70..-4, 3NW60..-4

PV LV HRC fuse systems, 3NH73..-4, 3NE13..-4D

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Technical specifications

		Cylindrical fuse links		Cylindrical fuse holders	
		3NW60..-4	3NW66..-4	3NW70..-4	3NW76..-4
Size	mm x mm	10 x 38	10 x 85		
Standards		IEC 60269-6		IEC 60269, IEC 60269-2, IEC 60947, UL 4248-1, -18	IEC 60269, IEC 60269-2, IEC 60947, UL 4248-1, -18
Approvals		UL 248-13, waiver certification for China (2 to 16 A)	(File No. E469670)	(File No. E355487), (variants without signal detector)	(E355487)
Operational class		gPV			
Rated voltage U_n	V DC	1000	1500 (20 A: 1200 V)	1000	1500
Rated current I_n	A DC	2 to 20	4 to 20	30	32
Rated short-circuit strength	kA	--		30	
Rated breaking capacity	kA DC	30	10	--	
Breaking capacity • Utilization category		--		AC-20B, DC-20B	
Max. power dissipation of the fuse link	W	--		4	6
Rated impulse withstand voltage	kV	--		6	--
Overvoltage category		--		II	--
Pollution degree		--		2	--
No-voltage changing of fuse links		--		Yes	
Sealable when installed		--		Yes	
Mounting position		Any, preferably vertical			
Current direction		--		Any (signal detector with antiparallel LED)	
Degree of protection acc. to IEC 60529		--		IP20, with connected conductors[1]	
Terminals with touch protection according to BGV A3 at incoming and outgoing feeder		--		Yes	
Ambient temperature	°C	-25 ... +55, humidity 90 % at +20			
Conductor cross-sections • Finely stranded, with end sleeve • AWG (American Wire Gauge)	 mm^2 AWG	 -- --		 0.75 ... 25 18 ... 4	
Tightening torque	Nm	--		2.5	

1) Degree of protection IP20 is tested according to regulations using a straight test finger (from the front), with the device mounted and equipped with a cover, housing or some other enclosure.

Selection and ordering data

	Size	I_n	U_n	P_v	P_v at 70 %[1]	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm x mm	A DC	V DC	W	W							kg
	Cylindrical fuse links operational class gPV											
3NW6004-4	10 x 38	2	1000	1.4	0.6	►	3NW6002-4		1	20 units	1DN	0.008
		4		1.6	0.7		3NW6004-4		1	20 units	1DN	0.009
		6		1.7	0.7		3NW6001-4		1	20 units	1DN	0.009
		8		1.9	0.8		3NW6008-4		1	20 units	1DN	0.009
		10		2.3	1.0		3NW6003-4		1	20 units	1DN	0.010
		12		2.7	1.1		3NW6006-4		1	20 units	1DN	0.009
		16		3.2	1.3		3NW6005-4		1	20 units	1DN	0.009
		20		3.4	1.4		3NW6007-4		1	20 units	1DN	0.008
3NW6604-4	10 x 85	4	1500	2.7	1.1		3NW6604-4		1	10 units	1DN	0.016
		6		3.0	1.2		3NW6601-4		1	10 units	1DN	0.016
		8		3.6	1.5		3NW6608-4		1	10 units	1DN	0.016
		10		3.7	1.6		3NW6603-4		1	10 units	1DN	0.016
		12		3.3	1.4		3NW6606-4		1	10 units	1DN	0.016
		16		3.7	1.6		3NW6605-4		1	10 units	1DN	0.016
		20	1200	4.0	1.7		3NW6607-4		1	10 units	1DN	0.016

1) Tested in the fuse holder 3NW7013-4 or 3NW7613-4.

* You can order this quantity or a multiple thereof.

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	Number of poles	I_n	For fuse links of size	Width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A DC	mm x mm	MW							kg
3NW7014-4	**Cylindrical fuse holders, 1000 V with signal detector**										
	1P	30	10 x 38	1		**3NW7014-4**		1	12 units	1DN	0.062
	2P	30	10 x 38	2		**3NW7024-4**		1	6 units	1DN	0.123
	Without signal detector										
	1P	30	10 x 38	1		**3NW7013-4**		1	12 units	1DN	0.064
	2P	30	10 x 38	2		**3NW7023-4**		1	6 units	1DN	0.122
3NW7613-4	**Cylindrical fuse holders, 1500 V**										
	1P	32	10 x 85	1.3		**3NW7613-4**		1	5 units	1DN	0.102

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* You can order this quantity or a multiple thereof.

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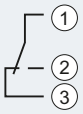
Technical specifications

		Fuse links 3NE1...-4 / -4D / -4E / -5E						Fuse bases 3NH7...-4					
Size		1	1L	2L	3L	1XL	2XL	1	1L	2L	3L	1XL	2XL
Standards		IEC 60269-6						IEC 60269, IEC 60269-2, IEC 60947					
Operational class		gPV											
Rated voltage U_n	V DC	1000 at time constant (L/R) 3 ms 1500 at time constant (L/R) 3 ms						1000				1500	
Rated current I_n	A DC	63 ... 160	200/250	315/400	500/630	63 ... 200	250/315	160	250	400	630	250	400
Rated short-circuit strength	kA	--						30					
Rated breaking capacity	kA DC	30						--					
Breaking capacity • Utilization category		--						AC-20B, DC-20B (switching without load)					
Max. power dissipation of the fuse link	W	--						40	90	110	130	90	110
No-voltage changing of fuse links		--						Yes					
Sealable when installed		--						Yes					
Mounting position		Any, preferably vertical											
Current direction		--						Any					
Ambient temperature	°C	-25 ... +55, humidity 90 % at +20											
Tightening torque	Nm	--						20					
Microswitch for Tripped signaling **5 A/250 V AC, 0.2 A/250 V DC**		In the "fuse not blown" state, contacts 1 and 3 are closed. 											

Selection and ordering data

3NE1330-4D

Size	I_n	U_n	P_v at U_n	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A DC	V DC	W							kg
Fuse links operational class gPV										
1	63	1000	19		3NE1218-4		1	2 units	1DN	0.607
	80		20		3NE1220-4		1	2 units	1DN	0.607
	100		24		3NE1221-4		1	2 units	1DN	0.539
	125		26		3NE1222-4		1	2 units	1DN	0.580
	160		32		3NE1224-4		1	2 units	1DN	0.621
1L	200		51		3NE1225-4D		1	2 units	1DN	0.819
	250		54		3NE1227-4D		1	2 units	1DN	0.750
2L	315		73		3NE1330-4D		1	2 units	1DN	1.081
	400		82		3NE1332-4D		1	2 units	1DN	1.097
3L	500		100		3NE1434-4E		1	2 units	1DN	1.701
	630		110		3NE1436-4E		1	2 units	1DN	1.684
1XL	63	1500	20		3NE1218-5E		1	2 units	1DN	1.011
	80		25		3NE1220-5E		1	2 units	1DN	0.994
	100		30		3NE1221-5E		1	2 units	1DN	1.003
	125		29	▶	3NE1222-5E		1	2 units	1DN	1.001
	160		34	▶	3NE1224-5E		1	2 units	1DN	0.998
	200		41	▶	3NE1225-5E		1	2 units	1DN	1.002
2XL	250		53	▶	3NE1327-5E		1	2 units	1DN	1.262
	315		63	▶	3NE1330-5E		1	2 units	1DN	1.263

* You can order this quantity or a multiple thereof.

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	For fuse links of size	I_n	U_n	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A DC								kg
	Fuse bases with flat terminal									
	Standard ceramic fuse base [1]									
3NH3230	1	250	1000	►	**3NH3230**		1	3 units	1BM	0.761
	Fuse bases with swiveling mechanism									
3NH7360-4	1L	250	1000		**3NH7260-4**		1	1 unit	1DN	1.306
	2L	400	1000		**3NH7360-4**		1	1 unit	1DN	1.724
	3L	630	1000/1500		**3NH7460-4**		1	1 unit	1DN	2.224
	1XL	250	1500		**3NH7261-4**		1	1 unit	1DN	1.337
	2XL	400	1500		**3NH7361-4**		1	1 unit	1DN	1.729
	Fuse bases with swiveling mechanism and microswitches for tripped signaling of the fuse[2]									
	1	250	1000		**3NH7262-4KK01**		1	1 unit	1DN	1.205
	2L	400	1000		**3NH7360-4KK01**		1	1 unit	1DN	1.725
Accessories										
3NX3121	**Terminal covers for PV fuse bases with swiveling mechanism**									
	1, 1L, 1XL				**3NX3121**		1	1 unit	1DN	0.070
	2L, 2XL				**3NX3122**		1	1 unit	1DN	0.129
	3L				**3NX3123**		1	1 unit	1DN	0.167

[1] For further information, see Catalog LV 11.

[2] Fuse must be inserted upside down.

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Notes

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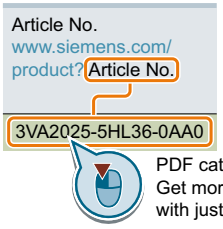
6/2	**Introduction**
6/3	**5SD7 lightning arresters, type 1**
6/5	**5SD7 combination surge arresters, type 1 + type 2**
6/7	**5SD7 combination surge arresters, type 1 / type 2**
6/9	**5SD7 surge arresters, type 2**
6/13	**5SD7 surge arresters, type 3**
6/14	**Configuration**
6/17	**5SD7 surge arresters for measuring and control technology**

NEW

Direct reference to the products in the Industry Mall from the selection and ordering data tables:



Paper catalog:
To get more product information enter the Web address plus Article No.

PDF catalog:
Get more product information with just a mouse click.

For further technical product information:

Configuration Manual

Overvoltage Protection Devices
Article No.: 3ZW1012-5SD74-0AC1

Siemens Industry Online Support:

www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
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FAQ
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Product note
Software archive
Technical data

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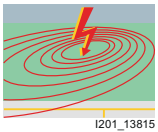
Overview

Devices		Page	Application	Standards
	5SD7 lightning arresters, type 1	6/3	With plug-in protective modules for TN-C, TN-S and TT systems. Rated voltage 350 V AC for lightning currents from 25 kA to 100 kA. All versions with remote signaling contact. For installation in main distribution boards, upstream or downstream of the counter.	EN 61643-11
	5SD7 combination surge arresters, type 1 + type 2	6/5	With plug-in protective modules for TN-C, TN-S and TT systems. Rated voltage 350 V AC for lightning currents from 25 kA to 100 kA. All versions with remote signaling contact. For installation in main distribution boards downstream of the counter.	EN 61643-11
	5SD7 combination surge arresters, type 1 / type 2	6/7	With plug-in protective modules for TN-C, TN-S and TT systems. Rated voltage 335 V AC for lightning currents or discharge surge currents up to 50 kA. Versions with or without remote signaling.	EN 61643-11
	5SD7 surge arresters, type 2	6/9	With plug-in protective modules for TN-C, TN-S and TT systems. Rated voltage 350 V AC, rated discharge surge current 20 kA and discharge surge current 40 kA. For installation in sub-distribution boards.	EN 61643-11
	5SD7 surge arresters, type 3	6/13	With plug-in protective modules for single-phase and three-phase systems. Rated voltage, single-phase 24 V, 120 V, 230 V AC and three-phase 230/400 V AC. For installation as close as possible upstream from the terminal equipment.	EN 61643-11
	**Configuration**	6/14	Everything you need to know about overvoltage protection: Function, mounting and technical connections.	
	5SD7 surge arresters for measuring and control technology	6/17	With plug-in protective modules for measuring and control technology for installation in signal circuits.	EN 61643-21

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Overview

Type 1 lightning arresters are the most powerful overvoltage protection. They protect low-voltage systems against any overvoltage or high impulse currents that may be triggered by a direct or indirect lightning strike.

All lightning arresters are fitted with a mechanical fault indication, which does not require an extra power supply.

The lightning conductors can therefore also be used in the precounter area.

The protective modules are available as connectors. The majority of lightning arresters have a remote signaling contact, which signals if the device fails.

Technical specifications

		5SD7411-2	5SD7412-1	5SD7413-1	5SD7414-1
Standards		IEC 61643-11 (DIN VDE 06754-6)			
Approvals		KEMA, UL/cUL	UL/cUL		UL/cUL
Rated voltage U_N	V AC	690	240	240/415	
Rated arrester voltage U_C					
• L-N, N-PE, L-(PE)N	V AC	800	350	350	350
Lightning impulse current I_{imp} (10/350 µs)					
• L-N or L-(PE)N, 1P/3P	kA	35	25	25/75	25/75
• N-PE	kA	--	100	--	100
Rated discharge surge current I_n (8/20 µs)					
• L-N or L-(PE)N, 1P/3P	kA	35	25	25/75	25/75
• N-PE	kA	--	100	--	100
Protection level U_p					
• L-(PE)N	kV	≤ 4.50	≤ 1.50	≤ 1.50	≤ 1.50
• L-PE	kV	--	≤ 2.50	--	≤ 2.50
• N-PE	kV	--	≤ 1.50	--	≤ 1.50
Follow current discharge capacity I_{fi} (AC)					
• L-N or L-(PE)N for 264 V/350 V	kA	--	50/25	50/25	50/25
• N-PE	A	--	100	--	100
Response time t_A					
• L-N or L-(PE)N	ns	≤ 100	≤ 100	≤ 100	≤ 100
• L-(N)-PE	ns	--	≤ 100	--	≤ 100
Max. back-up fuse acc. to IEC 61643-1					
• For stub wiring	A	400 gL/gG	315 gL/gG	315 gL/gG	315 gL/gG
• For V-wiring	A	125 gL/gG	125 gL/gG	125 gL/gG	125 gL/gG
Short-circuit withstand current With max. back-up fuse	kA_{rms}	50	50	50	50
Temperature range	°C	-40 ... +80			
Degree of protection		IP20, with connected conductors			
Conductor cross-section					
• Finely stranded	mm^2	16 ... 50	2.5 ... 25	2.5 ... 25	2.5 ... 25
• Solid	mm^2	16 ... 50	2.5 ... 35	2.5 ... 35	2.5 ... 35

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5SD7 lightning arresters, type 1

Selection and ordering data

	Version	Mounting width DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		MW						kg
Lightning arresters								
	1-pole With remote signaling	--[1]	5SD7411-2		1	1 unit	1BK	3.468
	2-pole For TN-S and TT systems with remote signaling	4	5SD7412-1		1	1 unit	1BK	0.778
	3-pole For TN-C systems With remote signaling	6	5SD7413-1		1	1 unit	1BK	1.354
	4-pole For TN-S and TT systems With remote signaling	8	5SD7414-1		1	1 unit	1BK	1.712
Replacement plugs								
	N-PE: • 5SD7412-1 • 5SD7414-1		5SD7418-0		1	1 unit	1BK	0.230
	L-N / L-PEN: • 5SD7412-1 • 5SD7413-1 • 5SD7414-1		5SD7418-1		1	1 unit	1BK	0.293

[1] No modular installation device.

* You can order this quantity or a multiple thereof.

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Overview

Combination surge arresters, type 1 + type 2 are compact designs comprising lightning arresters (type 1) and surge arresters (type 2). They protect low-voltage systems against overvoltages triggered by lightning strikes or by switching operations in the network.

A thermal isolating arrester for the varistors offers a high degree of protection against overload. The protective modules are available as connectors. All combination surge arresters have a remote signaling contact, which signals if the device fails.

Technical specifications

			5SD7442-1	5SD7443-1	5SD7444-1
Standards **Approvals**			IEC 61643-11; EN 61643-11 KEMA, UL/cUL		
Rated voltage U_N		V AC	240	240/415	
Rated arrester voltage U_C					
• L-N, N-PE, L-(PE)N		V AC	350		
Lightning impulse current I_{imp} (10/350 µs)					
• L-N or L-(PE)N, 1P/3P • N-PE		kA kA	25 100	25/75 --	25/75 100
Rated discharge surge current I_n (8/20 µs)					
• L-N or L-(PE)N, 1P/3P • N-PE		kA kA	25 100	25/75 --	25/75 100
Protection level U_p					
• L-(PE)N		kV	≤ 1.50	≤ 1.50	≤ 1.50
• L-PE		kV	≤ 2.20	--	≤ 2.20
• N-PE		kV	≤ 1.50	--	≤ 1.50
Follow current discharge capacity I_{fi} (AC)					
• L-N or L-(PE)N • N-PE		kA kA	25 100	25 --	25 100
Response time t_A					
• L-N or L-(PE)N • L-(N)-PE		ns ns	≤ 100 ≤ 100	≤ 100 --	≤ 100 ≤ 100
Max. back-up fuse	Acc. to IEC 61643-1				
• For stub wiring • For V-wiring		A A	315 gL/gG 125 gL/gG		
Short-circuit withstand current with max. back-up fuse		kA_{rms}	25		
Temperature range		°C	-40 ... +80		
Degree of protection			IP20, with connected conductors		
Conductor cross-section					
• Finely stranded • Solid		mm^2 mm^2	2.5 ... 25 2.5 ... 35		
Mounting width	Acc. to DIN 43880	MW	4	6	8
Visual function/fault indication			Yes		

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5SD7 combination surge arresters, type 1 + type 2

Selection and ordering data

	Version	Mounting width MW	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Combination surge arresters									
	2-pole For TN-S and TT systems With remote signaling	4		5SD7442-1		1	1 unit	1BK	0.729
	3-pole For TN-C systems With remote signaling	6		5SD7443-1		1	1 unit	1BK	1.162
	4-pole For TN-S and TT systems With remote signaling	8		5SD7444-1		1	1 unit	1BK	1.507
Replacement plugs									
	N-PE: • 5SD7442-1 • 5SD7444-1			5SD7418-0		1	1 unit	1BK	0.230
	L-N / L-PEN (type 2): • 5SD7442-1 • 5SD7443-1 • 5SD7444-1			5SD7428-1		1	1 unit	1BK	0.075
	L-N / L-PEN (type 1): • 5SD7442-1 • 5SD7443-1 • 5SD7444-1			5SD7448-1		1	1 unit	1BK	0.190

* You can order this quantity or a multiple thereof.

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Overview

Combination surge arresters type 1 / type 2 are compact designs which can be used as both lightning arresters type 1 and surge arresters type 2.

They protect low-voltage systems against overvoltages triggered by lightning strikes or by switching operations in the network.

A thermal isolating arrester for the varistors offers a high degree of protection against overload. The protective modules are available as connectors. The combination surge arresters can be fitted either with or without a remote signaling contact, which signals if the device fails.

Technical specifications

		5SD7411-2	5SD7412-2 5SD7412-3	5SD7413-2 5SD7413-3	5SD7414-2 5SD7414-3	5SD7483-6 5SD7483-7
Standards **Approvals**		IEC 61643-11 KEMA, UL/cUL	KEMA			EN 50539
Rated voltage U_N	V AC	690	240	240/415		--
Rated arrester voltage U_C						
• L-L-N, N-PE, L-(PE)N	V	800 AC	335 AC			1000 DC
Lightning impulse current I_{imp} (10/350 µs)						
• L-N or L-(PE)N, 1P/3P	kA	35	12.5	12.5/37.5	12.5	≤ 5
• N-PE	kA	--	50	--	50	--
Rated discharge surge current I_n (8/20 µs)						
• L-N or L-(PE)N, 1P/3P	kA	35	12.5	12.5/37.5	12.5/50	15
• N-PE	kA	--	50	--		--
Max. discharge surge current I_{max} (8/20 µs)						
• L-N	kA	100	12.5	50/150	50	40
• N-PE	kA	--	50	--	50	--
Protection level U_p						
• L-(PE)N	kV	≤ 4.50	≤ 1.20	≤ 1.20	≤ 1.20	≤ 3.50
• L-PE	kV	--	--	--	--	--
• N-PE	kV	--	≤ 1.70	--	≤ 1.70	--
Response time t_A						
• L-N or L-(PE)N	ns	≤ 100	≤ 25			
• L-(N)-PE	ns	--	≤ 100	--	≤ 100	≤ 25
Max. back-up fuse acc. to IEC 61643-1						
• For stub wiring	A	400 gL/gG	160 gL/gG			--
• For V-wiring	A	125 gL/gG	80 gL/gG			--
Short-circuit withstand current With max. back-up fuse	kA_{rms}	50	25			
Temperature range	°C	-40 ... +80				
Degree of protection		IP20, with connected conductors				
Conductor cross-section						
• Finely stranded	mm^2	16 ... 50	1.5 ... 25			
• Solid	mm^2	16 ... 50	1.5 ... 35			

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5SD7 combination surge arresters, type 1 / type 2

Selection and ordering data

	Version	Mounting width MW	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Combination surge arresters									
	1-pole With remote signaling	--[1]		5SD7411-2		1	1 unit	1BK	3.468
	2-pole For TN-S and TT systems								
	• Without remote signaling	2		5SD7412-2		1	1 unit	1BK	0.335
	• With remote signaling	2		5SD7412-3		1	1 unit	1BK	0.337
	3-pole For TN-C systems								
	• Without remote signaling	3		5SD7413-2		1	1 unit	1BK	0.556
	• With remote signaling	3		5SD7413-3		1	1 unit	1BK	0.538
	4-pole For TN-S and TT systems								
	• Without remote signaling	4		5SD7414-2		1	1 unit	1BK	0.678
	• With remote signaling	4		5SD7414-3		1	1 unit	1BK	0.682
For photovoltaic systems									
	3-pole, plug-in For protecting the DC part of **photovoltaic systems** up to 1000 V DC acc. to EN 50539-11								
	• Without remote signaling	3		5SD7483-6		1	1 unit	1BK	0.410
	• With remote signaling	3		5SD7483-7		1	1 unit	1BK	0.416
Replacement plugs									
	N-PE: • 5SD7412-2, 5SD7412-3 • 5SD7414-2, 5SD7414-3			5SD7418-2		1	1 unit	1BK	0.099
	L-N / L-PEN: • 5SD7412-2, 5SD7412-3 • 5SD7413-2, 5SD7413-3 • 5SD7414-2, 5SD7414-3			5SD7418-3		1	1 unit	1BK	0.135
	L-PE (PV): • 5SD7483-6, 5SD7483-7			5SD7498-3		1	1 unit	1BK	0.103

[1] No modular installation device.

* You can order this quantity or a multiple thereof.

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Overview

Surge arresters type 2 are used downstream of lightning arresters type 1 in main distribution boards or sub-distribution boards. They protect low-voltage systems against transient overvoltages, such as those triggered by switching operations.

A thermal isolating arrester for the varistors offers a high degree of protection against overload. The protective modules are available as connectors. The surge arresters have an optional remote signaling contact, which signals if the device fails.

Technical specifications

		Standard design						
		N-PE						
		5SD7481-0	5SD7461-0 5SD7461-1	5SD7481-1	5SD7463-0 5SD7463-1	5SD7464-0 5SD7464-1	5SD7473-1	5SD7483-5
Standards **Approvals**		IEC 61643-11; EN 61643-11 KEMA					--	KEMA, UL/cUL
Rated voltage U_N	V AC	240	240	690	240/415	240/415	500	554/960
Rated arrester voltage U_C								
• L-N	V AC	--	350	800	--	--	--	760
• L-N or L-(PE)N	V AC	--	--	--	350	350	580	--
• N-PE	V AC	260	--	--	--	260	--	--
Rated discharge surge current I_n (8/20 µs)								
• L-N	kA	--	20	15	--	--	--	15
• L-N or L-(PE)N, 1P	kA	--	--	--	20	20	15	--
• N-PE	kA	20	--	--	--	20	--	--
Max. discharge surge current I_{max} (8/20 µs)								
• L-N	kA	--	40	30	--	--	--	30
• L-N or L-(PE)N, 1P	kA	--	--	--	40	40	--	--
• L-N or L-(PE)N, 1P/multi-pole	kA	--	--	--	--	--	30	--
• N-PE	kA	40	--	--	--	40	--	--
Lightning impulse current I_{imp} (10/350 µs)	kA	12	--					
Protection level U_p								
• L-(PE)N	kV	--	≤ 1.50	≤ 5	≤ 1.50	≤ 1.60	≤ 2.50	≤ 2.90
• L-PE	kV	--	--	≤ 5	--	≤ 1.90	≤ 2.50	--
• N-PE	kV	≤ 1.50	--	--	--	≤ 1.50	--	--
Response time t_A								
• L-N or L-(PE)N	ns	--	≤ 25	≤ 100	≤ 25	≤ 25	≤ 25	≤ 25
• N-PE	ns	≤ 100	--	--	--	≤ 100	--	--
Max. back-up fuse acc. to IEC 61643-1								
• For stub wiring	A	--	125 gL/gG	100 gL/gG	125 gL/gG			100 gL/gG
• For V-wiring	A	--	--	80 gL/gG	80 gL/gG			80 gL/gG
Short-circuit withstand current With max. back-up fuse	kA_{rms}	25						
Temperature range	°C	-40 ... +80						
Degree of protection		IP20, with connected conductors						
Conductor cross-section								
• Finely stranded	mm^2	1.5 ... 25						
• Solid	mm^2	1.5 ... 35						
Mounting width according to DIN 43880	MW	1	1	2	3	4	3	3
Visual function/fault indication		Yes						

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5SD7 surge arresters, type 2

			Narrow design	
			5SD7422-0 **5SD7422-1**	**5SD7424-0** **5SD7424-1**
Standards **Approvals**			IEC 61643-11 (DIN VDE 06754-6) KEMA/UL/cUL	
Rated voltage U_N		V AC	240	240/415
Rated arrester voltage U_C				
• L-N or L-(PE)N		V AC	350	350
• N-PE		V AC	264	264
Rated discharge surge current I_n (8/20 µs)				
• L-N or L-(PE)N, 1P/3P		kA	20	20
• N-PE		kA	20	20
Max. discharge surge current I_{max} (8/20 µs)				
• L-N or L-(PE)N, 1P/3P		kA	40	40
• N-PE		kA	40	40
Protection level U_p				
• L-(PE)N		kV	≤ 1.50	≤ 1.50
• L-PE		kV	--	--
• N-PE		kV	≤ 1.50	≤ 1.50
Response time t_A				
• L-N		ns	≤ 25	≤ 25
• N-PE		ns	≤ 100	≤ 100
Max. back-up fuse	Acc. to IEC 61643-1			
• For stub wiring		A	315 gL/gG	
• For V-wiring		A	63 gL/gG	
Short-circuit withstand current with max. back-up fuse		kA_{rms}	25	25
Temperature range		°C	-40 ... +80	
Degree of protection			IP20, with connected conductors	
Conductor cross-section				
• Finely stranded		mm^2	1.5 ... 16	
• Solid		mm^2	1.5 ... 25	
Mounting width	Acc. to DIN 43880	mm	26	50
Visual function/fault indication			Yes	

Selection and ordering data

	Version	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		MW							kg
Surge arresters, standard design									
	1-pole, N-PE								
	• Without remote signaling	1		**5SD7481-0**		1	1 unit	1BK	0.132
	1-pole								
	• Without remote signaling	1		**5SD7461-0**		1	1 unit	1BK	0.139
	• With remote signaling	1		**5SD7461-1**		1	1 unit	1BK	0.143
	• With remote signaling	2		**5SD7481-1**		1	1 unit	1BK	0.239

* You can order this quantity or a multiple thereof.

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5SD7 surge arresters, type 2

	Version	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		MW							kg
	3-pole, 3+0 circuit								
	For TN-C systems								
	• Without remote signaling	3		5SD7463-0		1	1 unit	1BK	0.363
	• With remote signaling	3		5SD7463-1		1	1 unit	1BK	0.372
	For IT systems								
	• With remote signaling	3		5SD7473-1		1	1 unit	1BK	0.391
	• With remote signaling	3		5SD7483-5		1	1 unit	1BK	0.399
	4-pole, 3+1 circuit								
	For TN-S and TT systems								
	• Without remote signaling	4		5SD7464-0		1	1 unit	1BK	0.440
	• With remote signaling	4		5SD7464-1		1	1 unit	1BK	0.431
Replacement plugs									
	N-PE: • 5SD7481-0 • 5SD7464-0, 5SD7464-1			5SD7488-0		1	1 unit	1BK	0.056
	L-N / L-PEN: • 5SD7461-0, 5SD7461-1 • 5SD7463-0, 5SD7463-1 • 5SD7464-0, 5SD7464-1			5SD7468-1		1	1 unit	1BK	0.067
	L-PE / N-PE: • 5SD7485-0, 5SD7485-1			5SD7488-1		1	1 unit	1BK	0.080
	L-PEN: • 5SD7481-1, • 5SD7483-5			5SD7488-2		1	1 unit	1BK	0.088
	L-PEN: • 5SD7481-1			5SD7488-4		1	1 unit	1BK	0.043
	L-PE (IT/PV): • 5SD7473-0, 5SD7473-1 • 5SD7483-0, 5SD7483-1			5SD7498-1		1	1 unit	1BK	0.078

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* You can order this quantity or a multiple thereof.

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5SD7 surge arresters, type 2

	Version	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		MW							kg
Surge arresters, narrow design									
	2-pole For TN-S and TT systems								
	- Without remote signaling	24 (1 1/3)		5SD7422-0		1	1 unit	1BK	0.227
	- With remote signaling	24 (1 1/3)		5SD7422-1		1	1 unit	1BK	0.224
	4-pole For TN-S and TT systems								
	- Without remote signaling	48 (2 2/3)		5SD7424-0		1	1 unit	1BK	0.413
	- With remote signaling	48 (2 2/3)		5SD7424-1		1	1 unit	1BK	0.417
Replacement plugs									
	N-PE: • 5SD7422-0, 5SD7422-1 • 5SD7424-0, 5SD7424-1			5SD7428-0		1	1 unit	1BK	0.088
	L-N / L-PEN: • 5SD7422-0, 5SD7422-1 • 5SD7423-0, 5SD7423-1 • 5SD7424-0, 5SD7424-1			5SD7428-1		1	1 unit	1BK	0.075

* You can order this quantity or a multiple thereof.

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Overview

Type 3 surge arresters are installed downstream of type 2 surge arresters in sub-distribution boards as close as possible to the load. The protective modules are available as connectors. In the event of a power failure, a remote signaling is output over an optocoupler with open collector output.

Technical specifications

			2-pole			4-pole
			5SD7432-1	5SD7432-2	5SD7432-4	5SD7434-1
Standards			IEC 61643-11; EN 61643-11			
Approvals			KEMA/UL/cUL			KEMA
Rated voltage U_N		V AC	230	120	24	230/400
Rated load current I_L (at 30 °C)		A	26	26	26	3 × 26
Rated arrester voltage U_C		V AC	264	150	34	335
Rated discharge surge current I_n (8/20 µs)		kA	3	3	1	1.5
Combined surge U_{oc}		kV	6	6	2	4
Protection level U_p	L-N / L-PE, N-PE	V	≤ 1350/≤ 1500	≤ 850/≤ 950	≤ 250/≤ 650	≤ 1200/≤ 1500
Response time t_A		ns	≤ 100	≤ 100	≤ 100	≤ 100
Required back-up fuse, max.		A (gG/B/C)	25	25	25	25
Temperature range		°C	-40 ... +80			
Degree of protection			IP20, with connected conductors			
Conductor cross-section						
• Finely stranded		mm^2	0.2 ... 2.5			
• Solid		mm^2	0.2 ... 4			
Mounting width	Acc. to DIN 43880	MW	1	1	1	2
Visual function/fault indication			Yes			

Selection and ordering data

	Version	Rated voltage U_N	Mounting width DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	MW						kg
	Surge arresters, plug-in								
	• 2-pole								
	With remote signaling	24	1	**5SD7432-4**		1	1 unit	1BK	0.093
		120	1	**5SD7432-2**		1	1 unit	1BK	0.092
		230	1	**5SD7432-1**		1	1 unit	1BK	0.092
	• 4-pole								
	With remote signaling	230/400	2	**5SD7434-1**		1	1 unit	1BK	0.138
Replacement plugs[1]									
	5SD7432-1			**5SD7437-1**		1	1 unit	1BK	0.046
	5SD7432-2			**5SD7437-2**		1	1 unit	1BK	0.041
	5SD7432-3			**5SD7437-3**		1	1 unit	1BK	0.048
	5SD7432-4			**5SD7437-4**		1	1 unit	1BK	0.047
	5SD7434-1			**5SD7438-1**		1	1 unit	1BK	0.060

[1] Products and replacement plugs have a new shape.

*** You can order this quantity or a multiple thereof.**

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More information

Selection of overvoltage protection devices

Situation Which type of building do you want to protect? Generally speaking, all our devices are suitable for residential buildings, office buildings, industrial and commercial	Systems	Basic protection For installation upstream of counters in main distribution boards or in combined main/sub-distribution boards
Low risk buildings - No outer lightning protection - Power supply over ground conductor	**TN-S and TT systems**	**Surge arresters, type 2** 5SD7424-0, 5SD7424-1, 5SD7464-0, 5SD7464-1 **Combination surge arresters, type 1 / type 2** 5SD7414-2, 5SD7414-3
	TN-C systems	**Surge arresters, type 2** 5SD7423-0, 5SD7423-1, 5SD7463-0, 5SD7463-1 **Combination surge arresters, type 1 / type 2** 5SD7413-2, 5SD7413-3
High-risk buildings - Outer lightning protection system - Power supply over overhead lines - Grounded aerial structures	**TN-S and TT systems**	**Lightning arresters, type 1** 5SD7414-2, 5SD7414-3, 5SD7414-1
	TN-C systems	**Lightning arresters, type 1** 5SD7413-2, 5SD7413-3, 5SD7413-1
	TN-S and TT systems	**Combination surge arresters, type 1 + type 2** 5SD7444-1
	TN-C systems	**Combination surge arresters, type 1 + type 2** 5SD7443-1, 5SD7441-1
	IT systems without N conductor incorporated in the cable	Typically, IT systems are only installed in special building sections. TN-C, TN-S and TT systems are generally still used in the area of the main distribution board. In this case, the protective devices shown above must be installed.

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Medium protection For installation upstream of counters in main distribution boards or in combined main/sub-distribution boards	Fine protection For installation directly upstream of the terminal equipment
Surge arresters, type 2 5SD7424-0, 5SD7424-1, 5SD7464-0, 5SD7464-1 Only required if the distance between the main and sub-distribution boards is **> 10 m**	 **Surge arresters, type 3** For installation in sub-distribution boards or control cabinets 5SD7432-x and 5SD7434-1 With remote signaling
Surge arresters, type 2 5SD7463-0, 5SD7463-1 Only required if the distance between the main and sub-distribution boards is **> 10 m**	
Surge arresters, type 2 5SD7424-0, 5SD7424-1, 5SD7464-0, 5SD7464-1 	
Surge arresters, type 2 5SD7463-0, 5SD7463-1 	
Surge arresters, type 2 5SD7424-0, 5SD7424-1, 5SD7464-0, 5SD7464-1 Only required if the distance between the main and sub-distribution boards is **> 10 m**	
Surge arresters, type 2 5SD7463-0, 5SD7463-1 Only required if the distance between the main and sub-distribution boards is **> 10 m**	
Surge arresters, type 2 5SD7473-1 3-pole (3+0 circuit) U_C = 580 V AC 	

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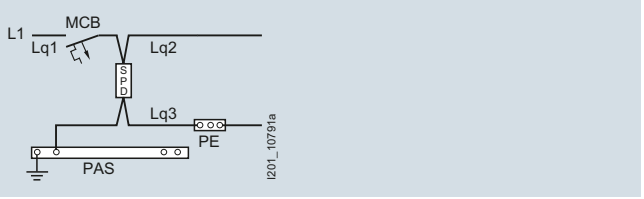
Configuration

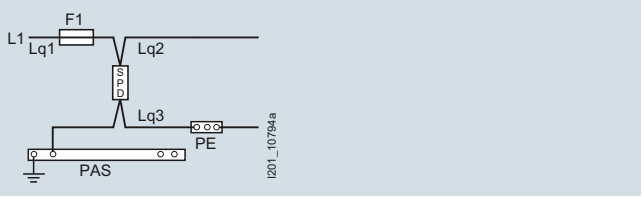
Dimensioning of conductor cross-sections

The different conductor cross-sections (Lq 1 to Lq 3) must be dimensioned according to the rated current of the miniature circuit breaker or of the fuse.

V-wiring



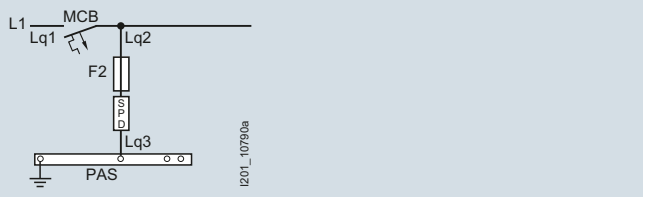
a) Protection of the SPD using miniature circuit breakers



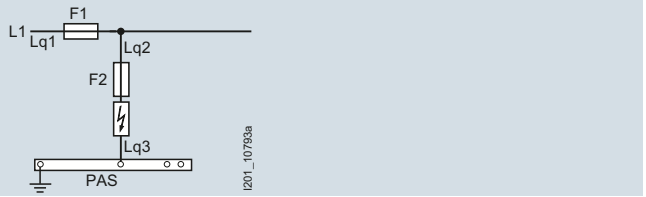
b) Protection of the SPD using fuses

PAS = Equipotential bonding strip

Stub wiring



a) Protection of the SPD using miniature circuit breakers



b) Protection of the SPD using fuses

Conductor cross-sections for lightning arresters (type 1) and combination surge arresters (type 1 + type 2) for V-wiring

MCB/fuse (F1) upstream [A gL/gG]	Lq 2 [mm²]	Lq 3 [mm²]
25	10	16
35	10	16
40	10	16
50	10	16
63	10	16
80	16	16
100	25	16
125	35	16

Conductor cross-sections for surge arresters (type 2) for V-wiring

MCB/fuse (F1) upstream [A gL/gG]	Lq 2 [mm²]	Lq 3 [mm²]
25	6	6
35	6	6
40	6	6
50	10	10
63	10	10

Conductor cross-sections for lightning arresters (type 1) and combination surge arresters (type 1 + type 2) for stub wiring

MCB/fuse (F1) upstream [A gL/gG]	Lq 2 [mm²]	Lq 3 [mm²]	F2 fuse [A gL/gG]
25	6	16	/
35	10	16	/
40	10	16	/
50	10	16	/
63	10	16	/
80	10	16	/
100	16	16	/
125	16	16	/
160	25	25	/
200	35	35	160[1)]
250	35	35	160[1)]
315	50	50	160[1)]
> 315	50	50	160[1)]

[1)] Recommended fuse.

Conductor cross-sections for surge arresters (type 2) for stub wiring

MCB/fuse (F1) upstream [A gL/gG]	Lq 2 [mm²]	Lq 3 [mm²]	F2 fuse [A gL/gG]
25	6	6	/
32	6	6	/
40	6	6	/
50	6	6	/
63	10	10	/
80	10	10	/
100	16	16	/
125	16	16	/
> 125	16	16	125

In the case of surge arresters type 3, the following conductor cross-sections are generally used:

- Rigid: Up to 4 mm²
- Flexible: Up to 2.5 mm²

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Overview

The surge arresters for measuring and control technology are overvoltage protection modules that comprise two parts, a basic element and a plug-in part. Their application area is the protection of signal circuits.

The cable shields of basic elements can be either directly or indirectly grounded.

The mounting width of the surge arresters is 1 MW.

Through the number of integrated paths, it is possible to protect up to four signal cores or two double cores against overvoltages.

The arresters are made up of two parts (plug-in part and base element).

A mechanical encoding ensures protection against reverse polarity.

Technical specifications

			5SD7502-0KB	5SD7522-7KA 5SD7522-7KB	5SD7530-4KA 5SD7530-4KB	5SD7540-6KB	5SD7541-7KB	5SD7550-4KA 5SD7550-4KB
IEC category/EN type			C1/C2/C3/D1	C1/C2/C3/D1	C1/C2/C3/D1	C1/C2/C3/D1	C1/C2/C3/D1	C1/C2/C3/D1
Max. continuous voltage U_C								
• Direct voltage		V DC	68	40	14	27	40	14
• AC voltage		V AC	48	28	8.3	18.6	28	9.8
Rated current I_N		mA	2000	450	450	2000	300	450
Lightning test current I_{imp} 10/350 µs	Per path	kA	5	2.5	2.5	2.5	2.5	2.5
Rated discharge current I_n	8/20 µs							
• Core – Core		kA	--	10	10	0.365	--	10
• Core – Ground		kA	20	10	10	0.365	10	10
Total surge current I_N	8/20 µs	kA	40	20	20	20	20	20
Output voltage limit at 1 kV/µs								
• Core – Core		V	--	≤ 55	25	25	--	≤ 25
• Core – Ground		V	≤ 600	≤ 450	40	40	≤ 55	≤ 25
Residual voltage at I_n								
• Core – Core		V	--	≤ 55	--	--	--	≤ 25
• Core – Ground		V	--	--	--	--	≤ 55	≤ 40
Response time t_A								
• Core – Core		ns	--	≤ 1	≤ 500	≤ 1	--	≤ 500
• Core – Ground		ns	≤ 100	≤ 100	≤ 500	≤ 100	≤ 1	≤ 500
Insertion loss a_E								
• Symmetrical in the 50 Ω system		dB	--	Typ. 0.5 (1.5 MHz)	--	0.1 dB to 1 MHz	--	--
• Asymmetrical in the 50 Ω system		dB	0.1 (1 MHz)	--	--	--	0.5 (1.5 MHz)	--
• Symmetrical in the 100 Ω system		dB	--	--	0.2 (5 MHz)	--	--	0.2 (5 MHz)
Limit frequency f_G (3 dB)								
• Symmetrical in the 50 Ω system		MHz	--	Typ. 8	--	6 MHz (typ.)	--	--
• Asymmetrical in the 50 Ω system		MHz	--	--	--	--	Typ. 8	--
• Symmetrical in the 100 Ω system		MHz	--	--	Typ. 70	--	--	Typ. 70
Resistance per path		Ω	--	2.2	--	--	4.7	2.2
Temperature range		°C	-40 ... +85					
Degree of protection according to IEC 60529/EN 60529			IP20					
Flammability class acc. to UL 94			V0					
Test standards			EN 61643-21	EN 61643-21	IEC 61643-21/ EN 61643-21	IEC 61643-21/ EN 61643-21	EN 61643-21	IEC 61643-21

KA: Basic element grounded via gas arrester
KB: Basic element directly grounded

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5SD7 surge arresters for measuring and control technology

			5SD7581-2	5SD7581-3	5SD7581-5	5SD7581-6
IEC category/EN type			B2/C1/C2/C3/D1	B2/C1/C2/C3/D1	B2/C1/C2/C3/D1	B2/C1/C2/C3/D1
Max. continuous voltage U_C						
• Direct voltage		V DC	185	3.3	12	15
• AC voltage		V AC	128	2.3	8.3	10.4
Rated current I_N		mA	380	1500	380	1000
Rated discharge current I_n	8/20 µs					
• Core – Core		kA	5	0.10	5	0.25
• Core – Ground		kA	5	2	5	0.25
Total surge current I_N	8/20 µs	kA	10	10	10	5
Output voltage limit at 1 kV/µs						
• Core – Core		V	≤ 250	≤ 9	≤ 25	≤ 25
• Core – Ground		V	≤ 250	≤ 700	≤ 700	≤ 650
Residual voltage at I_n						
• Core – Core		V	≤ 120	≤ 15	≤ 25	≤ 55
• Core – Ground		V	≤ 120	≤ 700	≤ 55	≤ 700
Response time t_A						
• Core – Core		ns	≤ 100	≤ 1	≤ 100	≤ 1
• Core – Ground		ns	≤ 100	≤ 100	≤ 100	≤ 100
Insertion loss a_E						
• Symmetrical in the 50 Ω system		dB	--	--	--	--
• Asymmetrical in the 50 Ω system		dB	--	--	--	--
• Symmetrical in the 100 Ω system		dB	--	≤ 1	0.3	--
Temperature range		°C	-40 ... +85			
Degree of protection according to IEC 60529/EN 60529			IP20			
Test standards			EN 61643-21	EN 61643-21	EN 61643-21	EN 61643-21

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Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Surge arresters								
	Coarse protection for 2 single-sided grounded signal leads		5SD7502-0KB		1	1 unit	1BK	0.090
	Protection for 2-wire signal circuits grounded via gas arresters		5SD7522-7KA		1	1 unit	1BK	0.102
	Protection for 2-wire signal circuits grounded directly		5SD7522-7KB		1	1 unit	1BK	0.102
	Protection for 2 signal cores with shared reference potential, grounded via gas arresters		5SD7530-4KA		1	1 unit	1BK	0.090
	Protection for 2 signal cores with shared reference potential, grounded directly		5SD7530-4KB		1	1 unit	1BK	0.090
	Protection for one 4-wire signal circuit, operated without potential to ground, grounded directly		5SD7540-6KB		1	1 unit	1BK	0.102
	Protection for 4 signal cores with shared reference potential, grounded directly		5SD7541-7KB		1	1 unit	1BK	0.102
	Protection for field bus systems and signal circuits in 3-wire or 4-wire method, grounded via gas arresters		5SD7550-4KA		1	1 unit	1BK	0.102
	Protection for field bus systems and signal circuits in 3-wire or 4-wire method, grounded directly		5SD7550-4KB		1	1 unit	1BK	0.102
	Overvoltage protection for analog and digital telecommunication interfaces, connection: RJ45		5SD7581-2		1	1 unit	1BK	0.327
	Overvoltage protection for Ethernet interfaces up to 10 Gbits		5SD7581-3		1	1 unit	1BK	0.318
	D-SUB-9 intermediate connectors with overvoltage protection for RS 485 interfaces		5SD7581-5		1	1 unit	1BK	0.329
	D-SUB-9 intermediate connectors with overvoltage protection for V.24 interface		5SD7581-6		1	1 unit	1BK	0.328

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* You can order this quantity or a multiple thereof.

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5SD7 surge arresters for measuring and control technology

Plug-in parts	5SD7502-0	5SD7522-7	5SD7530-4	5SD7540-6	5SD7550-4	5SD7541-7
Surge arresters	5SD7502-0KB	5SD7522-7KA 5SD7522-7KB	5SD7530-4KA 5SD7530-4KB	5SD7540-6KB	5SD7550-4KA 5SD7550-4KB	5SD75SD7541-7KB

Accessories for surge arresters

Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
		5SD7522-7		1	1 unit	1BK	0.027
		5SD7530-4		1	1 unit	1BK	0.040
		5SD7540-6		1	1 unit	1BK	0.046
		5SD7550-4		1	1 unit	1BK	0.018
		5SD7541-7		1	1 unit	1BK	0.028
		5SD7502-0		1	1 unit	1BK	0.015

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* You can order this quantity or a multiple thereof.

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For further technical product information:

Configuration Manual

Switch disconnectors
Article No.: 3ZW1012-3NP11-0AC1

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PDF catalog: Get more product information with just a mouse click.

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Introduction

Overview

		Article No.	Page
Switch disconnectors			
3LD	**Main control and EMERGENCY-STOP switches from 16 A to 250 A** • Devices for front mounting, floor mounting with door-coupling rotary operating mechanism, distribution board mounting or in molded-plastic enclosures • Front mounting with four-hole and center hole arrangement • 3, 4 and 6-pole versions • 3 and 4-pole load transfer switches • DC isolators 800 V DC	**3LD**	7/3
5TE1	**Switch disconnectors from 100 A to 200 A** • For floor and distribution board mounting • 2, 3 and 4-pole versions	**5TE1**	7/27
3KD	**Switch disconnectors up to 1600 A** • Compact design allowing it to be used where space is limited. • Complete assemblies: 3- and 4-pole switch disconnectors with front operating mechanisms, connections in form of box terminal or flat terminal including direct operating mechanism with gray handle • Basic units for individual configuration, with front operating mechanism without handle, 3 and 4-pole variants, connection by box terminal or flat terminal, operating mechanism module in center or on left-hand side of switch disconnector	**3KD**	7/33
3KA/3KE	**Switch disconnectors from 63 A to 1000 A** • Devices for floor mounting with handle, with door-coupling rotary operating mechanism, in molded-plastic enclosures and for mounting in control cabinet side panels • 3 and 4-pole versions • Accessories for use as load transfer switches and parallel switches	**3KA, 3KE**	7/68
3VT	**Switch disconnectors from 160 A to 1600 A** • Compact design allowing it to be used where space is limited. • 3 and 4-pole versions • Coordinated, comprehensive range of accessories for greater functionality, e.g. - Motorized operating mechanisms - Shunt and undervoltage releases for remote control - Switching state interrogation by means of auxiliary and alarm switches	**3VT**	7/79
Switch disconnectors with fuses			
3KL	**Switch disconnectors with fuses up to 800 A** • Devices for floor mounting with door-coupling rotary operating mechanism and for mounting in control cabinet side panels • 3KM versions with isolating plug connector for mounting on vertical busbars • 3 and 4-pole versions • Suitable for NH and BS 88 fuse systems	**3KL, 3KM**	7/103
3NJ62	**In-line switch disconnectors with fuses, plug-in type, up to 630 A** • 2, 3 and 4-pole versions • Suitable for NH and BS 88 fuse systems • Manually operated or with motorized operating mechanism • Optionally with integrated current transformers, auxiliary switches and electronic fuse monitoring	**3NJ62**	7/130
Fuse switch disconnectors			
3NP1	**3NP fuse switch disconnectors** • Rated current up to 630 A • Connection components are available for flat connection, saddle terminal connection, prism terminal connection and box terminal connection • Electromechanical and electronic fuse monitoring with/without network monitoring function • Mounting versions for floor mounting and 40/60 mm busbar system	**3NP1, 3NP5**	7/155
3NJ4/3NJ5	**In-line fuse switch disconnectors up to 2000 A** • 1 and 3-pole switchable versions • Versions for secondary-side protection of transformers • In-line infeed block versions up to 2000 A with isolating blades • Connection components are available for flat connection, stud bolt connection, saddle terminal connection, prism terminal connection and box terminal connection • Versions with/without integratable current transformer • Versions with/without electronic fuse monitoring	**3NJ4, 3NJ5**	7/188

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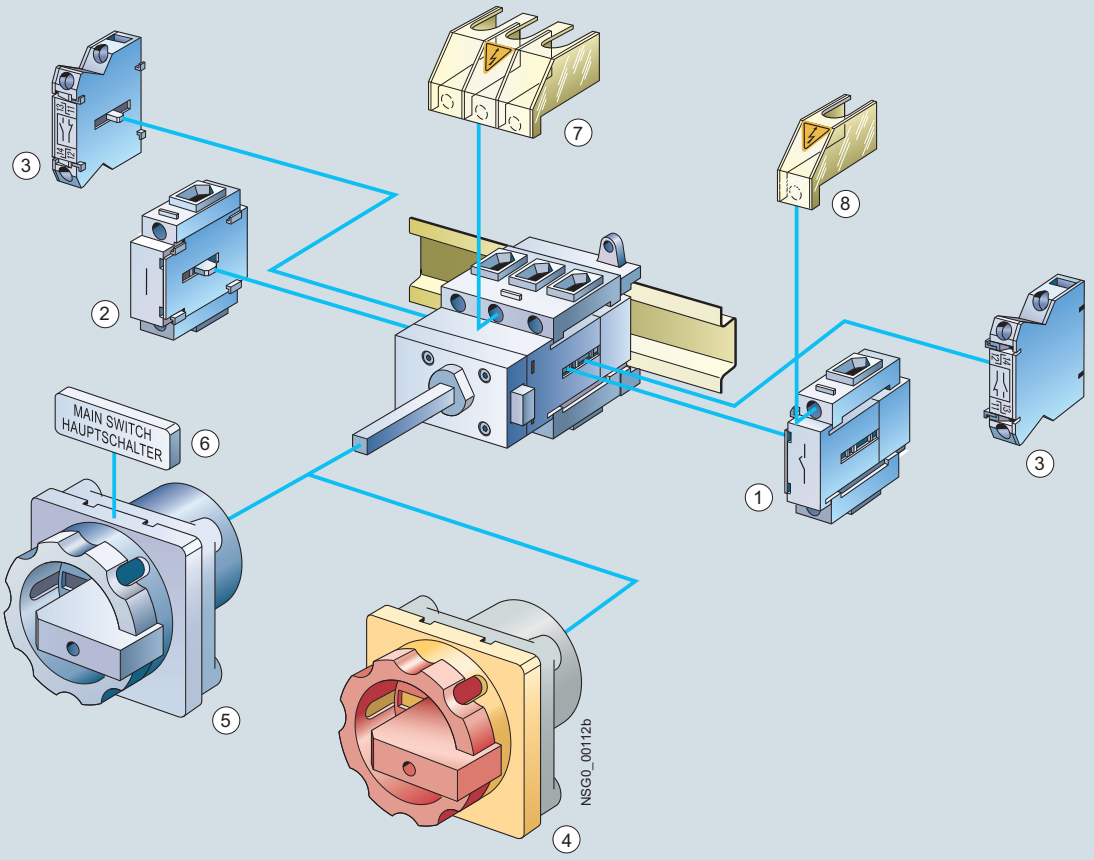
Overview



1. 4th contact (N conductor)
2. N or PE/ground terminal, continuous
3. Auxiliary switch 1 NO + 1 NC
4. Rotary operating mechanism, red/yellow
5. Rotary operating mechanism, black
6. Front plate, English/German
7. Terminal cover, three-pole
8. Terminal cover, single-pole

The 3LD main control and EMERGENCY-STOP switches are manually operated switch disconnectors according to IEC 60947-3/VDE 0660 Part 107 (EN 60947-3) and comply with the conditions for switch disconnectors.

In EN 60204-1 (VDE 0113 Part 1), main control switches are called "disconnector units", while EMERGENCY-STOP switches are termed "devices for emergency shutdown".

The 3LD switches for 16 to 250 A are approved according to UL 508 and can be used as "manual motor controllers" and "motor disconnects". In addition, the 3LD switch disconnectors have CCC certification.

Maintenance personnel can protect themselves against unauthorized startup with padlocks (up to three can be fitted).

The 3LD switches can be used in any mounting position.

Application

The 3LD switches are used for switching main and auxiliary circuits, but also for switching three-phase motors and other loads during maintenance and repair work.

They can be used as:

- ON-OFF switches
- EMERGENCY-STOP switches
- Main control switches according to EN 60204-1

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Design

Design of the contacts

Each switch has three adjacent contact elements[1]. A 4th leading contact for switching the N conductor, a continuous PE terminal, and an auxiliary switch (1 NO + 1 NC) can be fitted to each side of the switch. The auxiliary switches operate as leading contacts on opening. On opening, the NO contact opens before the main contacts, so that a contactor carries the switching capacity in the circuit and the maintenance or safety switch switches at zero current. On closing, the auxiliary switch switches later than or at the same time as the main contacts.

Design of rotary operating mechanisms

The rotary operating mechanisms of the switches for front or floor mounting are mounted on control cabinet doors, front or side panels with four-hole or center-hole mounting with a standard diameter of 22.5 mm and operated from the outside. In their Off position, they can be locked with up to three padlocks with a hasp thickness of 8 mm. Controls with defeatable door-coupling rotary operating mechanism are available in addition.

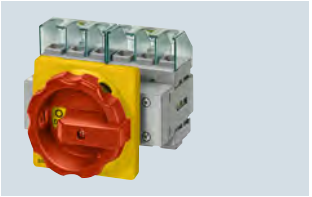
- Switch position indicator:
  The switch position is clearly marked with direction arrows and an "O" for OFF and a "I" for ON at the front.
- Switches for front mounting:
  The switches for front mounting are connected directly to the rotary operating mechanism through the fixing screws or – in the case of center-hole mounting – a special-purpose coupling.
- Switches for floor mounting:
  The switches for floor mounting are snapped onto 35 mm standard mounting rails according to EN 60715 or screw-mounted on mounting plates. The actuators are connected to the lower section of the switch through a door coupling, which can be released in its zero position, and a 300 mm long switch shaft. When the control cabinet door is open, the switch can be protected against inadvertent operation by removing the switch shaft from the lower section of the switch.
  The mounting depth can be adapted to individual requirements by adjusting the switch shaft length.
- Switches for distribution board mounting:
  The switches for distribution board mounting are suited for operation in distribution boards and for switching inside control cabinets or distributors. They have cap and mounting dimensions to DIN 43880 and can be fitted under the same cover together with miniature circuit breakers. The selector switches can be locked in their OFF position with up to 2 padlocks with a hasp thickness of 6 mm.
- Switches in molded-plastic enclosure:
  For surface mounting of individual main control and EMERGENCY-STOP switches, molded plastic-enclosed switches to degree of protection IP65 are used. The actuators can be locked in their OFF position with three padlocks with a hasp thickness of 8 mm.
  The molded-plastic enclosures each contain an N and/or a PE terminal.

[1] 16 A versions have four contact elements; 3-pole changeover switches and 6-pole main control switches have six contact elements.

3LD2704-0TK53 switch for front mounting with rotary operating mechanism

3LD2222-0TK1 switch for front mounting with knob

3LD2122-7UK01 3-pole changeover switch for front mounting with knob



3LD2103-3VK53 6-pole switch for front mounting with rotary operating mechanism

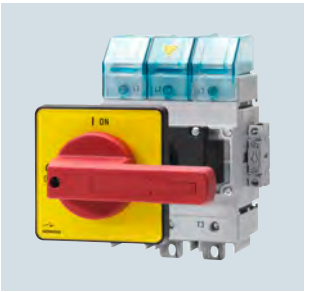
3LD2144-0TK53 switch for floor mounting with rotary operating mechanism and door coupling

3LD2530-0TK11 switch for distribution board mounting with knob

3LD2264-0TB5 switch in molded-plastic enclosure

3LD2217-1TL13 switch for floor mounting with rotary operating mechanism and defeatable door coupling

3LD2265-8VQ51-0AF6 DC isolator



3LD2418-0TK13 switch for floor mounting, 250 A, with rotary operating mechanism and door coupling

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Technical specifications

Standards			DIN VDE 0660, IEC 60947							
Switches		Type	**3LD20**	**3LD21**	**3LD22**	**3LD25**	**3LD27**	**3LD28**	**3LD23**	**3LD24**
Rated insulation voltage U_i		V	690							
Rated operational voltage U_e		V AC	690							
Rated frequency		Hz	50 ... 60							
Rated impulse withstand voltage U_{imp}		kV	6	6	6	6	6	6	6	6
Rated short-time withstand current (1 s current, rms value)		A	340	640	640	1260	2000	2000	4000	4000
Short-circuit protection, max. back-up fuse (gL)		A	20	25	40	63	100	125	160	250
Rated conditional short-circuit current with upstream fuses at AC 50/60 Hz, 690 V		kArms	50	50	50	50	50	20	50	50
Maximum permissible let-through I^2t value		kA^2s	2.5	4	9	21	64	104	185	557
Permissible let-through current of the fuse		kA	3	3.5	4.5	6	10	10	15	15
Rated uninterrupted current I_u		A	16	25	32	63	100	125	160	250
AC-21A load-break switch	Rated operational current I_e	A	16	25	32	63	100	125	160	250
AC-3 motor load switches	Rating									
In-service switching	At 220 ... 240 V	kW	3.0	4.0	5.5	11.0	18.5	22.0	35.0	55.0
of individual motors	At 380 ... 440 V	kW	5.5	7.5	9.5	18.5	30.0	37.0	50.0	110.0
	At 660/690 V	kW	5.5	7.5	9.5	15.0	22.0	30.0	37.0	45.0
AC-23A main control switch	Rating									
Repair switch	At 220 ... 240 V	kW	4.0	5.0	6.0	11.0	18.5	22.0	45.0	75.0
frequent, but not in-service switching	At 380 ... 440 V	kW	7.5	9.5	11.5	22.0	37.0	45.0	75.0	132.0
of individual motors	At 660/690 V	kW	7.5	9.5	11.5	18.5	30.0	37.0	45.0	55.0
Power loss per conducting path at I_e		W	0.5	1.1	1.8	4.5	7.5	12.0	36.0	36.0
Endurance mechanical	Operating cycles		100 000							
Switching frequency		1/h	50							
Permissible ambient temperature		°C	-25 ... +55							
Isolating features	Up to max.	V	690							
Conductor cross-sections for main conductors [1]										
Solid or stranded		mm^2	1 ... 6	1.5 ... 16	1.5 ... 16	2.5 ... 35	4 ... 50	4 ... 50	16 ...185	16 ... 185
Finely stranded with end sleeve (max.)		mm^2	4	10	10	16	35	35	150	150
Conductor cross-sections	Copper cable	AWG	18 ... 10	14 ... 8	14 ... 8	14 ... 6	12 ... 1	12 ... 1		
Torque for terminal		Nm	1.5 ... 2	2 ... 2.5	2 ... 2.5	2.5 ... 3	2.5 ... 3	2.5 ... 3	9.5 ... 10	9.5 ... 10
Touch protection according to EN 50274			Yes							
Auxiliary switches										
Rated insulation voltage U_i		V	500							
Rated operational voltage U_e		V AC	500							
Rated uninterrupted current I_u		A	10							
Rated operational current I_e, AC-15	At 120 V	A	6							
	At 220 ... 240 V	A	3							
	At 380 ... 415 V	A	1.8							
	At 500 V	A	1.4							
Short-circuit protection, auxiliary switch, max. back-up fuse (gL/gG)		A	10							
Conductor cross-sections for auxiliary conductors										
Connection type			Terminals							
Solid or stranded		mm^2	2 × (0.75 ... 2.5), 1 × 4							
Finely stranded with end sleeve		mm^2	2 × (0.75 ... 1.5) 1 x 2.5							
Torque for terminal		Nm	0.8							

3LD switches for UL/CSA as "manual motor controllers" [2]

Standards			UL/CSA							
Switches		Type	**3LD20**	**3LD21**	**3LD22**	**3LD25**	**3LD27**	**3LD28**	**3LD23**	**3LD24**
Rated operational voltage U_e		V AC	600	600	600	600	600	600	600	600
Rated uninterrupted current I_u		A	10	20	30	60	100	125	160	250
	Current rating		A 600	A 600	A 600	--	--	--	--	--
	Pilot duty		P 600	P 600	P 600	--	--	--	--	--
Conventional thermal current I_{th}		A	16	25	32	63	100	125	160	250
Maximum rated power (AC-3)	3 ~ 120 V	HP	1	3	3	5	10	15	--	--
Alternating current motors 40 ... 60 Hz	240 V	HP	3	7.5	10 (7.5)[3]	15	30	40	40	50
(HP = PS)	480 V	HP	7.5	10	20 (15)[3]	40	60	75	75	100
	600 V	HP	10	15	30 (20)[3]	50	75	100	75	75
	1 ~ 120 V	HP	0.5	2	2	3	--	--	--	--
	240 V	HP	1.5	3	3	10	--	--	--	--
Conductor cross-sections	Cu cable	AWG	18 ... 10	14 ... 8	14 ... 8	14 ... 6	12 ... 1	12 ... 1	1 ... MCM400	
Torque		Nm	1.5 ... 2	2 ... 2.5	2 ... 2.5	2.5 ... 3	2.5 ... 3	2.5 ... 3	10	10

[1] Depending on the cable infeed, only small cross-sections are possible with devices in molded-plastic enclosures.

[2] The 3LD switches for UL/CSA are approved in accordance with UL/CSA as "manual motor controllers", and they can be used as repair switches in the molded-plastic enclosure, for example. However, they do not have UL approval as main control switches.

[3] Values in brackets apply to devices in molded-plastic enclosure

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Front mounting

Selection and ordering data

Number and version of the contacts		Rated data at 50 ... 60 Hz, 380 ... 440 V			DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.
Main contact elements	Aux. cont. elements	P/AC-3 kW	P/AC-23A kW	I_u/ AC-21A A							kg
Main control and EMERGENCY-STOP switches with rotary operating mechanism/knob-operated mechanism • Lockable in 0 position with up to 3 padlocks • Degree of protection at front side IP65 • All versions with rotary operating mechanism Exception: 3LD23 and 3LD24 with knob-operated mechanism • Including terminal cover for the infeed side • Front plate: - 3LD20, 3LD21, 3LD22: 67 mm × 67 mm - 3LD25 to 3LD28: 90 mm × 90 mm - 3LD23 to 3LD24: 96 mm × 96 mm											
Four-hole mounting											
3	--	5.5	7.5	16	▶	3LD2003-0TK5☐		1	1 unit	1CL	0.208
		7.5	9.5	25	▶	3LD2103-0TK5☐		1	1 unit	1CL	0.201
		9.5	11.5	32	▶	3LD2203-0TK5☐		1	1 unit	1CL	0.204
		18.5	22.0	63	▶	3LD2504-0TK5☐		1	1 unit	1CL	0.419
		30	37.0	100	▶	3LD2704-0TK5☐		1	1 unit	1CL	0.499
		37	45.0	125		3LD2804-0TK5☐		1	1 unit	1CL	0.501
		50	75.0	160		3LD2305-0TK1☐		1	1 unit	1CL	2.089
		110	132.0	250		3LD2405-0TK1☐		1	1 unit	1CL	2.097
3 + N	--	5.5	7.5	16	▶	3LD2003-1TL5☐		1	1 unit	1CL	0.218
		7.5	9.5	25		3LD2103-1TL5☐		1	1 unit	1CL	0.236
		9.5	11.5	32		3LD2203-1TL5☐		1	1 unit	1CL	0.235
		18.5	22.0	63		3LD2504-1TL5☐		1	1 unit	1CL	0.489
		30.0	37.0	100	▶	3LD2704-0TK5☐ +[1]		1	1 unit	1CL	0.499
					▶	3LD9280-0B		1	1 unit	1CL	0.098
		37.0	45.0	125		3LD2804-0TK5☐ +[1]		1	1 unit	1CL	0.501
					▶	3LD9280-0B		1	1 unit	1CL	0.098
		50	75.0	160		3LD2305-1TL1☐		1	1 unit	1CL	2.609
		110	132.0	250		3LD2405-1TL1☐		1	1 unit	1CL	2.611
3	1 NO + 1 NC	5.5	7.5	16		3LD2003-1TP5☐		1	1 unit	1CL	0.229
		7.5	9.5	25		3LD2103-1TP5☐		1	1 unit	1CL	0.224
		9.5	11.5	32		3LD2203-1TP5☐		1	1 unit	1CL	0.221
		18.5	22.0	63		3LD2504-1TP5☐		1	1 unit	1CL	0.438
		30.0	37.0	100		3LD2704-1TP5☐		1	1 unit	1CL	0.508
		37	45.0	125		3LD2804-1TP5☐		1	1 unit	1CL	0.517
		50.0	75.0	160		3LD2305-0TK1☐ +[2]		1	1 unit	1CL	2.089
					▶	3LD9200-5B		1	1 unit	1CL	0.020
		110.0	132.0	250		3LD2405-0TK1☐ +[2]		1	1 unit	1CL	2.097
					▶	3LD9200-5B		1	1 unit	1CL	0.020
3 + N	1 NO + 1 NC	5.5	7.5	16		3LD2003-2EP5☐		1	1 unit	1CL	0.237
		7.5	9.5	25		3LD2103-2EP5☐		1	1 unit	1CL	0.076
		9.5	11.5	32		3LD2203-1TL5☐ +[2]		1	1 unit	1CL	0.235
					▶	3LD9200-5B		1	1 unit	1CL	0.020
		18.5	22.0	63		3LD2504-1TP5☐ +[1]		1	1 unit	1CL	0.438
					▶	3LD9250-0BA		1	1 unit	1CL	0.075
		30.0	37.0	100	▶	3LD2704-0TK5☐ +[1]		1	1 unit	1CL	0.499
					▶	3LD9280-0B +[2]		1	1 unit	1CL	0.098
					▶	3LD9200-5B		1	1 unit	1CL	0.020
		37.0	45.0	125		3LD2804-0TK5☐ +[1]		1	1 unit	1CL	0.501
					▶	3LD9280-0B +[2]		1	1 unit	1CL	0.098
					▶	3LD9200-5B		1	1 unit	1CL	0.020
		50.0	75.0	160		3LD2305-1TL1☐ +[2]		1	1 unit	1CL	2.609
					▶	3LD9200-5B		1	1 unit	1CL	0.020
		110.0	132.0	250		3LD2405-1TL1☐ +[2]		1	1 unit	1CL	2.611
					▶	3LD9200-5B		1	1 unit	1CL	0.020

3LD2203-0TK51

3LD2704-0TK53

Actuator color

Black

Red/yellow (EMERGENCY-STOP)

1
3

[1] 4th contact element as N conductor to be ordered separately, see page 7/22, "Accessories"

[2] Auxiliary switches 1 NO + 1 NC to be ordered separately, see page 7/22, "Accessories".

* You can order this quantity or a multiple thereof.

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	Number and version of the contacts		Rated data at 50 ... 60 Hz, 380 ... 440 V			DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	Main contact elements	Auxiliary contact elements	P/AC-3	P/AC-23A	I_u/ AC-21A							
			kW	kW	A							kg
	Main control and EMERGENCY-STOP switches with direct operating mechanism (rotary operating mechanism/knob-operated mechanism)											
	• Lockable in 0 position with up to 3 padlocks											
	• Degree of protection at front side IP65											
	• All versions with rotary operating mechanism Exception: 3LD23 and 3LD24 with knob-operated mechanism											
	• Including terminal cover for the infeed side											
	• Front plate - 3LD20, 3LD21, 3LD22: 67 mm × 67 mm - 3LD25 to 3LD28: 90 mm × 90 mm - 3LD23 to 3LD24: 96 mm × 96 mm											
Center-hole mounting Ø 22.5 mm												
3LD2254-0TK53	3	--	5.5	7.5	16		3LD2054-0TK5☐		1	1 unit	1CL	0.208
			7.5	9.5	25		3LD2154-0TK5☐		1	1 unit	1CL	0.203
			9.5	11.5	32		3LD2254-0TK5☐		1	1 unit	1CL	0.207
			18.5	22	63		3LD2555-0TK5☐		1	1 unit	1CL	0.430
	3 + N	--	5.5	7.5	16		3LD2054-1TL5☐		1	1 unit	1CL	0.220
			7.5	9.5	25		3LD2154-1TL5☐		1	1 unit	1CL	0.246
			9.5	11.5	32		3LD2254-1TL5☐		1	1 unit	1CL	0.242
			18.5	22	63		3LD2555-0TK5☐ +[1]		1	1 unit	1CL	0.430
						►	3LD9250-0BA		1	1 unit	1CL	0.075
	3	1 NO + 1 NC	5.5	7.5	16		3LD2054-1TP5☐		1	1 unit	1CL	0.231
			7.5	9.5	25		3LD2154-1TP5☐		1	1 unit	1CL	0.229
			9.5	11.5	32		3LD2254-0TK5☐ +[2]		1	1 unit	1CL	0.207
						►	3LD9200-5B		1	1 unit	1CL	0.020
			18.5	22	63		3LD2555-0TK5☐ +[2]		1	1 unit	1CL	0.430
						►	3LD9200-5B		1	1 unit	1CL	0.020
	3 + N	1 NO + 1 NC	5.5	7.5	16		3LD2054-2EP5☐		1	1 unit	1CL	0.225
			7.5	9.5	25		3LD2154-2EP5☐		1	1 unit	1CL	0.262
			9.5	11.5	32		3LD2254-1TL5☐ +[2]		1	1 unit	1CL	0.242
						►	3LD9200-5B		1	1 unit	1CL	0.020
			18.5	22	63		3LD2555-0TK5☐ +[1]		1	1 unit	1CL	0.430
						►	3LD9250-0BA +[2]		1	1 unit	1CL	0.075
						►	3LD9200-5B		1	1 unit	1CL	0.020

Actuator color

Black	1
Red/yellow (EMERGENCY-STOP)	3

1) 4th contact element as N conductor to be ordered separately, see page 7/22, "Accessories"

2) Auxiliary switches 1 NO + 1 NC to be ordered separately, see page 7/22, "Accessories"

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Front mounting

	Number and version of the contacts		Rated data 50 ... 60 Hz, 380 ... 440 V		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	Main contact elements	Auxiliary contact elements	P/AC-23A kW	I_u A							kg
	Main control and EMERGENCY-STOP switches with direct operating mechanism (knob-operated mechanism) • Lockable in 0 position (can be modified to I position) with max. 2 padlocks • Degree of protection at front side IP65 • Including terminal cover for the infeed side • Front plate - 48 mm × 48 mm										
Four-hole mounting											
3LD2222-0TK11	3	--	7.5	16		3LD2022-0TK1☐		1	1 unit	1CL	0.183
			9.5	25		3LD2122-0TK1☐		1	1 unit	1CL	0.177
			11.5	32		3LD2222-0TK1☐		1	1 unit	1CL	0.182
	3 + N	--	7.5	16		3LD2022-1TL1☐		1	1 unit	1CL	0.196
			9.5	25		3LD2122-1TL1☐		1	1 unit	1CL	0.214
			11.5	32		3LD2222-0TK1☐ +[1]		1	1 unit	1CL	0.182
					►	3LD9220-0B		1	1 unit	1CL	0.037
	3	1 NO + 1 NC	7.5	16		3LD2022-0TK1☐ +[2]		1	1 unit	1CL	0.183
					►	3LD9200-5B		1	1 unit	1CL	0.020
			9.5	25		3LD2122-0TK1☐ +[2]		1	1 unit	1CL	0.177
					►	3LD9200-5B		1	1 unit	1CL	0.020
			11.5	32		3LD2222-0TK1☐ +[2]		1	1 unit	1CL	0.182
					►	3LD9200-5B		1	1 unit	1CL	0.020
	3 + N	1 NO + 1 NC	7.5	16		3LD2022-1TL1☐ +[2]		1	1 unit	1CL	0.196
					►	3LD9200-5B		1	1 unit	1CL	0.020
			9.5	25		3LD2122-1TL1☐ +[2]		1	1 unit	1CL	0.214
					►	3LD9200-5B		1	1 unit	1CL	0.020
			11.5	32		3LD2222-0TK1☐ +[1]		1	1 unit	1CL	0.182
					►	3LD9220-0B +[2]		1	1 unit	1CL	0.037
					►	3LD9200-5B		1	1 unit	1CL	0.020

Actuator color

Black	1
Red/yellow (EMERGENCY-STOP)	3

[1] 4th contact element as N conductor to be ordered separately, see page 7/22, "Accessories"

[2] Auxiliary switches 1 NO + 1 NC to be ordered separately, see page 7/22, "Accessories"

* You can order this quantity or a multiple thereof.

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	Number and version of the contacts		Rated data at 50 ... 60 Hz, 380 ... 440 V		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	Main contact elements	Auxiliary contact elements	P/AC-23A kW	I_u A							kg
	Main control and EMERGENCY-STOP switches with direct operating mechanism (knob-operated mechanism) • Lockable in 0 position (can be modified to I position) with max. 2 padlocks • Degree of protection at front side IP65 • Including terminal cover for the infeed side • Front plate: 48 mm × 48 mm										
Center-hole mounting Ø 22.5 mm											
3LD2150-0TK13	3	--	7.5	16		3LD2050-0TK1☐		1	1 unit	1CL	0.192
			9.5	25		3LD2150-0TK1☐		1	1 unit	1CL	0.187
			11.5	32		3LD2250-0TK1☐		1	1 unit	1CL	0.188
	3 + N	--	7.5	16		3LD2050-1TL1☐		1	1 unit	1CL	0.198
			9.5	25		3LD2150-0TK1☐ +[2]		1	1 unit	1CL	0.187
					►	3LD9200-5B		1	1 unit	1CL	0.020
			11.5	32		3LD2250-0TK1☐ +[2]		1	1 unit	1CL	0.188
					►	3LD9200-5B		1	1 unit	1CL	0.020
	3	1 NO + 1 NC	7.5	16		3LD2050-0TK1☐ +[2]		1	1 unit	1CL	0.192
					►	3LD9200-5B		1	1 unit	1CL	0.020
			9.5	25		3LD2150-0TK1☐ +[2]		1	1 unit	1CL	0.187
					►	3LD9200-5B		1	1 unit	1CL	0.020
			11.5	32		3LD2250-0TK1☐ +[2]		1	1 unit	1CL	0.188
					►	3LD9200-5B		1	1 unit	1CL	0.020
	3 + N	1 NO + 1 NC	7.5	16		3LD2050-1TL1☐ +[2]		1	1 unit	1CL	0.198
					►	3LD9200-5B		1	1 unit	1CL	0.020
			9.5	25		3LD2150-0TK1☐ +[1]		1	1 unit	1CL	0.187
					►	3LD9220-0B +[2]		1	1 unit	1CL	0.037
					►	3LD9200-5B		1	1 unit	1CL	0.020
			11.5	32		3LD2250-0TK1☐ +[1]		1	1 unit	1CL	0.188
					►	3LD9220-0B +[2]		1	1 unit	1CL	0.037
					►	3LD9200-5B		1	1 unit	1CL	0.020

Actuator color

Black	1
Red/yellow (EMERGENCY-STOP)	3

1) 4th contact element as N conductor to be ordered separately, see page 7/22, "Accessories"

2) Auxiliary switches 1 NO + 1 NC to be ordered separately, see page 7/22, "Accessories"

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Front mounting

	Number and version of the contacts		Rated data at 50 ... 60 Hz, 380 ... 440 V			DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	Main contact elements	Auxiliary contact elements	P/AC-3 kW	P/AC-23A kW	I_u A							kg
	Main control and EMERGENCY-STOP switches with direct operating mechanism (rotary operating mechanism/knob-operated mechanism), 6-pole											
	• Lockable in 0 position with up to 3 padlocks											
	• Degree of protection at front side IP65											
	• All versions with rotary operating mechanism Exception: 3LD23 and 3LD24 with knob-operated mechanism											
	• Including terminal cover for the infeed side											
	• Front plate - 3LD20, 3LD21, 3LD22: 67 mm × 67 mm - 3LD25: 90 mm × 90 mm - 3LD23 to 3LD24: 96 mm × 96 mm											
Four-hole mounting												
3LD2103-3VK53	6	--	7.5	9.5	25		3LD2103-3VK5☐		1	1 unit	1CL	0.389
			9.5	11.5	32		3LD2203-3VK5☐		1	1 unit	1CL	0.380
			18.5	22.0	63		3LD2504-3VK5☐		1	1 unit	1CL	0.744
			50	75	160		3LD2305-3VK1☐		1	1 unit	1CL	3.972
			110	132	250		3LD2405-3VK1☐		1	1 unit	1CL	3.925
	6	1 NO + 1 NC	7.5	9.5	25		3LD2103-4VP5☐		1	1 unit	1CL	0.385

Actuator color

Black	1
Red/yellow (EMERGENCY-STOP)	3

	Number and version of the contacts		Rated data at 50 ... 60 Hz, 380 ... 440 V			DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	Main contact elements	Auxiliary contact elements	P/AC-3 kW	P/AC-23A kW	I_u A							kg
	Changeover switches with direct operating mechanism (knob-operated mechanism)											
	• Black actuator											
	• Knob-operated mechanism on 3LD23 and 3LD24 is lockable, on all other versions it is non-lockable											
	• Degree of protection at front side IP65											
Four-hole mounting												
3LD2123-7UK01	3	--	7.5	9.5	25		3LD2123-7UK01		1	1 unit	1CL	0.378
			9.5	11.5	32		3LD2223-7UK01		1	1 unit	1CL	0.374
			18.5	22.0	63		3LD2524-7UK01		1	1 unit	1CL	0.740
			30.0	37.0	100		3LD2724-7UK01		1	1 unit	1CL	0.956
			50	75	160		3LD2305-7UK01		1	1 unit	1CL	4.507
			110	132	250		3LD2405-7UK01		1	1 unit	1CL	4.512
3LD2405-7UL01	3 + N		50	75	160		3LD2305-7UL01		1	1 unit	1CL	5.786
			110	132	250		3LD2405-7UL01		1	1 unit	1CL	5.865

* You can order this quantity or a multiple thereof.

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Selection and ordering data

Number and version of the contacts		Rated data at 50 ... 60 Hz, 380 ... 440 V		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
Main contact elements	Auxiliary contact elements	P/AC-23A	I_u							
		kW	A							kg
Main control and EMERGENCY-STOP switches with door-coupling rotary operating mechanism • With shaft • Lockable in 0 position with up to 3 padlocks • Degree of protection at front side IP65 • Door-coupling rotary operating mechanism with integrated tolerance compensation (16 to 125 A) • All versions with rotary operating mechanism • Exception: 3LD23 and 3LD24 with knob-operated mechanism • Mounting using screws or snap-on mounting on 35 mm standard mounting rail (16 to 125 A) • Including terminal cover for the infeed side • Front plate - 3LD20, 3LD21, 3LD22: 67 mm x 67 mm - 3LD25 to 3LD28: 90 mm x 90 mm - 3LD23 to 3LD24: 96 mm x 96 mm • Mounting dimensions - 3LD20, 3LD21, 3LD22: 380 mm - 3LD25 to 3LD28: 390 mm - 3LD23 to 3LD24: 600 mm										
Four-hole mounting										
3LD2213-0TK53	3	--	7.5	16	►	**3LD2013-0TK5☐**	1	1 unit	1CL	0.411
			9.5	25	►	**3LD2113-0TK5☐**	1	1 unit	1CL	0.399
			11.5	32	►	**3LD2213-0TK5☐**	1	1 unit	1CL	0.398
			22	63	►	**3LD2514-0TK5☐**	1	1 unit	1CL	0.640
			37	100	►	**3LD2714-0TK5☐**	1	1 unit	1CL	0.244
			45	125		**3LD2814-0TK5☐**	1	1 unit	1CL	0.755
			75	160		**3LD2318-0TK1☐**	1	1 unit	1CL	2.750
			132	250		**3LD2418-0TK1☐**	1	1 unit	1CL	2.761
	3 + N	--	7.5	16	►	**3LD2013-1TL5☐**	1	1 unit	1CL	0.422
			9.5	25		**3LD2113-1TL5☐**	1	1 unit	1CL	0.439
			11.5	32		**3LD2213-1TL5☐**	1	1 unit	1CL	0.443
			22	63		**3LD2514-1TL5☐**	1	1 unit	1CL	0.712
			37	100	►	**3LD2714-0TK5☐** + [1]	1	1 unit	1CL	0.244
					►	**3LD9280-0C**	1	1 unit	1CL	0.097
			45	125		**3LD2814-0TK5☐** + [1]	1	1 unit	1CL	0.755
					►	**3LD9280-0C**	1	1 unit	1CL	0.097
			75	160		**3LD2318-1TL1☐**	1	1 unit	1CL	3.239
			132	250		**3LD2418-1TL1☐**	1	1 unit	1CL	3.264

Actuator color

Black	**1**
Red/yellow (EMERGENCY-STOP)	**3**

[1] 4th contact element as N conductor to be ordered separately,
see page 7/22, "Accessories"

*** You can order this quantity or a multiple thereof.**

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Floor mounting

3LD2213-0TK53

Number and version of the contacts		Rated data at 50 ... 60 Hz, 380 ... 440 V		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
Main contact elements	Auxiliary contact elements	P/AC-23A	I_u							
		kW	A							kg
3	1 NO + 1 NC	7.5	16	►	3LD2013-0TK5☐ +[2]		1	1 unit	1CL	0.411
				►	3LD9200-5C		1	1 unit	1CL	0.020
		9.5	25	►	3LD2113-0TK5☐ +[2]		1	1 unit	1CL	0.399
				►	3LD9200-5C		1	1 unit	1CL	0.020
		11.5	32	►	3LD2213-0TK5☐ +[2]		1	1 unit	1CL	0.398
				►	3LD9200-5C		1	1 unit	1CL	0.020
		22	63	►	3LD2514-0TK5☐ +[2]		1	1 unit	1CL	0.640
				►	3LD9200-5C		1	1 unit	1CL	0.020
		37	100	►	3LD2714-0TK5☐ +[2]		1	1 unit	1CL	0.244
				►	3LD9200-5C		1	1 unit	1CL	0.020
		45	125		3LD2814-0TK5☐ +[2]		1	1 unit	1CL	0.755
				►	3LD9200-5C		1	1 unit	1CL	0.020
		75	160		3LD2318-0TK1☐ +[2]		1	1 unit	1CL	2.750
				►	3LD9200-5C		1	1 unit	1CL	0.020
		132	250		3LD2418-0TK1☐ +[2]		1	1 unit	1CL	2.761
				►	3LD9200-5C		1	1 unit	1CL	0.020
3 + N	1 NO + 1 NC	7.5	16	►	3LD2013-1TL5☐ +[2]		1	1 unit	1CL	0.422
				►	3LD9200-5C		1	1 unit	1CL	0.020
		9.5	25		3LD2113-1TL5☐ +[2]		1	1 unit	1CL	0.439
				►	3LD9200-5C		1	1 unit	1CL	0.020
		11.5	32		3LD2213-1TL5☐ +[2]		1	1 unit	1CL	0.443
				►	3LD9200-5C		1	1 unit	1CL	0.020
		22	63		3LD2514-1TL5☐ +[2]		1	1 unit	1CL	0.712
				►	3LD9200-5C		1	1 unit	1CL	0.020
		37	100	►	3LD2714-0TK5☐ +[1]		1	1 unit	1CL	0.244
				►	3LD9280-0C +[2]		1	1 unit	1CL	0.097
				►	3LD9200-5C		1	1 unit	1CL	0.020
		45	125		3LD2814-0TK5☐ +[1]		1	1 unit	1CL	0.755
				►	3LD9280-0C +[2]		1	1 unit	1CL	0.097
				►	3LD9200-5C		1	1 unit	1CL	0.020
		75	160		3LD2318-1TL1☐ +[2]		1	1 unit	1CL	3.239
				►	3LD9200-5C		1	1 unit	1CL	0.020
		132	250		3LD2418-1TL1☐ +[2]		1	1 unit	1CL	3.264
				►	3LD9200-5C		1	1 unit	1CL	0.020

Actuator color

Black	1
Red/yellow (EMERGENCY-STOP)	3

[1] 4th contact element as N conductor to be ordered separately, see page 7/22, "Accessories"

[2] Auxiliary switches 1 NO + 1 NC to be ordered separately, see page 7/22, "Accessories"

* You can order this quantity or a multiple thereof.

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Number and version of the contacts		Rated data at 50 ... 60 Hz, 380 ... 440 V		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
Main contact elements	Auxiliary contact elements	P/AC-23A	I_u							
		kW	A							kg
Main control and EMERGENCY-STOP switches with door-coupling rotary operating mechanism • With shaft • Lockable in 0 position with up to 3 padlocks • Degree of protection at front side IP65 • Door-coupling rotary operating mechanism with integrated tolerance compensation (16 to 125 A) • All versions with rotary operating mechanism • Exception: 3LD23 and 3LD24 with knob-operated mechanism • Mounting using screws or snap-on mounting on 35 mm standard mounting rail (16 to 125 A) • Including terminal cover for the infeed side • Front plate - 3LD20, 3LD21, 3LD22: 67 mm x 67 mm - 3LD25 to 3LD28: 90 mm x 90 mm - 3LD23 to 3LD24: 96 mm x 96 mm • Mounting dimensions - 3LD20, 3LD21, 3LD22: 380 mm - 3LD25 to 3LD28: 390 mm - 3LD23 to 3LD24: 600 mm										
Center-hole mounting Ø 22.5 mm										
3	--	7.5	16		3LD2044-0TK5□		1	1 unit	1CL	0.433
		9.5	25		3LD2144-0TK5□		1	1 unit	1CL	0.431
		11.5	32		3LD2244-0TK5□		1	1 unit	1CL	0.424
		22	63		3LD2545-0TK5□		1	1 unit	1CL	0.688
3 + N	--	7.5	16		3LD2044-1TL5□		1	1 unit	1CL	0.441
		9.5	25		3LD2144-1TL5□		1	1 unit	1CL	0.462
		11.5	32		3LD2244-1TL5□		1	1 unit	1CL	0.455
		22	63		3LD2545-0TK5□ +[1]		1	1 unit	1CL	0.688
				►	3LD9250-0CA		1	1 unit	1CL	0.075
3	1 NO + 1 NC	7.5	16		3LD2044-0TK5□ +[2]		1	1 unit	1CL	0.433
				►	3LD9200-5C		1	1 unit	1CL	0.020
		9.5	25		3LD2144-0TK5□ +[2]		1	1 unit	1CL	0.431
				►	3LD9200-5C		1	1 unit	1CL	0.020
		11.5	32		3LD2244-0TK5□ +[2]		1	1 unit	1CL	0.424
				►	3LD9200-5C		1	1 unit	1CL	0.020
		22	63		3LD2545-0TK5□ +[2]		1	1 unit	1CL	0.688
				►	3LD9200-5C		1	1 unit	1CL	0.020
3 + N	1 NO + 1 NC	7.5	16		3LD2044-1TL5□ +[2]		1	1 unit	1CL	0.441
				►	3LD9200-5C		1	1 unit	1CL	0.020
		9.5	25		3LD2144-1TL5□ +[2]		1	1 unit	1CL	0.462
				►	3LD9200-5C		1	1 unit	1CL	0.020
		11.5	32		3LD2244-1TL5□ +[2]		1	1 unit	1CL	0.455
				►	3LD9200-5C		1	1 unit	1CL	0.020
		22	63		3LD2545-0TK5□ +[1]		1	1 unit	1CL	0.688
				►	3LD9250-0CA +[2]		1	1 unit	1CL	0.075
				►	3LD9200-5C		1	1 unit	1CL	0.020

3LD2144-0TK53

Actuator color

Black 1

Red/yellow (EMERGENCY-STOP) 3

[1] 4th contact element as N conductor to be ordered separately, see page 7/22, "Accessories"

[2] Auxiliary switches 1 NO + 1 NC to be ordered separately, see page 7/22, "Accessories"

*** You can order this quantity or a multiple thereof.**

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Floor mounting

Number and version of the contacts		Rated data at 50 Hz ... 60 Hz, 380 V ... 440 V			DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
Main contact elements	Auxiliary contact elements	P/AC-3	P/AC-23A	I_u							
		kW	kW	A							kg
Main control and EMERGENCY-STOP switches with door-coupling rotary operating mechanism (6-pole)											
• Lockable in 0 position with up to 3 padlocks • Degree of protection at front side IP65 • Door-coupling rotary operating mechanism with integrated tolerance compensation (for 3LD21) • All versions with rotary operating mechanism Exception: 3LD23 and 3LD24 with door-coupling rotary operating mechanism as selector switch • Mounting using screws or snap-on mounting on 35 mm standard mounting rails • Including terminal cover for the infeed side • Front plate - 3LD20, 3LD21, 3LD22: 67 mm × 67 mm - 3LD23, 3LD24: 96 mm × 96 mm											
Four-hole mounting											
6	--	7.5	9.5	25		**3LD2113-3VK5□**		1	1 unit	1CL	0.588
6	--	50	75	160		**3LD2318-3VK1□**		1	1 unit	1CL	4.568
6	--	110	132	250		**3LD2418-3VK1□**		1	1 unit	1CL	4.530
6	1 NO + 1 NC	9.5	9.5	25		**3LD2113-4VP5□**		1	1 unit	1CL	0.608

3LD2113-3VK51

Actuator color

Black	**1**
Red/yellow (EMERGENCY-STOP)	**3**

Number and version of the contacts		Rated data at 50 Hz ... 60 Hz, 380 V ... 440 V			DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
Main contact elements	Auxiliary contact elements	P/AC-3	P/AC-23A	I_u							
		kW	kW	A							kg
Changeover switches with door-coupling rotary operating mechanism											
• Lockable in 0 position with up to 3 padlocks • Handle and cover black • Door-coupling rotary operating mechanisms as selector switch • Degree of protection at front side IP65											
Four-hole mounting											
3		50	75	160		**3LD2318-7UK01**		1	1 unit	1CL	5.156
3		110	132	250		**3LD2418-7UK01**		1	1 unit	1CL	5.191
3 + N		50	75	160		**3LD2318-7UL01**		1	1 unit	1CL	6.543
3 + N		110	132	250		**3LD2418-7UL01**		1	1 unit	1CL	6.533

* You can order this quantity or a multiple thereof.

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Floor mounting

	Number and version of the contacts		Rated data at 50 ... 60 Hz, 380 ... 440 V		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	Main contact elements	Auxiliary contact elements	P/AC-23A	I_u							
			kW	A							kg

Main control and EMERGENCY-STOP switches with defeatable door-coupling rotary operating mechanism

The 3LD main control and EMERGENCY-STOP switch with defeatable door-coupling rotary operating mechanism enables you to conduct repairs, maintenance work or tests on electrical plants and machines without having to interrupt their operation. With the help of the defeatable door-coupling rotary operating mechanism, an electrician can bypass locking in the ON position and open the control cabinet door with the plant activated.

3LD main control and EMERGENCY-STOP switches with defeatable door-coupling rotary operating mechanism are approved according to UL 508.

- With 300 mm switch shaft
- Lockable in 0 position with up to 3 padlocks
- Degree of protection at front side IP65
- Door-coupling rotary operating mechanism with integrated tolerance compensation
- Mounting using screws or snap-on mounting on 35 mm standard mounting rails
- Including terminal cover for the infeed side
- Front plate 65 mm × 65 mm

Four-hole mounting

3LD2017-0TK..

3	--	7.5	16	3LD2017-0TK1☐	1	1 unit	1CL	0.419
		11.5	32	3LD2217-0TK1☐	1	1 unit	1CL	0.415
		22	63	3LD2517-0TK1☐	1	1 unit	1CL	0.559
3 + N	--	7.5	16	3LD2017-1TL1☐	1	1 unit	1CL	0.423
		11.5	32	3LD2217-1TL1☐	1	1 unit	1CL	0.448
		22	63	3LD2517-1TL1☐	1	1 unit	1CL	0.634

Actuator color

Black	1
Red/yellow (EMERGENCY-STOP)	3

*** You can order this quantity or a multiple thereof.**

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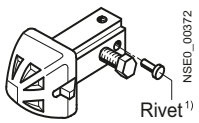
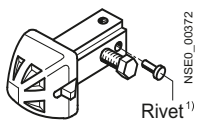
Accessories

Defeatable door-coupling rotary operating mechanisms from 100 A - 250 A

For switch disconnectors with door-coupling rotary operating mechanisms, a defeatable door-coupling rotary operating mechanism can be assembled with the following components from the 8UC7 series.

The following components are to be used for this purpose:

- For switch disconnectors with 3LD27 and 3LD28 door-coupling rotary operating mechanisms:
  - 8UC7110-1BB
  - 8UC7120-3BB
  - 8UC6011
- For switch disconnectors with 3LD23 and 3LD24 door-coupling rotary operating mechanisms:
  - 8UC7210-1BB
  - 8UC7220-3BB
  - 8UC6012

	Rotary operating mechanisms Type	Size	Cross-section of the actuating shaft mm × mm	Version[2] DT	Individual parts for 8UC7 door-coupling rotary operating mechanisms Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Components for 3LD27, 3LD28										
8UC71	8UC71	1	6 × 6	Standard	**8UC7110-1BB**		1	1 unit	1CL	0.175
				EMERGENCY-STOP	**8UC7120-3BB**		1	1 unit	1CL	0.178
 8UC6011	8UC71	1	6 × 6	--	**8UC6011**		1	1 unit	1CL	0.077
Components for 3LD23, 3LD24										
8UC74	8UC72	2	8 × 8	Standard	**8UC7210-1BB**		1	1 unit	1CL	0.190
				EMERGENCY-STOP	**8UC7220-3BB**		1	1 unit	1CL	0.186
 8UC6012	8UC72	2	8 × 8	--	**8UC6012**		1	1 unit	1CL	0.073

1) Non-interchangeability features.

2) Standard: Ti-gray handle, light-gray masking plate; EMERGENCY-STOP: Red handle, yellow masking plate.

*** You can order this quantity or a multiple thereof.**

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Selection and ordering data

Number and version of the contacts		Rated data at 50 ... 60 Hz, 380 ... 440 V		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
Main contact elements	Auxiliary contact elements	P/AC-23A	I_u							
		kW	A							kg
ON/OFF and EMERGENCY-STOP switches with masking plate and selector knob • With screw fixing • With snap-on mounting on 35 mm standard mounting rail (16 to 125 A) • Lockable in 0 position with up to 2 (160 A and 250 A: max. 3) padlocks • Degree of protection at front side IP44 • Including terminal cover for the infeed side (160 A and 250 A only)										
3	--	7.5	16		**3LD2030-0TK1□**		1	1 unit	1CL	0.169
		9.5	25		**3LD2130-0TK1□**		1	1 unit	1CL	0.163
		11.5	32		**3LD2230-0TK1□**		1	1 unit	1CL	0.165
		22	63		**3LD2530-0TK1□**		1	1 unit	1CL	0.303
		37	100		**3LD2730-0TK1□**		1	1 unit	1CL	0.375
		45	125		**3LD2830-0TK1□**		1	1 unit	1CL	0.374
		75	160		**3LD2330-0TK1□**		1	1 unit	1CL	2.040
		132	250		**3LD2430-0TK1□**		1	1 unit	1CL	2.030
3 + N	--	7.5	16		**3LD2030-1TL1□**		1	1 unit	1CL	0.183
		9.5	25		**3LD2130-0TK1□** +[1]		1	1 unit	1CL	0.163
				►	**3LD9220-0C**		1	1 unit	1CL	0.036
		11.5	32		**3LD2230-0TK1□** +[1]		1	1 unit	1CL	0.165
				►	**3LD9220-0C**		1	1 unit	1CL	0.036
		22	63		**3LD2530-0TK1□** +[1]		1	1 unit	1CL	0.303
				►	**3LD9250-0CA**		1	1 unit	1CL	0.075
		37	100		**3LD2730-0TK1□** +[1]		1	1 unit	1CL	0.375
				►	**3LD9280-0C**		1	1 unit	1CL	0.097
		45	125		**3LD2830-0TK1□** +[1]		1	1 unit	1CL	0.374
				►	**3LD9280-0C**		1	1 unit	1CL	0.097
		75	160		**3LD2330-0TK1□** +[1]		1	1 unit	1CL	2.040
				►	**3LD9240-0C**		1	1 unit	1CL	0.498
		132	250		**3LD2430-0TK1□** +[1]		1	1 unit	1CL	2.030
				►	**3LD9240-0C**		1	1 unit	1CL	0.498

3LD2530-0TK13

3LD2330-0TK11

Actuator color

Black	1
Red/yellow (EMERGENCY-STOP)	3

[1] 4th contact element as N conductor to be ordered separately, see page 7/22, "Accessories, accessories for floor mounting"

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Distribution board mounting

3LD2530-0TK11

Number and version of the contacts		Rated data at 50 ... 60 Hz, 380 ... 440 V		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
Main contact elements	Auxiliary contact elements	P/AC-23A	I_u							
		kW	A							kg
3	1 NO + 1 NC	7.5	16		3LD2030-0TK1☐ +[2]		1	1 unit	1CL	0.169
				►	3LD9200-5C		1	1 unit	1CL	0.020
		9.5	25		3LD2130-0TK1☐ +[2]		1	1 unit	1CL	0.163
				►	3LD9200-5C		1	1 unit	1CL	0.020
		11.5	32		3LD2230-0TK1☐ +[2]		1	1 unit	1CL	0.165
				►	3LD9200-5C		1	1 unit	1CL	0.020
		22	63		3LD2530-0TK1☐ +[2]		1	1 unit	1CL	0.303
				►	3LD9200-5C		1	1 unit	1CL	0.020
		37	100		3LD2730-0TK1☐ +[2]		1	1 unit	1CL	0.375
				►	3LD9200-5C		1	1 unit	1CL	0.020
		45	125		3LD2830-0TK1☐ +[2]		1	1 unit	1CL	0.374
				►	3LD9200-5C		1	1 unit	1CL	0.020
		75	160		3LD2330-0TK1☐ +[2]		1	1 unit	1CL	2.040
				►	3LD9200-5C		1	1 unit	1CL	0.020
		132	250		3LD2430-0TK1☐ +[2]		1	1 unit	1CL	2.030
				►	3LD9200-5C		1	1 unit	1CL	0.020
3 + N	1 NO + 1 NC	7.5	16		3LD2030-1TL1☐ +[2]		1	1 unit	1CL	0.183
				►	3LD9200-5C		1	1 unit	1CL	0.020
		9.5	25		3LD2130-0TK1☐ +[2]		1	1 unit	1CL	0.163
				►	3LD9200-5C +[1]		1	1 unit	1CL	0.020
				►	3LD9220-0C		1	1 unit	1CL	0.036
		11.5	32		3LD2230-0TK1☐ +[2]		1	1 unit	1CL	0.165
				►	3LD9200-5C +[1]		1	1 unit	1CL	0.020
				►	3LD9220-0C		1	1 unit	1CL	0.036
		22	63		3LD2530-0TK1☐ +[2]		1	1 unit	1CL	0.303
				►	3LD9200-5C +[1]		1	1 unit	1CL	0.020
				►	3LD9250-0CA		1	1 unit	1CL	0.075
		37	100		3LD2730-0TK1☐ +[2]		1	1 unit	1CL	0.375
				►	3LD9200-5C +[1]		1	1 unit	1CL	0.020
				►	3LD9280-0C		1	1 unit	1CL	0.097
		45	125		3LD2830-0TK1☐ +[2]		1	1 unit	1CL	0.374
				►	3LD9200-5C +[1]		1	1 unit	1CL	0.020
				►	3LD9280-0C		1	1 unit	1CL	0.097
		75	160		3LD2330-0TK1☐ +[2]		1	1 unit	1CL	2.040
				►	3LD9200-5C +[1]		1	1 unit	1CL	0.020
				►	3LD9240-0C		1	1 unit	1CL	0.498
		132	250		3LD2430-0TK1☐ +[2]		1	1 unit	1CL	2.030
				►	3LD9200-5C +[1]		1	1 unit	1CL	0.020
				►	3LD9240-0C		1	1 unit	1CL	0.498

Actuator color

Black	1
Red/yellow (EMERGENCY-STOP)	3

[1] 4th contact element as N conductor to be ordered separately;
see page 7/22, "Accessories for floor mounting"

[2] Auxiliary switches 1 NO + 1 NC to be ordered separately,
see page 7/22, "Accessories"

* You can order this quantity or a multiple thereof.

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Selection and ordering data

Number and version of the contacts		Base terminal	Rated data at 50 ... 60 Hz, 380 ... 440 V		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
Main contact elements	Auxiliary contact elements		P/AC-23A kW	I_u A							kg
Main control and EMERGENCY-STOP switches • With N and/or PE/ground base terminals • Lockable in 0 position with up to 3 padlocks • Degree of protection IP65 • Rotary operating mechanisms with center-hole mounting • For floor-mounted auxiliary switches • Metric screw connection											
3	--	PE + N	7.5	16		3LD2064-0TB5☐		1	1 unit	1CL	0.460
		PE + N	9.5	25		3LD2164-0TB5☐		1	1 unit	1CL	0.454
		PE + N	11.5	32		3LD2264-0TB5☐		1	1 unit	1CL	0.453
		PE + N	22	63		3LD2565-0TB5☐		1	1 unit	1CL	0.905
		PE + N	37	100		3LD2766-0TB5☐		1	1 unit	1CL	1.886
		PE + N	45	125		3LD2866-0TB5☐		1	1 unit	1CL	1.895
3 + N	--	PE	7.5	16		3LD2064-1TC5☐		1	1 unit	1CL	0.471
		PE	9.5	25		3LD2164-1TC5☐		1	1 unit	1CL	0.476
		PE	11.5	32		3LD2264-1TC5☐		1	1 unit	1CL	0.477
		PE	22	63		3LD2565-1TC5☐		1	1 unit	1CL	0.953
		PE + N	37	100		3LD2766-0TB5☐ +[1]		1	1 unit	1CL	1.886
					►	3LD9280-0C		1	1 unit	1CL	0.097
		PE + N	45	125		3LD2866-0TB5☐ +[1]		1	1 unit	1CL	1.895
					►	3LD9280-0C		1	1 unit	1CL	0.097
3	1 NO + 1 NC	N	7.5	16		3LD2064-1GP5☐		1	1 unit	1CL	0.471
		N	9.5	25		3LD2164-1GP5☐		1	1 unit	1CL	0.463
		N	11.5	32		3LD2264-1GP5☐		1	1 unit	1CL	0.465
		N	22	63		3LD2565-1GP5☐		1	1 unit	1CL	0.908
		N	37	100		3LD2766-1GP5☐		1	1 unit	1CL	1.815
		N	45	125		3LD2866-1GP5☐		1	1 unit	1CL	1.851
3 + N	1 NO + 1 NC	PE	7.5	16		3LD2064-1TC5☐ +[2]		1	1 unit	1CL	0.471
					►	3LD9200-5C		1	1 unit	1CL	0.020
		PE	9.5	25		3LD2164-1TC5☐ +[2]		1	1 unit	1CL	0.476
					►	3LD9200-5C		1	1 unit	1CL	0.020
		PE	11.5	32		3LD2264-1TC5☐ +[2]		1	1 unit	1CL	0.477
					►	3LD9200-5C		1	1 unit	1CL	0.020
		PE	22	63		3LD2565-1TC5☐ +[2]		1	1 unit	1CL	0.953
					►	3LD9200-5C		1	1 unit	1CL	0.020
		N	37	100		3LD2766-1GP5☐ +[1]		1	1 unit	1CL	1.815
					►	3LD9280-0C		1	1 unit	1CL	0.097
		N	45	125		3LD2866-1GP5☐ +[1]		1	1 unit	1CL	1.851
					►	3LD9280-0C		1	1 unit	1CL	0.097

3LD2164-0TB53

Actuator color

Black	1
Red/yellow (EMERGENCY-STOP)	3

1) 4th contact element as N conductor to be ordered separately; see page 7/22, "Accessories for floor mounting"

2) Auxiliary switches 1 NO + 1 NC to be ordered separately, see page 7/22, "Accessories"

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Molded-plastic enclosures

Number and version of the contacts		Base terminal	Rated data at 50 ... 60 Hz, 380 ... 440 V			DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
Main contact elements	Auxiliary contact elements		P/AC-3	P/AC-23A	I_u							
			kW	kW	A							kg
Main control and EMERGENCY-STOP switches with rotary operating mechanism (6-pole)												
• With N and/or PE/ground base terminals												
• Degree of protection IP65												
• Metric screw connection												
6	--	PE + N	7.5	9.5	25		3LD2165-3VB5☐		1	1 unit	1CL	0.862
		PE + N	9.5	11.5	32		3LD2265-3VB5☐		1	1 unit	1CL	0.860
		PE + N	18.5	22.0	63		3LD2566-3VB5☐		1	1 unit	1CL	2.136
6	1 NO + 1 NC	N	7.5	9.5	25		3LD2165-4VD5☐		1	1 unit	1CL	0.877
		N	9.5	11.5	32		3LD2265-4VD5☐		1	1 unit	1CL	0.887
		PE + N	18.5	22.0	63		3LD2566-4VD5☐		1	1 unit	1CL	2.164

3LD2165-3VB53

Actuator color

Black	1
Red/yellow (EMERGENCY-STOP)	3

Number and version of the contacts		Base terminal	Rated data at 50 ... 60 Hz, 380 ... 440 V			DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
Main contact elements	Auxiliary contact elements		P/AC-3	P/AC-23A	I_u							
			kW	kW	A							kg
Changeover switches with direct operating mechanism (knob-operated mechanism)												
• With N and/or PE/ground base terminals												
• Black actuator												
• Lockable in 0 position with up to 3 padlocks (25 A and 32 A)												
• Metric screw connection												
• Degree of protection IP65												
3	--	PE + N	7.5	9.5	25		3LD2165-7UB01		1	1 unit	1CL	0.894
		PE + N	9.5	11.5	32		3LD2265-7UB01		1	1 unit	1CL	0.894
		PE + N	18.5	22.0	63		3LD2566-7UB01		1	1 unit	1CL	2.164
		PE + N	30.0	37.0	100		3LD2766-7UB01		1	1 unit	1CL	2.309

3LD2165-7UB01

* You can order this quantity or a multiple thereof.

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Selection and ordering data

Mains voltage Max. V DC	Rated current I_e at 800 V DC DC-21A A	DC-22A A	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
DC isolators in molded-plastic enclosure • Molded-plastic enclosure IP65 • Metric screw connection • (W x H x D) 146 mm x 199 mm x 136 mm • Conductor cross-sections: - Solid and stranded 1.5 … 16 mm² - Finely stranded with end sleeve max. 10 mm² • Lockable									
800	32	16		**3LD2265-8VQ5□-0AF6**		1	1 unit	1CL	0.936

3LD2265-8VQ5.-0AF6

Actuator color

Black	1
Red/yellow (EMERGENCY-STOP)	3

Mains voltage Max. V DC	Rated current I_e at 800 V DC DC-21A A	DC-22A A	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
DC isolators for distribution board mounting • Conductor cross-sections: - Solid and stranded 1.5 … 16 mm² - Finely stranded with end sleeve max. 10 mm² • Actuator color: Black									
800	32	16		**3LD2230-8VQ11-0AF6**		1	1 unit	1CL	0.419

3LD2265-8VQ11-0AF6

* You can order this quantity or a multiple thereof.

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Selection and ordering data

	Version	DT	3LD20 Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
For front mounting								
3LD9200-2B	**N or PE terminals** Through-type	►	3LD9200-2B		1	1 unit	1CL	0.030
3LD9200-5B	**Auxiliary switches** For mounting on the left and/or right, lagging switch-on, leading switch-off • 1 NO + 1 NC	►	3LD9200-5B		1	1 unit	1CL	0.020
	For mounting on the left and/or right, lagging switch-on, with gold-plated contacts for requesting electronic information, leading switch-off • 1 NO + 1 NC		3LD9200-5BF		1	1 unit	1CL	0.020
For floor mounting, distribution board mounting or molded-plastic enclosures								
3LD9200-2C	**N or PE terminals** Through-type	►	3LD9200-2C		1	1 unit	1CL	0.030
3LD9200-5C (left) 3LD9200-6C (right)	**Auxiliary switches** For mounting on the left and/or right, lagging switch-on, leading switch-off • 1 NO + 1 NC	►	3LD9200-5C		1	1 unit	1CL	0.020
	• 2 NC	►	3LD9200-6C		1	1 unit	1CL	0.021
	For mounting on the left and/or right, lagging switch-on, with gold-plated contacts for requesting electronic information, leading switch-off • 1 NO + 1 NC		3LD9200-5CF		1	1 unit	1CL	0.020
For front and floor mounting								
3LD9224-1B	**Rotary operating mechanisms** Lockable in 0 position with up to 3 padlocks • For four-hole mounting, including seal							
	- Black		3LD9224-1B		1	1 unit	1CL	0.076
	- Red/Yellow		3LD9224-3B		1	1 unit	1CL	0.076
	• For center-hole mounting, including seal and nut							
3LD9224-3D	- Black		3LD9224-1D		1	1 unit	1CL	0.076
	- Red/Yellow		3LD9224-3D		1	1 unit	1CL	0.076
3LD9256-0A	**Mounting tools** For center-hole mounting with nut		3LD9256-0A		1	5 units	1CL	0.025
	Switching shafts 6 x 6 mm							
	Length 300 mm		3LD9205-0C		1	5 units	1CL	0.473
	Length 600 mm		3LD9205-2C		1	5 units	1CL	0.166
3LD9286-1A	**Inscription labels** With English/German inscription (MAIN SWITCH/HAUPTSCHALTER)		3LD9286-1A		1	10 units	1CL	0.005
	Without inscription		3LD9286-4A		1	10 units	1CL	0.053
3LD9201-2A	**Terminal covers as additional touch protection (also for distribution board mounting)** Can be snapped on at top and bottom							
	• 1-pole		3LD9201-2A		100	4 units	1CL	0.280
	• 3-/4-pole		3LD9201-1A		1	4 units	1CL	0.007

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	Version	DT	3LD21 and 3LD22 Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
For front mounting								
 3LD9220-0B (left) 3LD9220-2B (right)	**4th contact (N conductor)** Leading switch-on, lagging switch-off	►	3LD9220-0B		1	1 unit	1CL	0.037
	N or PE terminals Through-type	►	3LD9220-2B		1	1 unit	1CL	0.034
 3LD9200-5B	**Auxiliary switches** For mounting on the left and/or right, lagging switch-on, leading switch-off • 1 NO + 1 NC	►	3LD9200-5B		1	1 unit	1CL	0.020
	For mounting on the left and/or right, lagging switch-on, leading switch-off, with gold-plated contacts for requesting electronic information • 1 NO + 1 NC		3LD9200-5BF		1	1 unit	1CL	0.020
For floor mounting, distribution board mounting or molded-plastic enclosures								
 3LD9220-0C	**4th contact (N conductor)** Leading switch-on, lagging switch-off	►	3LD9220-0C		1	1 unit	1CL	0.036
	N or PE terminals Through-type	►	3LD9220-2C		1	1 unit	1CL	0.034
 3LD9200-5C (left) 3LD9200-6C (right)	**Auxiliary switches** For mounting on the left and/or right, lagging switch-on, leading switch-off • 1 NO + 1 NC	►	3LD9200-5C		1	1 unit	1CL	0.020
	• 2 NC	►	3LD9200-6C		1	1 unit	1CL	0.021
	For mounting on the left and/or right, lagging switch-on, leading switch-off, with gold-plated contacts for requesting electronic information • 1 NO + 1 NC		3LD9200-5CF		1	1 unit	1CL	0.020
For front and floor mounting								
 3LD9224-1B	**Rotary operating mechanisms** Lockable in 0 position with up to 3 padlocks • For four-hole mounting including seal							
	- Black		3LD9224-1B		1	1 unit	1CL	0.076
	- Red/Yellow		3LD9224-3B		1	1 unit	1CL	0.076
	• For center-hole mounting, including seal and nut							
 3LD9224-3D	- Black		3LD9224-1D		1	1 unit	1CL	0.076
	- Red/Yellow		3LD9224-3D		1	1 unit	1CL	0.076
 3LD9256-0A	**Mounting tools** For center-hole mounting with nut		3LD9256-0A		1	5 units	1CL	0.025
	Switching shafts 6 x 6 mm							
	Length 300 mm		3LD9205-0C		1	5 units	1CL	0.473
	Length 600 mm		3LD9205-2C		1	5 units	1CL	0.166
 3LD9286-1A	**Inscription labels** With English/German inscription (MAIN SWITCH/HAUPTSCHALTER)		3LD9286-1A		1	10 units	1CL	0.005
	Without inscription		3LD9286-4A		1	10 units	1CL	0.053
 3LD9221-2A (left) 3LD9221-0A (right)	**Terminal covers as additional touch protection (also for distribution board mounting)** Can be snapped on at top and bottom							
	• 1-pole		3LD9221-2A		100	4 units	1CL	0.363
	• 3-pole		3LD9221-0A		1	4 units	1CL	0.007

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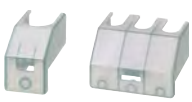
Accessories

	Version	DT	3LD25 Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
For front mounting								
3LD9250-0BA (left) 3LD9250-2BA (right)	**4th contact (N conductor)**	►	3LD9250-0BA		1	1 unit	1CL	0.075
	Leading switch-on, lagging switch-off							
	N or PE terminals	►	3LD9250-2BA		1	1 unit	1CL	0.067
	Through-type							
3LD9200-5B	**Auxiliary switches**							
	For mounting on the left and/or right, lagging switch-on, leading switch-off							
	• 1 NO + 1 NC	►	3LD9200-5B		1	1 unit	1CL	0.020
	For mounting on the left and/or right, lagging switch-on, leading switch-off, with gold-plated contacts for requesting electronic information							
	• 1 NO + 1 NC		3LD9200-5BF		1	1 unit	1CL	0.020
For floor mounting, distribution board mounting or molded-plastic enclosures								
3LD9250-0CA (left) 3LD9250-2CA (right)	**4th contact (N conductor)**	►	3LD9250-0CA		1	1 unit	1CL	0.075
	Leading switch-on, lagging switch-off							
	N or PE terminals	►	3LD9250-2CA		1	1 unit	1CL	0.068
	Through-type							
3LD9200-5C (left) 3LD9200-6C (right)	**Auxiliary switches**							
	For mounting on the left and/or right, lagging switch-on, leading switch-off							
	• 1 NO + 1 NC	►	3LD9200-5C		1	1 unit	1CL	0.020
	• 2 NC	►	3LD9200-6C		1	1 unit	1CL	0.021
	For mounting on the left and/or right, lagging switch-on, leading switch-off, with gold-plated contacts for requesting electronic information							
	• 1 NO + 1 NC		3LD9200-5CF		1	1 unit	1CL	0.020
For front and floor mounting								
3LD9284-1B	**Rotary operating mechanisms**							
	Lockable in 0 position with up to 3 padlocks							
	• For four-hole mounting, including seal							
	- Black		3LD9284-1B		1	1 unit	1CL	0.151
	- Red/Yellow		3LD9284-3B		1	1 unit	1CL	0.152
	• For center-hole mounting, including seal and nut							
3LD9284-3D	- Black		3LD9284-1D		1	1 unit	1CL	0.150
	- Red/Yellow		3LD9284-3D		1	1 unit	1CL	0.150
3LD9256-0A	**Mounting tools**							
	For center-hole mounting with nut		3LD9256-0A		1	5 units	1CL	0.025
	Switching shafts 6 x 6 mm							
	Length 300 mm		3LD9205-0C		1	5 units	1CL	0.473
	Length 600 mm		3LD9205-2C		1	5 units	1CL	0.166
3LD9286-1A	**Inscription labels**							
	With English/German inscription (MAIN SWITCH/HAUPTSCHALTER)		3LD9286-1A		1	10 units	1CL	0.005
	Without inscription		3LD9286-4A		1	10 units	1CL	0.053
 3LD9251-2A (left) 3LD9251-0A (right)	**Terminal covers as additional touch protection (also for distribution board mounting)**							
	Can be snapped on at top and bottom							
	• 1-pole		3LD9251-2A		100	4 units	1CL	0.480
	• 3-pole		3LD9251-0A		1	4 units	1CL	0.009

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	Version	DT	3LD27 and 3LD28 Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
For front mounting								
 3LD9280-0B (left) 3LD9280-2B (right)	**4th contact (N conductor)** Leading switch-on, lagging switch-off	►	3LD9280-0B		1	1 unit	1CL	0.098
	N or PE terminals Through-type	►	3LD9280-2B		1	1 unit	1CL	0.087
 3LD9200-5B	**Auxiliary switches** For mounting on the left and/or right, lagging switch-on, leading switch-off							
	• 1 NO + 1 NC	►	3LD9200-5B		1	1 unit	1CL	0.020
	For mounting on the left and/or right, lagging switch-on, leading switch-off, with gold-plated contacts for requesting electronic information							
	• 1 NO + 1 NC		3LD9200-5BF		1	1 unit	1CL	0.020
For floor mounting, distribution board mounting or molded-plastic enclosures								
 3LD9280-0C (left) 3LD9280-2C (right)	**4th contact (N conductor)** Leading switch-on, lagging switch-off	►	3LD9280-0C		1	1 unit	1CL	0.097
	N or PE terminals Through-type	►	3LD9280-2C		1	1 unit	1CL	0.087
 3LD9200-5C (left) 3LD9200-6C (right)	**Auxiliary switches** For mounting on the left and/or right, lagging switch-on, leading switch-off							
	• 1 NO + 1 NC	►	3LD9200-5C		1	1 unit	1CL	0.020
	• 2 NC	►	3LD9200-6C		1	1 unit	1CL	0.021
	For mounting on the left and/or right, lagging switch-on, leading switch-off, with gold-plated contacts for requesting electronic information							
	• 1 NO + 1 NC		3LD9200-5CF		1	1 unit	1CL	0.020
For front and floor mounting								
 3LD9284-1B	**Rotary operating mechanisms** Lockable in 0 position with up to 3 padlocks							
	• For four-hole mounting, including seal							
	- Black		3LD9284-1B		1	1 unit	1CL	0.151
	- Red/Yellow		3LD9284-3B		1	1 unit	1CL	0.152
 3LD9284-3D	• For center-hole mounting, including seal and nut							
	- Black		3LD9284-1D		1	1 unit	1CL	0.150
	- Red/Yellow		3LD9284-3D		1	1 unit	1CL	0.150
	Switching shafts 6 x 6 mm							
	Length 300 mm		3LD9205-0C		1	5 units	1CL	0.473
	Length 600 mm		3LD9205-2C		1	5 units	1CL	0.166
 3LD9286-1A	**Inscription labels** With English/German inscription (MAIN SWITCH/HAUPTSCHALTER)		3LD9286-1A		1	10 units	1CL	0.005
	Without inscription		3LD9286-4A		1	10 units	1CL	0.053
 3LD9281-2A	**Terminal covers as additional touch protection (also for distribution board mounting)** Can be snapped on at top and bottom							
	• 1-pole (1 pack = 4 units)		3LD9281-2A		1	4 units	1CL	0.006

*** You can order this quantity or a multiple thereof.**

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Accessories

	Version	DT	3LD23 and 3LD24 Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
For front mounting								
 3LD9240-0B (left) 3LD9240-2B (right)	**4th contact (N conductor)** Leading switch-on, lagging switch-off	►	3LD9240-0B		1	1 unit	1CL	0.502
	N or PE terminals Through-type	►	3LD9240-2B		1	1 unit	1CL	0.428
 3LD9200-5B	**Auxiliary switches** For mounting on the left and/or right, lagging switch-on, leading switch-off							
	• 1 NO + 1 NC	►	3LD9200-5B		1	1 unit	1CL	0.020
	• For mounting on the left and/or right, lagging switch-on, leading switch-off, with gold-plated contacts for requesting electronic information							
	• 1 NO + 1 NC		3LD9200-5BF		1	1 unit	1CL	0.020
For floor and distribution board mounting								
 3LD9242-4F	**Shaft coupling** No ON-lock		3LD9242-4F		1	5 units	1CL	0.040
	4th contact (N conductor) Leading switch-on, lagging switch-off	►	3LD9240-0C		1	1 unit	1CL	0.498
 3LD9240-0C (left) 3LD9240-2C (right)	**N or PE terminals** Through-type	►	3LD9240-2C		1	1 unit	1CL	0.424
 3LD9200-5C (left) 3LD9200-6C (right)	**Auxiliary switches** For mounting on the left and/or right, lagging switch-on, leading switch-off							
	• 1 NO + 1 NC	►	3LD9200-5C		1	1 unit	1CL	0.020
	• 2 NC	►	3LD9200-6C		1	1 unit	1CL	0.021
	For mounting on the left and/or right, lagging switch-on, leading switch-off, with gold-plated contacts for requesting electronic information							
	• 1 NO + 1 NC		3LD9200-5CF		1	1 unit	1CL	0.020
For front and floor mounting								
 3LD9243-1B	**Knob-operated mechanism (also for distribution board mounting)** Lockable in 0 position with up to 3 padlocks							
	• For four-hole mounting, including seal							
	- Black		3LD9243-1B		1	1 unit	1CL	0.226
	- Red/Yellow		3LD9243-3B		1	1 unit	1CL	0.218
	Switching shafts 8 x 8 mm							
	Length 300 mm		3LD9245-0C		1	5 units	1CL	0.162
	Length 600 mm		3LD9245-2C		1	5 units	1CL	0.300
 3LD9241-2A	**Terminal covers as additional touch protection (also for distribution board mounting)** Can be snapped on at top and bottom							
	• 1-pole		3LD9241-2A		1	4 units	1CL	0.018

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Overview

The 5TE1 switch disconnectors are available from 100 A to 200 A in 3 and 4-pole versions and can be used as main control switches, repair switches, outgoing feeder switches and emergency mains switching off device.

The series corresponds to the requirements of IEC/EN 60947-3 and its key features are its compact and robust design, high short-circuit strength, high DC breaking capacity and comprehensive accessories.

Its small footprint means it is easy to install in all types of enclosures, distribution boards and control cabinets.

The devices are approved to UL 508 and KEMA certified.

Benefits

- Transparent enclosures ensure that the contact position is always visible
- Contacts with double breaks ensure reliable insulation characteristics
- Can be locked in the OFF position to allow for maintenance work
- With a red knob and yellow cap, it can also be used as an emergency switching off device

Technical specifications

					5TE1.1	5TE1.2	5TE1.3	5TE1.4
Standards **Approvals**					IEC/EN 60947-3, UL 508 UL508 for the following types: 5TE1320, 5TE1330, 5TE1340, 5TE1420, 5TE1430 and 5TE1440. UL File No. E302554			
Rated operational current I_e With utilization category AC-21A	Per conduct. path	At U_e =	400 V 415 V 500 V 690 V	A A A A	100 100 100 100	125 125 125 125	160 160 160 160	200 200 200 200
Rated operational current I_e With utilization category AC-22A	Per conduct. path	At U_e =	400 V 415 V 500 V 690 V	A A A A	100 100 100 63	125 125 100 63	160 160 160 160	200 200 200 200
Rated operational current I_e With utilization category AC-23A	Per conduct. path	At U_e =	400 V 415 V 500 V 690 V	A A A A	80 80 50 40		125 125 125 63	160 160 125 80
Rated operational current I_e With utilization category DC-23A	2 poles in series 2 poles in series 4 poles in series		110 V 220 V 220 V	A A A	100 -- 100		160 100 160	
Rated operational voltage U_e				V AC	According to UL: 480, acc. to IEC: 690			
Rated insulation voltage U_i				V AC	690			
Rated impulse withstand voltage U_{imp}	2000 m			kV	8			
Impulse test voltage	At sea level			kV	12.3			
Max. rated operational power With utilization category AC-23A		At U_e =	400 V 415 V 500 V 690 V	kW kW kW kW	44 46 35 36		69 72 86 60	88 92 86 76
Rated thermal current I_{th}	At 40 °C, 50 °C and 60 °C			A	100	125	160	200
Rated making capacity	At 415 V AC-23A			A	1875		3200	4000
Rated breaking capacity	At 415 V AC-23A			A	1000		1920	2400
Rated ultimate short-circuit breaking capacity I_{cm}	Per conduct. path	At U_e =	400 V 415 V 500 V 690 V	kA kA kA kA	10 10 6.7 6.7			
Rated short-time withstand current I_{cw} (peak value)	Per conduct. path		0.25 s 1 s	kA kA	5 2.5		6 3	
Rated conditional short-circuit current With back-up protection with back-up fuse With identical rated current		At U_e =	400 V 415 V 500 V 690 V	kA kA kA kA	50 50 50 33	33	20	18
Capacitive load	At 400 V			kVar	50	60	77	97
Number of poles					2/3/4			
Rated power dissipation P_v	Per pole			VA	2.9	4.5	6.5	10
Frequency				Hz	50/60			
Conductor cross-sections • Solid and stranded • AWG cables • Copper busbars				 mm^2 AWG mm^2	 6 ... 50 10 ... 1/0 --		 -- 8 Max. 20 × 6	
Endurance	Electrical Mechanical			Switching cycles	1500 20000		1000 10000	
Acc. to UL 508 **UL 508 General Use 480 V** **UL 508 Manual motor controller 230 V** **UL 508 Manual motor controller 480 V** **UL 508 short-circuit at 480 V**	I_n FLA (Full load amperes) Power Power With Class H or K5 fuses With J fuses			A A hp hp kA kA	-- -- -- -- -- --	80 28 10 20 10 50	100 34 25 15	125 40 30 15

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Selection and ordering data

	Version	I_e	U_e	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A AC	V AC	MW							kg
	Switch disconnectors, lockable, with gray knob and transparent enclosure, mounting depth 92 mm										
	2 NO										
		100	690	5		5TE1210		1	1 unit	1BK	0.470
		125				5TE1220		1	1 unit	1BK	0.473
		160		8		5TE1230		1	1 unit	1BK	0.604
		200				5TE1240		1	1 unit	1BK	0.569
	3 NO										
		100	690	5		5TE1310		1	1 unit	1BK	0.523
		125				5TE1320		1	1 unit	1BK	0.545
		160		8		5TE1330		1	1 unit	1BK	0.682
		200				5TE1340		1	1 unit	1BK	0.651
	4 NO										
		100	690	5		5TE1410		1	1 unit	1BK	0.602
		125				5TE1420		1	1 unit	1BK	0.604
		160		8		5TE1430		1	1 unit	1BK	0.749
		200				5TE1440		1	1 unit	1BK	0.765
	3 NO with N-conductor through-type terminal										
		100	690	5		5TE1610		1	1 unit	1BK	0.587
		125				5TE1620		1	1 unit	1BK	0.591
		160		8		5TE1630		1	1 unit	1BK	0.760
		200				5TE1640		1	1 unit	1BK	0.740
	Switch disconnectors with red knob and yellow cap, can be used as emergency mains switching off device acc. to IEC 60204-1, EN 60204-1 (VDE 0113-1) if switch is easily accessible, mounting depth 92 mm										
	3 NO										
		100	690	5		5TE1315		1	1 unit	1BK	0.524
		125				5TE1325		1	1 unit	1BK	0.530
		160		8		5TE1335		1	1 unit	1BK	0.665
		200				5TE1345		1	1 unit	1BK	0.680
	4 NO										
		100	690	5		5TE1415		1	1 unit	1BK	0.591
		125				5TE1425		1	1 unit	1BK	0.606
		160		8		5TE1435		1	1 unit	1BK	0.767
		200				5TE1445		1	1 unit	1BK	0.760

* You can order this quantity or a multiple thereof.

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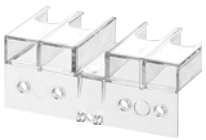
Accessories

	Version	I_e	U_e	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A AC	V AC							kg
 5TE9000	**Terminal covers** Sealable									
	For 100 A and 125 A switch disconnectors				5TE9000		1	1 unit	1BK	0.041
	For 160 A and 200 A switch disconnectors				5TE9001		1	1 unit	1BK	0.034
5TE9001										
	Cage terminals For 160 A and 200 A switch disconnectors, 14.5 mm terminal diameter for 35 mm^2 cables, hexagonal socket head screw 5 mm									
	1 set = 3 units				5TE9003		1	1 set	1BK	0.245
	1 set = 4 units				5TE9004		1	1 set	1BK	0.323
	Auxiliary switches Can be mounted optionally left or right or both sides (2 units); minimum contact load 24 V, 50 mA									
	1 CO	6	230		5TE9005		1	1 unit	1BK	0.039
	2 CO	6	230		5TE9006		1	1 unit	1BK	0.047
	Locking units For up to three padlocks with max. ∅ 8 mm				5TE9014		1	1 unit	1BK	0.018
	Conversion kits, 4-pole, for 100 A and 125 A for the connection of busbars or cables with cable lugs For busbars max 15 mm wide including terminal cover				5TE9015		1	1 set	1BK	0.078
5TE9010	**Rotary actuators with extension shafts for mounting on hinged doors or enclosure lids, lockable, IP65**									
	Black knob									
	Shaft length 200 mm				5TE9010		1	1 unit	1BK	0.176
	Shaft length 400 mm				5TE9011		1	1 unit	1BK	0.235
	Red knob									
	Shaft length 200 mm				5TE9012		1	1 unit	1BK	0.174
	Shaft length 400 mm				5TE9013		1	1 unit	1BK	0.234

7

* You can order this quantity or a multiple thereof.

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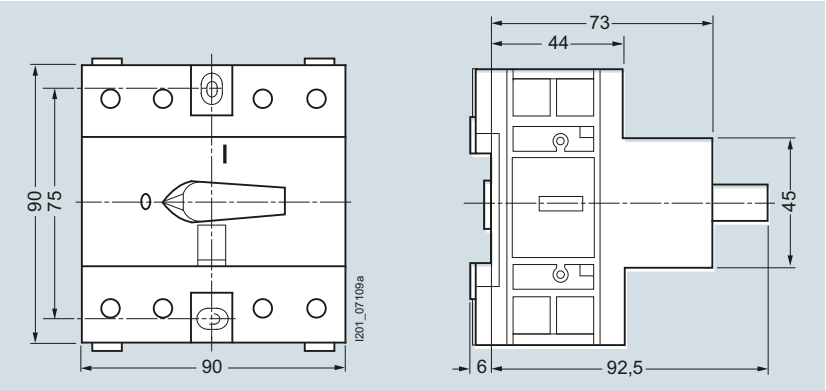
General data

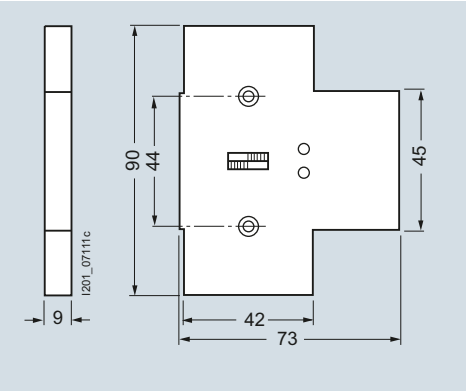
Dimensional drawings

5TE1 switch disconnectors, 100 A and 125 A



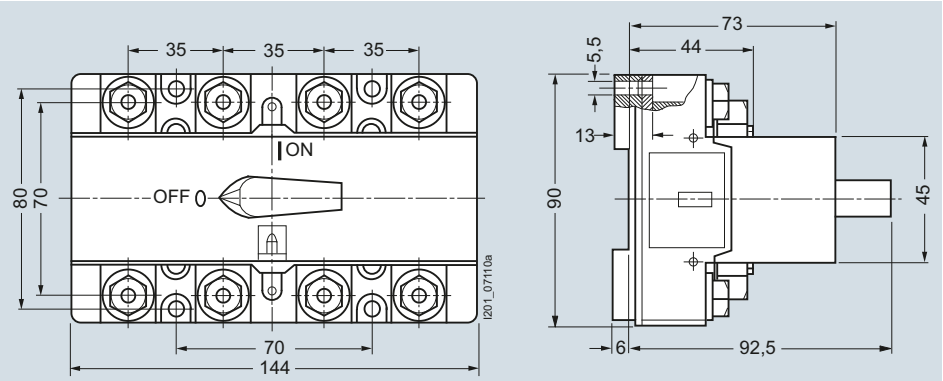
5TE1210 5TE1310 5TE1410 5TE1610
5TE1220 5TE1315 5TE1415 5TE1620
5TE1320 5TE1420
5TE1325 5TE1425

5TE9 auxiliary switches



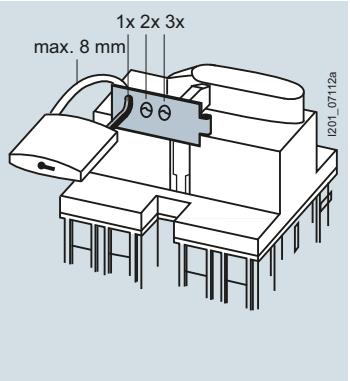
5TE9005
5TE9006

5TE1 switch disconnectors, 160 A and 200 A

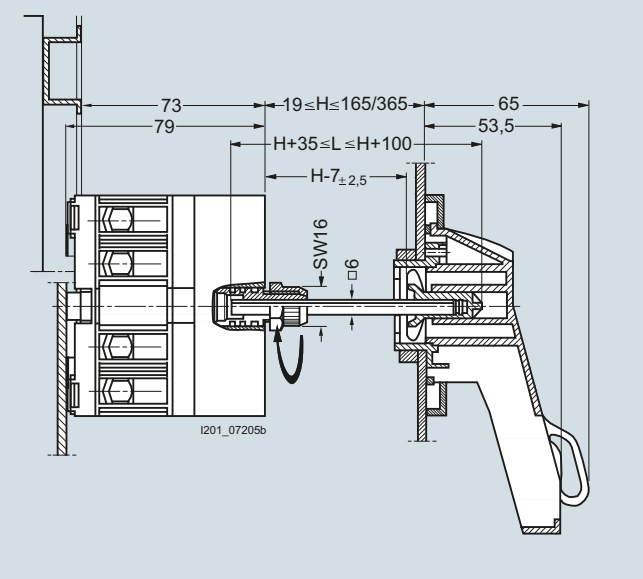


5TE1230 5TE1330 5TE1430 5TE1630
5TE1240 5TE1335 5TE1435 5TE1640
5TE1340 5TE1440
5TE1345 5TE1445

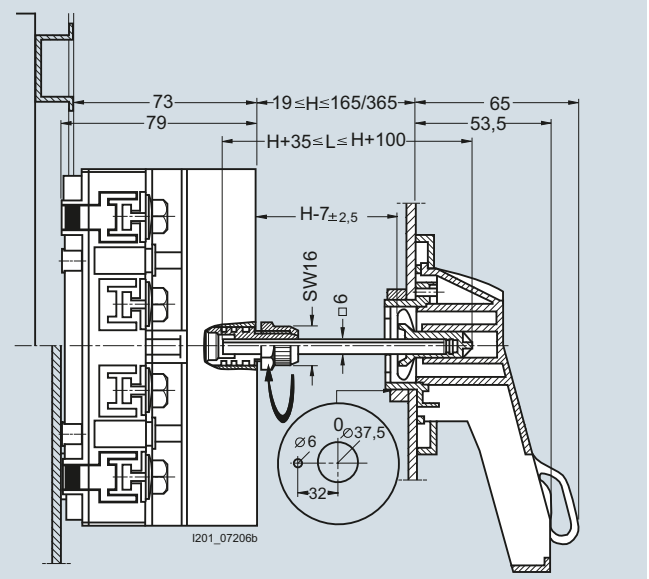
5TE9014 locking units



5TE9 rotary actuators with extension shaft



With switch disconnectors 100 A and 125 A
5TE9010, 5TE9011,
5TE9012, 5TE9013
It is possible to open the door in a disconnected state.



With switch disconnectors 160 A and 200 A
5TE9010, 5TE9011,
5TE9012, 5TE9013
It is possible to open the door in a disconnected state.

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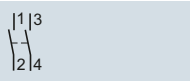
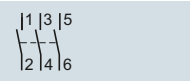
Circuit diagrams

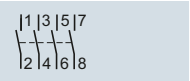
Graphical symbols



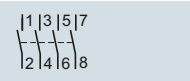
5TE1210
5TE1220
5TE1230
5TE1240



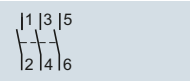
5TE1310
5TE1320
5TE1330
5TE1340



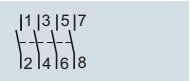
5TE1410
5TE1420
5TE1430
5TE1440



5TE1610
5TE1620
5TE1630
5TE1640

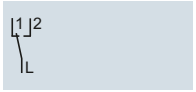


5TE1315
5TE1325
5TE1335
5TE1345

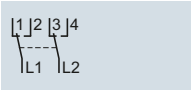


5TE1415
5TE1425
5TE1435
5TE1445

5TE9 auxiliary switches



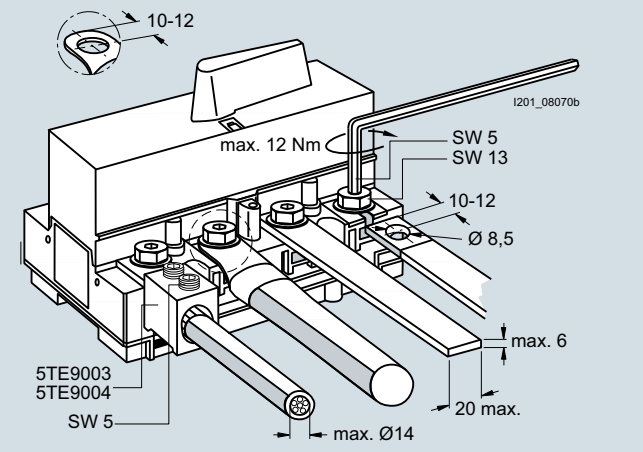
5TE9005



5TE9006

More information

Connection of 5TE1.3 and 5TE1.4 switches, 160 and 200 A



Design

- From 160 A: Supplied with one terminal cover
- 160 A and 200 A: Version for connection with cable lug
- Screw fixing on base plate
- Installation on standard mounting rail to EN 60715, which is raised at least 5 mm from the base plate.

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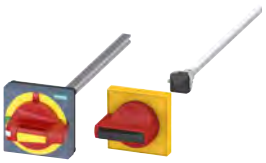
Introduction

Overview

Devices		Description	Page
Complete assemblies			
	Complete assemblies with direct operating mechanisms	Ready-to-install combinations comprising switch disconnectors and operating mechanisms • 3- and 4-pole switch disconnectors with front operating mechanisms • Connections in form of box terminal or flat terminal incl. direct operating mechanism with gray handle	7/53
Basic units			
	Front operating mechanisms 6-pole up to 1200 V DC NEW	Switch disconnectors with front operating mechanisms without handle • 6-pole versions for DC applications • Connections in form of flat terminal (size 2 to 5) or box terminal (size 1 and 2) • Operating mechanism module in center of switch disconnector	7/55 7/55
	3-/4-pole up to 690 V AC / 440 V DC	• 3- and 4-pole versions • Connections in form of flat terminal (size 2 to 5) or box terminal (size 1 and 2) • Operating mechanism module in center or on left-hand side of switch disconnector	7/55
	Side operating mechanisms	Switch disconnectors with side operating mechanisms • 3- and 4-pole versions • Connections in form of flat terminal (size 2 to 5) or box terminal (size 1 and 2) • Operating mechanism module on right or left-hand NEW side of switch disconnector	7/56
Accessories and spare parts			
 Left: Box terminal Right: Flat terminal	**Additional poles**	Additional poles for enhanced functionality • 4th contact element (switching pole) • N terminal (neutral conductor terminal with removable jumper) • N/PE terminal (with permanent jumper)	7/58
	Direct operating mechanisms	Different handles for mounting on basic units • Direct operating mechanisms for direct mounting on switch disconnector • Handles available in colors gray or red/yellow	7/59
	**Door-coupling rotary operating mechanisms**	Different handles for mounting on basic units • Door-coupling rotary operating mechanisms for operation of switch disconnector outside the control cabinet door • 8UD1 series NEW or 8UC/3KD series • Handles available in colors gray or red/yellow	7/60
	Auxiliary switches	Auxiliary switches • For querying the switch position • Optionally available with leading NO contacts (auxiliary switch contacts open before the main contacts of the 3KD switch disconnector) • Optionally available with test function (switch can be tested without closure of main contacts)	7/65
	Accessories for DC applications NEW	• Connecting bridge for series connection of two poles • Cable connection cover for connecting bridge	7/66
	Other accessories	• Phase barriers • Cable connection cover As touch protection for termination area (for installation outside control cabinet) • Mounting bracket for wall mounting (spare part)	7/66

7

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Overview

3KD switch disconnector, complete assembly, 3-pole

Characteristics

- 3-pole, 4-pole, and 6-pole versions in 5 different sizes
- Supplied as a complete assembly including direct operating mechanism or as a basic unit without a handle
- Direct operating mechanism with handle on switch disconnector
- Door-coupling rotary operating mechanism for operation of switch disconnector outside the control cabinet door
- Versions with side operating mechanisms
- Connections in the form of box terminals or flat terminals
- Floor mounting or mounting on a standard mounting rail (sizes 1 and 2)
- Additional poles can be retrofitted: 4th contact element, N or N/PE terminals
- Auxiliary switches for querying the switch positions
- Suitable for AC applications up to 690 V + 10 % (wind power)
- Suitable for DC applications up to 1200 V

Benefits

- Enhanced touch protection
- Contact position is clearly visible
- Locking functions help to prevent unauthorized operation
- Enhanced protection against inter-phase arcing
- Safe use in wind farms
- Compact design saves space
- Wide variety of applications thanks to a range of different operating mechanism designs
- Supplementary functions can be retrofitted
- Various service positions are possible thanks to optimized heat dissipation
- Test function to ensure safe commissioning
- Comprehensive support through provision of CAx data

Application

3KD switch disconnectors are designed for applications with exacting requirements. They are deployed as main control switches, EMERGENCY-STOP switches and repair switches in industrial plants, infrastructure and buildings. 3KD switch disconnectors are designed to switch the specified rated current on and off under load. At the same time, they constitute a safety isolating function and isolating distance in all low-voltage circuits.

All 3KD switch disconnectors are climate-proof and meet the requirements of IEC 60947-1, IEC 60947-3 and VDE 0660-107.

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General data

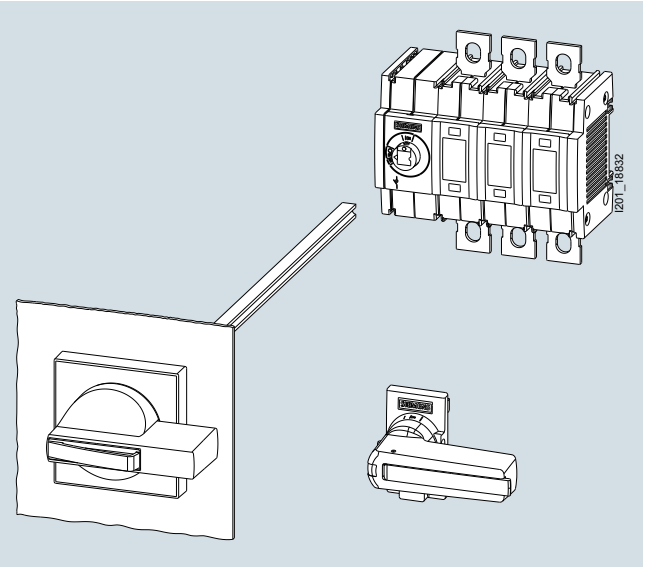
Design

A 3KD switch disconnector consists of an operating mechanism module, three, four or six switching poles and a handle to operate the switch disconnector.

Handles

The direct operating mechanism version of the handle is mounted directly on the switch disconnector. It can also be supplied in the form of a door-coupling rotary operating mechanism for actuation of the switch disconnector outside the control cabinet door. The handle is available in gray, or colored red/yellow for use as an EMERGENCY-STOP switch.

Commonly used switch disconnector variants comprising basic unit and handle are available as complete assemblies.

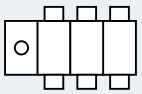
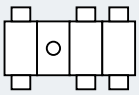
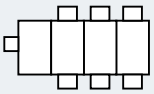
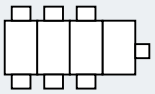
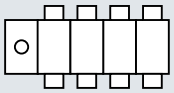
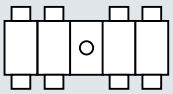
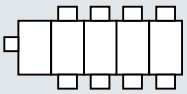
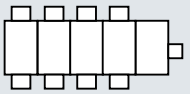
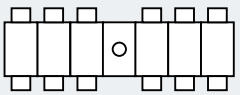


Handle either as direct operating mechanism or door-coupling rotary operating mechanism

Position of operating mechanism modules

To allow optimum utilization of the available installation space, units with front operating mechanisms can be supplied with the operating mechanism module in various positions – mounted on the left-hand side of the 3KD switch disconnector or in the center between the switching poles.

On units with side operating mechanisms, the operating mechanism module is positioned on the right or left-hand side of the 3KD switch disconnector.

Number of poles/ application	Front operating mechanism on side	Front operating mechanism in center	Side operating mechanism, left	Side operating mechanism, right
3-pole				
4-pole				
For 1200 V DC	--		--	--

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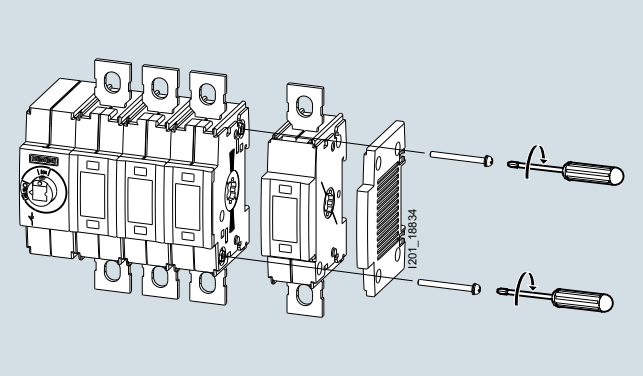
Additional poles

All sizes of the 3KD switch disconnectors can be retrofitted with additional poles on a modular basis.

When installing additional poles, it is important to note that only a 3-pole 3KD switch disconnector may be retrofitted with an additional switching pole with contact system (4th contact element).

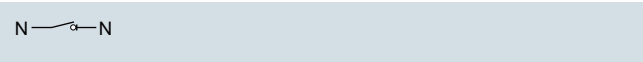
Additional poles (4th contact element, N or N/PE terminal) must always be mounted directly adjacent to the switch disconnector on the left or right. Accordingly, an auxiliary switch module must not be mounted between the basic unit and an additional pole on sizes 1 and 2.



Installation of an additional pole

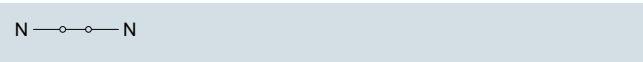
Available versions:

Fourth contact element:
The 4th contact element includes a contact system and is identical to the poles installed at the factory. It can be installed to upgrade a 3-pole switch disconnector to a disconnector with 4 poles.



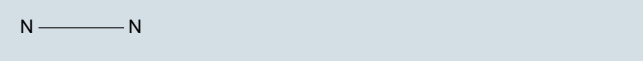
Fourth contact element as an additional pole

N terminal (neutral conductor terminal):
The N terminal does not include a contact system. A jumper can be removed in order to interrupt the electrical connection between the two terminals. An N terminal can be installed to add a non-switching N pole to a 3-pole disconnector.



N terminal as non-switching pole

N/PE terminal:
The N/PE terminal is identical to the neutral conductor terminal. However, the electrical connection between the two terminals is permanent and cannot be interrupted by removal of a jumper. The N/PE terminal is normally deployed for applications in which it is vital to ensure that this connection can never be interrupted.



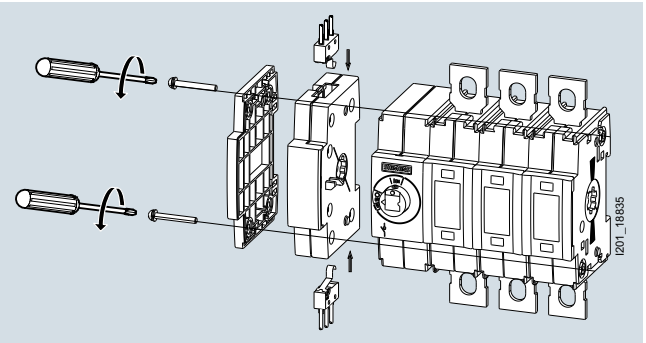
N/PE terminal with permanent connections

Auxiliary switches

Auxiliary switches allow remote interrogation of the contact position of the switch disconnector.

Installation of auxiliary switches for sizes 1 and 2

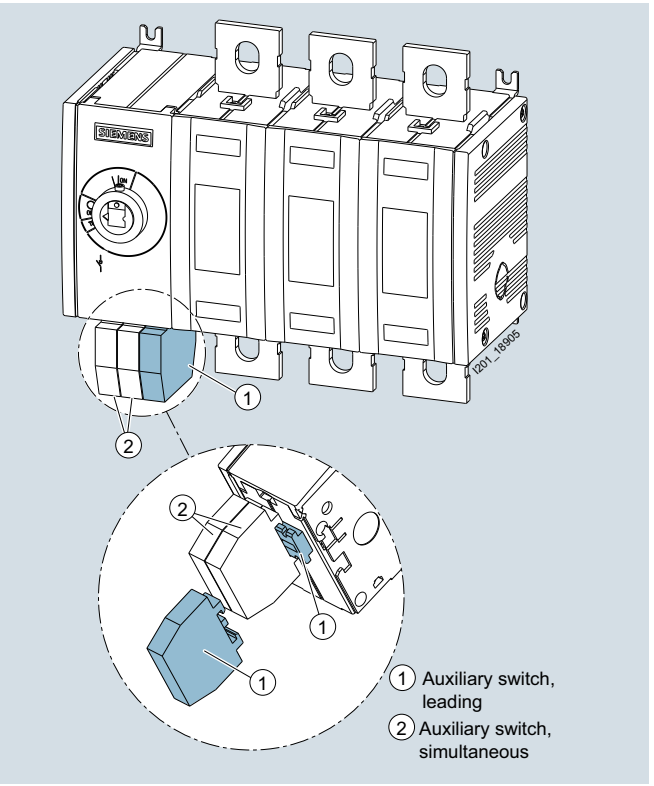
The auxiliary switches used for sizes 1 and 2 are microswitches (changeover contacts) which can be snapped into an auxiliary switch module. This auxiliary switch module is mounted on the side of the switch disconnector in the same way as an additional pole. A maximum of two microswitches can be installed in each auxiliary switch module.



Auxiliary switches with auxiliary switch module for sizes 1 and 2

Installation of auxiliary switches for sizes 3 to 5

With sizes 3 to 5, the auxiliary switches are directly attached to the operating mechanism module. The auxiliary switch with the leading switch function is always installed in the right-hand mounting location. The other locations are provided for simultaneously switching with the main contacts.



Auxiliary switches directly attached to the operating mechanism module with sizes 3 to 5. The leading auxiliary switch is highlighted in the drawing.

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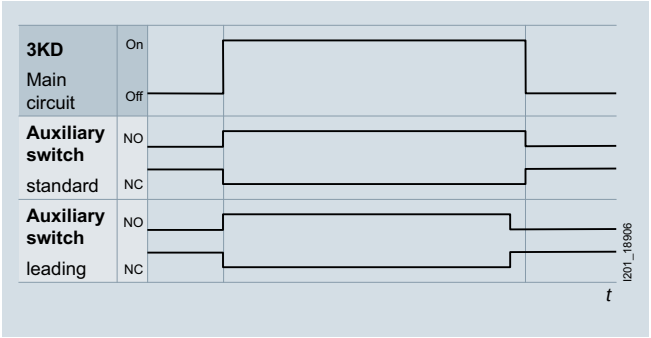
General data

Switching instants of auxiliary switches

The auxiliary switches can operate either simultaneously with the main contacts or function as leading switches with all sizes.



One of the possible functions of leading auxiliary switches is to disconnect the circuit with the assistance of a higher-level switching device, such as a circuit breaker, before the main contacts of the 3KD switch disconnector open.

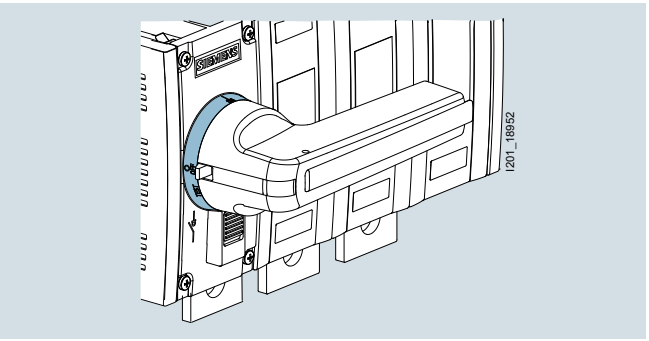
With sizes 1 and 2, the selection of the appropriate auxiliary switch module determines whether the switching instant will be leading or simultaneous.

With sizes 3, 4 and 5, the switching instant is determined by the selection of the mounting location for the auxiliary switch on the operating mechanism module. In this case, only 3SB3 auxiliary switches with NO contacts (1 NO or 1 NC) can be used as leading auxiliary switches.

Test function for auxiliary switches

The test function allows a wiring check to be performed on the auxiliary switches without necessitating closure of the main contacts of the 3KD switch disconnector. The test function can be used as part of the commissioning process.

The test function is activated by turning the handle of a direct operating mechanism in the OFF position by 25° in the anti-clockwise direction. The handle must be turned 90° in the clockwise direction in order to switch the main contacts.



The auxiliary switch module including test function must be used for sizes 1 and 2. With sizes 3, 4 and 5, all installed auxiliary switches are switched when the test function is activated.

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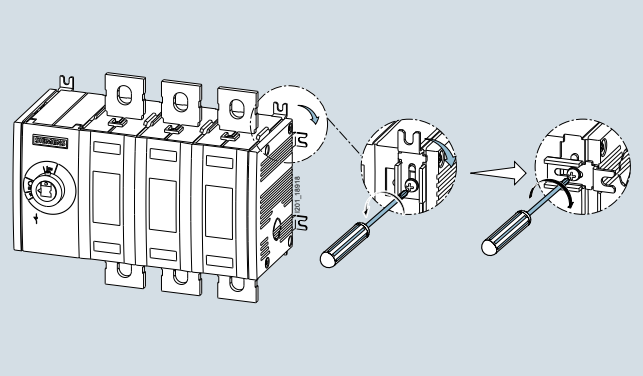
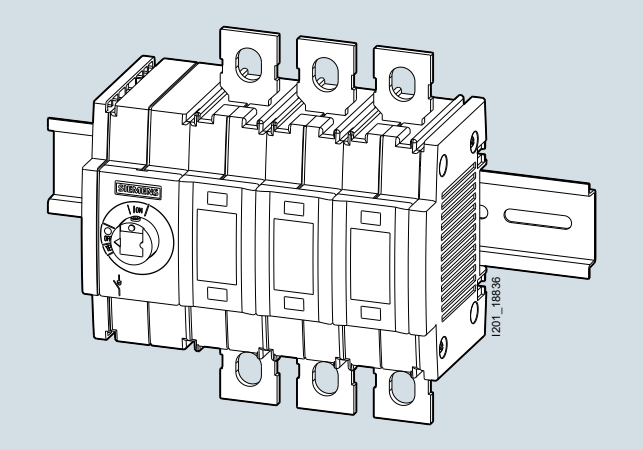
Types of mounting

All 3KD switch disconnectors are designed for floor mounting. To ensure that the switch can be flexibly adapted to the relevant installation conditions, the mounting bracket can be rotated through 90° with size 3 or larger.



Floor mounting method

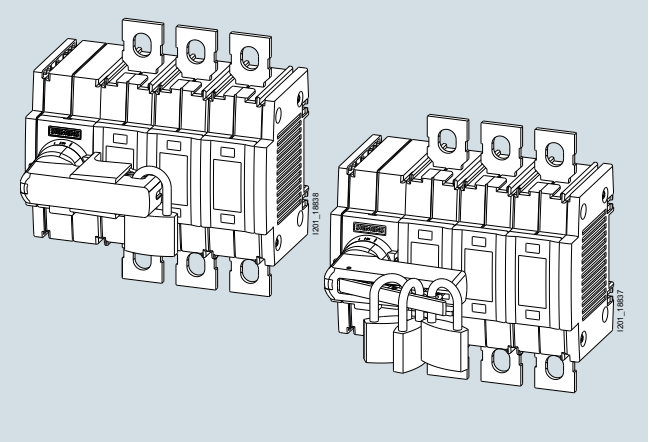
Sizes 1 and 2 can be snapped onto a standard mounting rail (TH35 according to EN 60715) as an alternative mounting method.



Mounting on a standard mounting rail

Locking functions

3KD switch disconnectors can be locked by up to three padlocks in order to prevent unauthorized switch operation. A flat version of the direct operating mechanisms is available for use in confined installation spaces. This can be secured with a lock without increasing the required mounting depth.



Locking functions involving one or more padlocks

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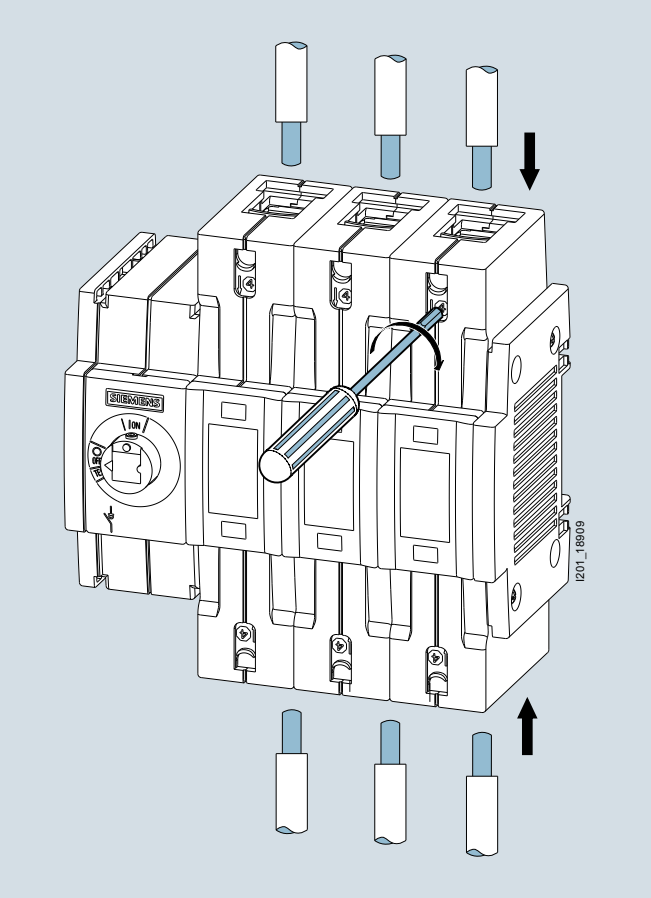
General data

Electrical connection

3KD switch disconnectors are available with a number of different terminal types.

Box terminals

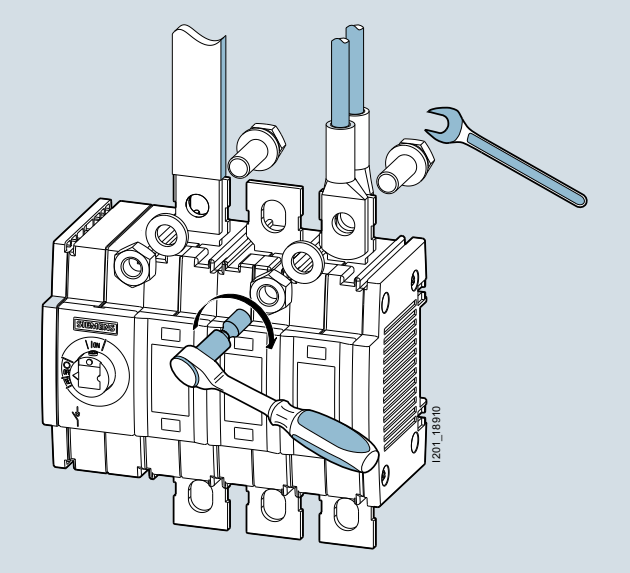
Box terminals for sizes 1 and 2 (rated currents 16 A to 160 A) are designed to allow the speedy connection of stripped conductors.



Connection via box terminals

Flat terminals

Sizes 2 to 5 (rated currents 80 A to 1600 A) are available with flat terminals – for the connection of cable lugs or busbar systems.



Connection via flat terminals

Terminal covers and phase barriers can be supplied for 3KD switch disconnectors with flat terminals.

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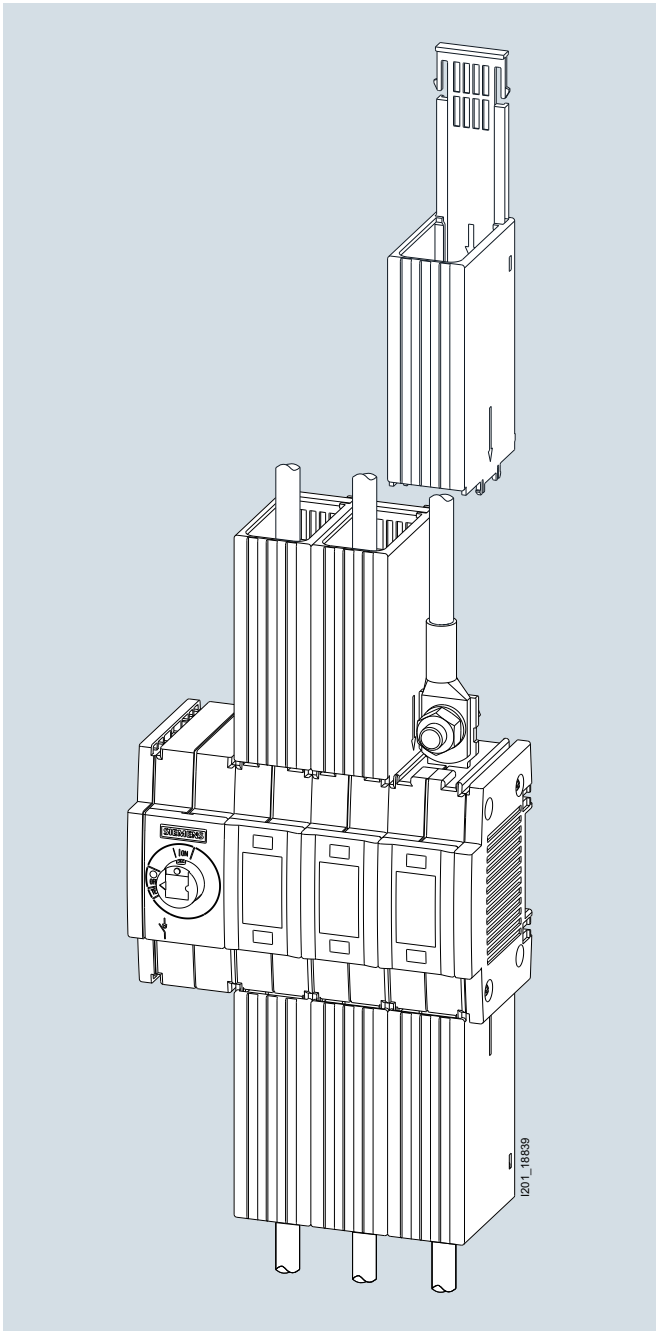
Terminal covers

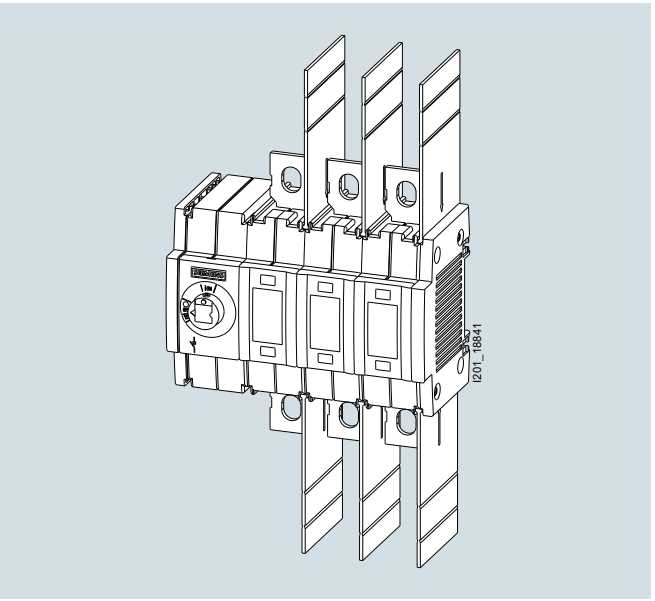
If the 3KD switch disconnector is erected outside a control cabinet, terminal covers can be installed to provide touch protection for all terminals.



Terminal covers

Phase barriers

When long, non-insulated cable lugs are used, phase barriers provide enhanced protection against arcing.



Phase barriers

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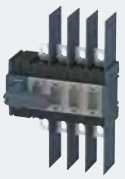
Overview

3LD main control and EMERGENCY-STOP switches																
3KD switch disconnectors: Box terminals																
3KD switch disconnectors: Flat terminals																
Size					**1**						**2**					
Type	**3LD20**	**3LD21**	**3LD22**	**3LD25**	**3KD....-.M**			**3LD27**	**3LD28**	**3LD23**	**3KD....-.N**					
	3LD main control and EMERGENCY-STOP switches				**3KD switch disconnectors**			**3LD main control and EMERGENCY-STOP switches**			**3KD switch disconnectors**					
Rated current I_n A	16	25	32	63	16	32	63	100	125	160	80	100	125	160	200	
Number of poles																
• 3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
• 4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
• 6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Connection																
• Flat terminals	--	--	--	--	--	--	--	--	--	--	✓	✓	✓	✓	✓	
• Box terminals	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	--	
Operating mechanisms																
• Front operating mechanism	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
• Side operating mechanism	--	--	--	--	✓	✓	✓	--	--	--	✓	✓	✓	✓	✓	
Operating and short-circuit behavior																
• Rated short-time withstand current I_{cw} (1 s current, rms value) kA	0.34	0.64	0.64	1.26	3	3	3	2	2	4	4	4	4	4	4	
• Rated conditional short-circuit current with upstream fuses at 690 V[1] kA_{rms}	50	50	50	50	100	100	100	50	20	50	65	65	65	65	50	

[1] Valid for the combination of 3KD switch disconnector and fuse type 3NA…, characteristic gG

✓ Available

-- Not available

For further information about 3LD main control and EMERGENCY-STOP switches

- see page 7/3
- Industry Mall, section "Building Technologies and Electrical Distribution" --> "Low-Voltage Components" --> "SENTRON Protection, Switching, Measuring and Monitoring Devices" --> "Switching Devices" --> "Switch Disconnectors" --> "3LD Main Control and EMERGENCY-STOP Switches up to 250 A"

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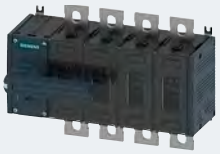
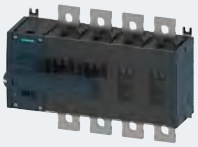
Overview (continued)

3LD main control and EMERGENCY-STOP switches											
3KD switch disconnectors: Box terminals											
3KD switch disconnectors: Flat terminals											
Size			**3**				**4**			**5**	
Type		**3LD24**	**3KD....-.P**				**3KD....-.Q**			**3KD....-.R**	
		3LD main control and EMERGENCY-STOP switches	**3KD switch disconnectors**								
Rated current I_n	A	250	200	250	315	400	500	630	800	1000	1250	1600
Number of poles												
• 3		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
• 4		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
• 6		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Connection												
• Flat terminals		--	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
• Box terminals		✓	--	--	--	--	--	--	--	--	--	--
Operating mechanisms												
• Front operating mechanism		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
• Side operating mechanism		--	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Operating and short-circuit behavior												
• Rated short-time withstand current I_{cw} (1 s current, rms value)	kA	4	13	13	13	13	30	30	30	50	50	50
• Rated conditional short-circuit current with upstream fuses at 690 V[1]	kA_{rms}	50	65	65	35	35	65	65	50	--	--	--

[1] Valid for the combination of 3KD switch disconnector and fuse type 3NA…, characteristic gG

✓ Available

-- Not available

For further information about 3LD main control and EMERGENCY-STOP switches

- see page 7/3
- see the Industry Mall, section "Building Technologies and Electrical Distribution" --> "Low-Voltage Components" --> "SENTRON Protection, Switching, Measuring and Monitoring Devices" --> "Switching Devices" --> "Switch Disconnectors" --> "3LD Main Control and EMERGENCY-STOP Switches up to 250 A"

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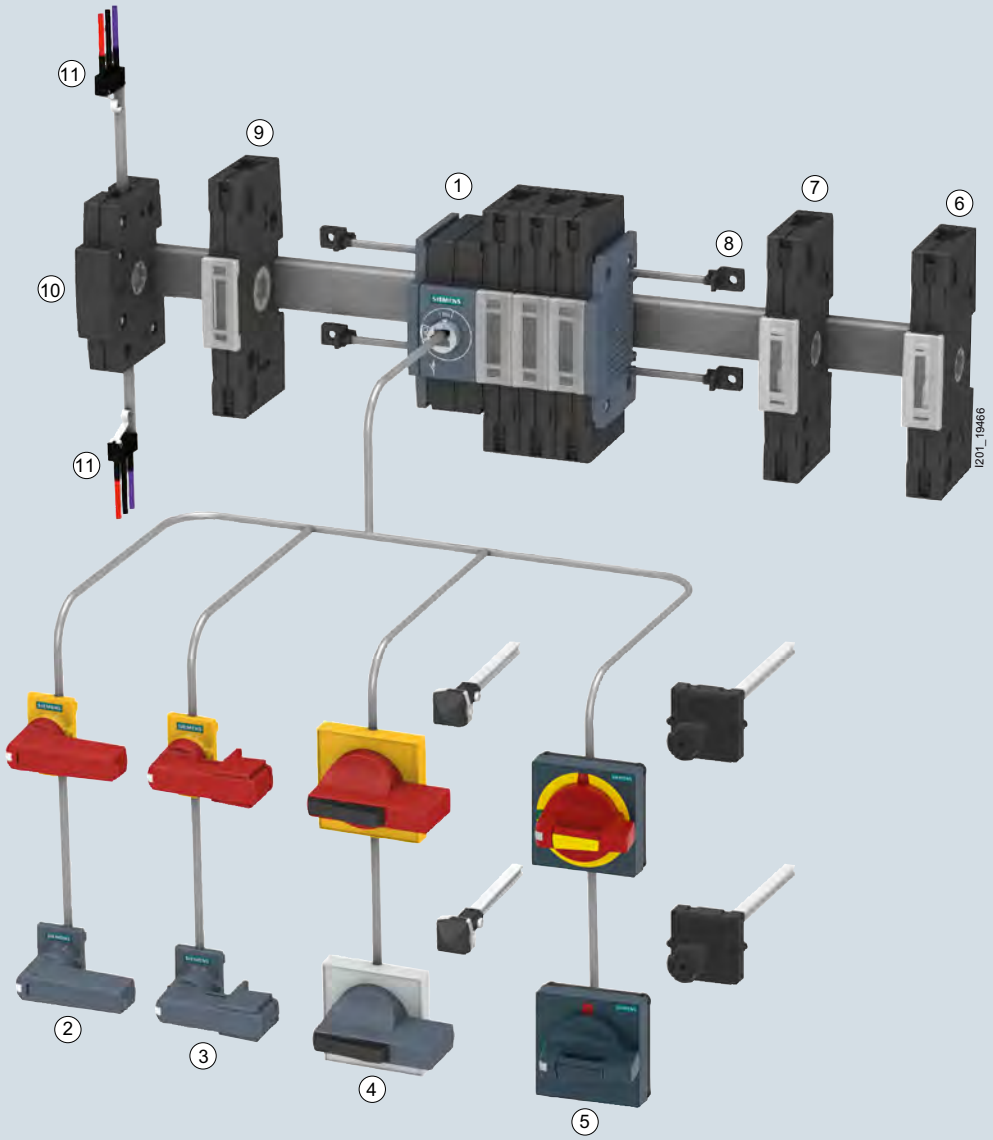
Technical features

Overview of components and accessories: 3KD switch disconnectors, 3/4-pole, sizes 1 and 2, box terminal



1 3KD switch disconnectors
2 Direct operating mechanism (standard version)
3 Direct operating mechanism (suitable for distribution boards)
4 8UC/3KD9 Door-coupling rotary operating mechanism
5 8UD1 Door-coupling rotary operating mechanism
6 N/PE terminal (with permanent jumper)
7 Neutral conductor terminal (with removable jumper)
8 Mounting bracket (spare part)
9 4th contact element
10 Auxiliary switch module
11 Auxiliary switch

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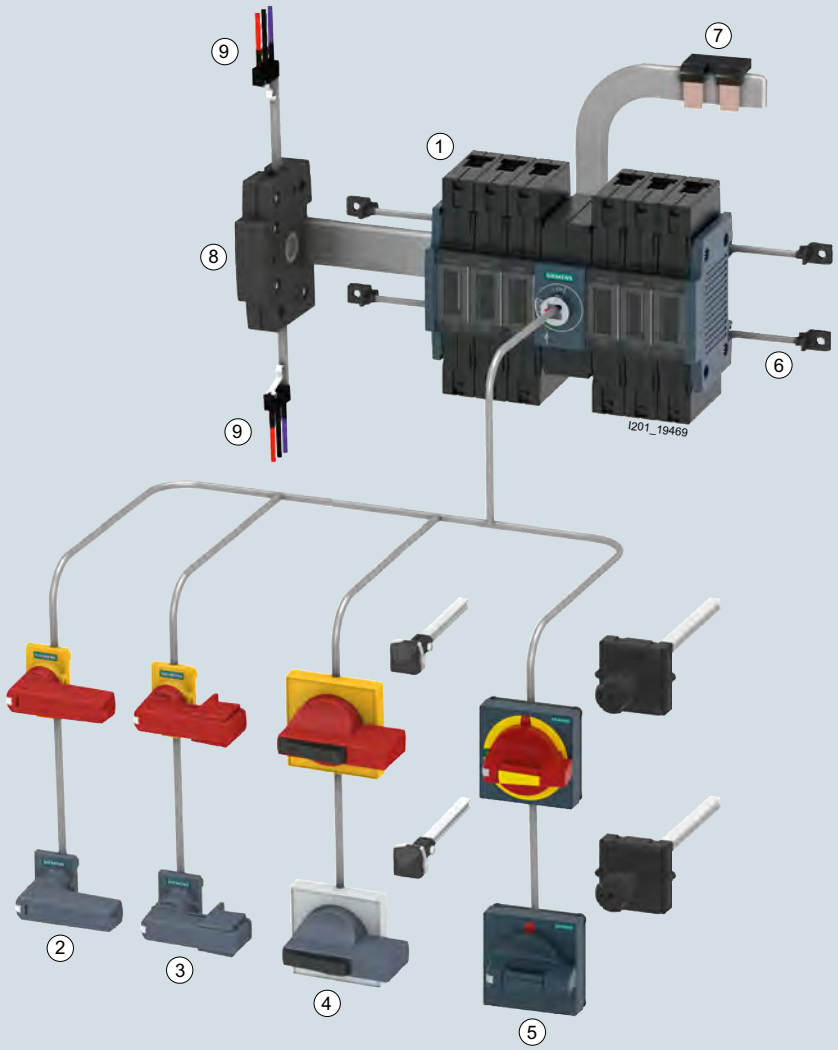
Overview of components and accessories: 3KD switch disconnectors, 6-pole for DC applications, sizes 1 and 2, box terminal



1 3KD switch disconnectors
2 Direct operating mechanism (standard version)
3 Direct operating mechanism (suitable for distribution boards)
4 8UC/3KD9 Door-coupling rotary operating mechanism
5 8UD1 Door-coupling rotary operating mechanism
6 Mounting bracket (spare part)
7 Bridging bar
8 Auxiliary switch module
9 Auxiliary switch

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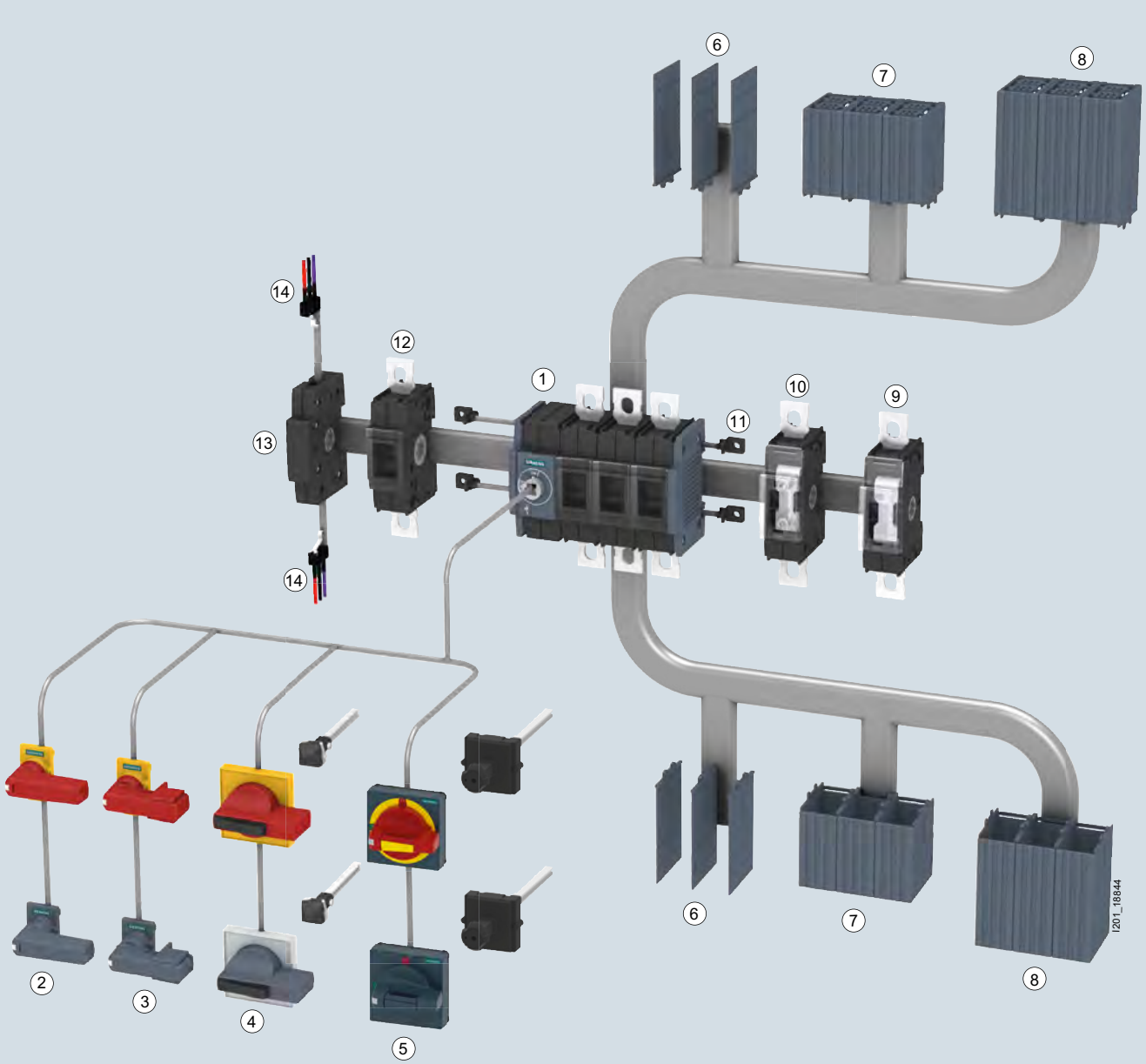
Technical features

Overview of components and accessories: 3KD switch disconnectors, 3/4-pole, size 2, flat terminal



1 3KD switch disconnectors
2 Direct operating mechanism (standard version)
3 Direct operating mechanism (suitable for distribution boards)
4 8UC/3KD9 Door-coupling rotary operating mechanism
5 8UD1 Door-coupling rotary operating mechanism
6 Phase barriers
7 Cable connection covers, short
8 Cable connection covers
9 N/PE terminal (with permanent jumper)
10 Neutral conductor terminal (with removable jumper)
11 Mounting bracket (spare part)
12 4th contact element
13 Auxiliary switch module
14 Auxiliary switch

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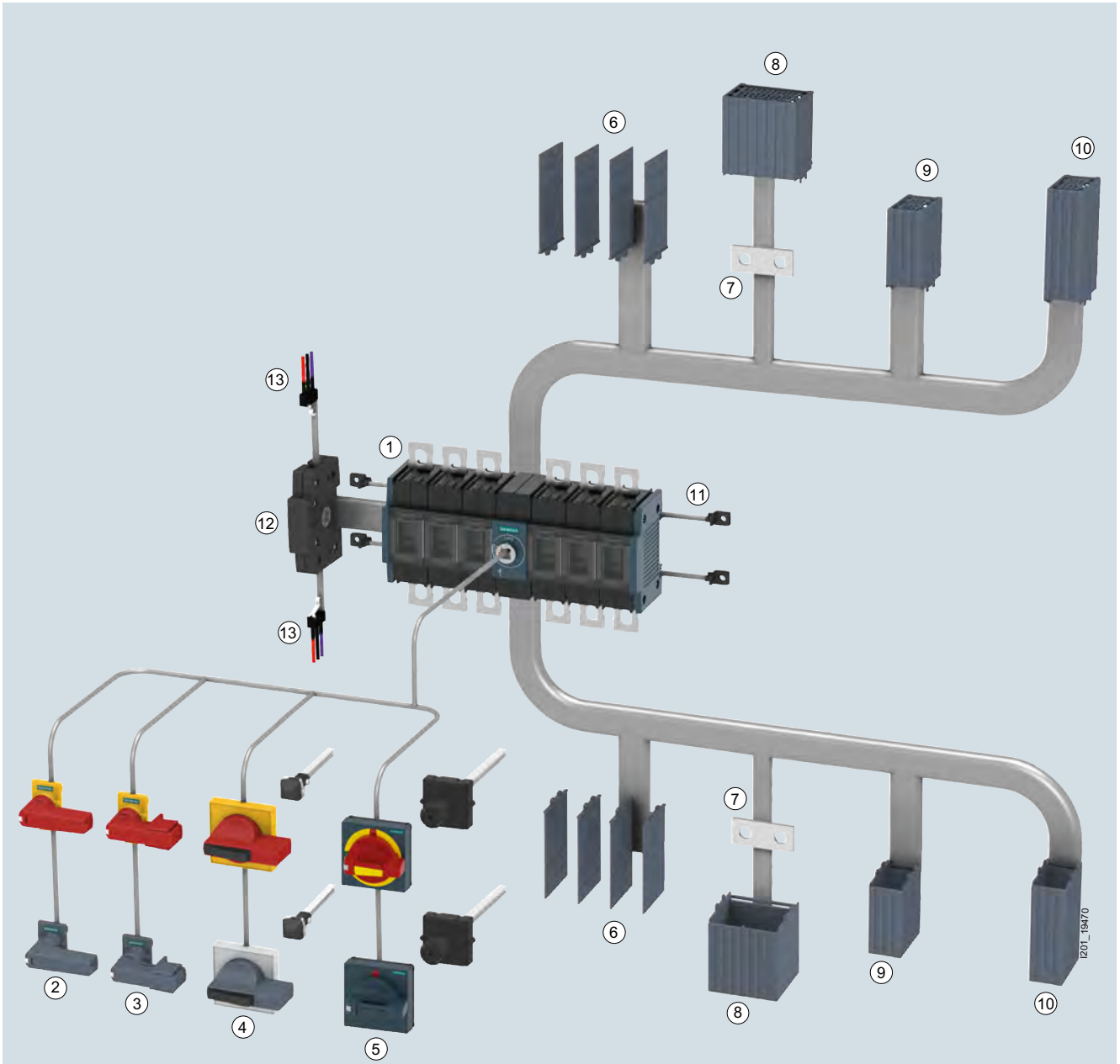
Overview of components and accessories: 3KD switch disconnectors, 6-pole, size 2, flat terminal



1 3KD switch disconnectors
2 Direct operating mechanism (standard version)
3 Direct operating mechanism (suitable for distribution boards)
4 8UC/3KD9 Door-coupling rotary operating mechanism
5 8UD1 Door-coupling rotary operating mechanism
6 Phase barriers
7 Bridging bar
8 Cable connection cover for bridging bars
9 Cable connection cover, short
10 Cable connection cover
11 Mounting bracket (spare part)
12 Auxiliary switch module
13 Auxiliary switch

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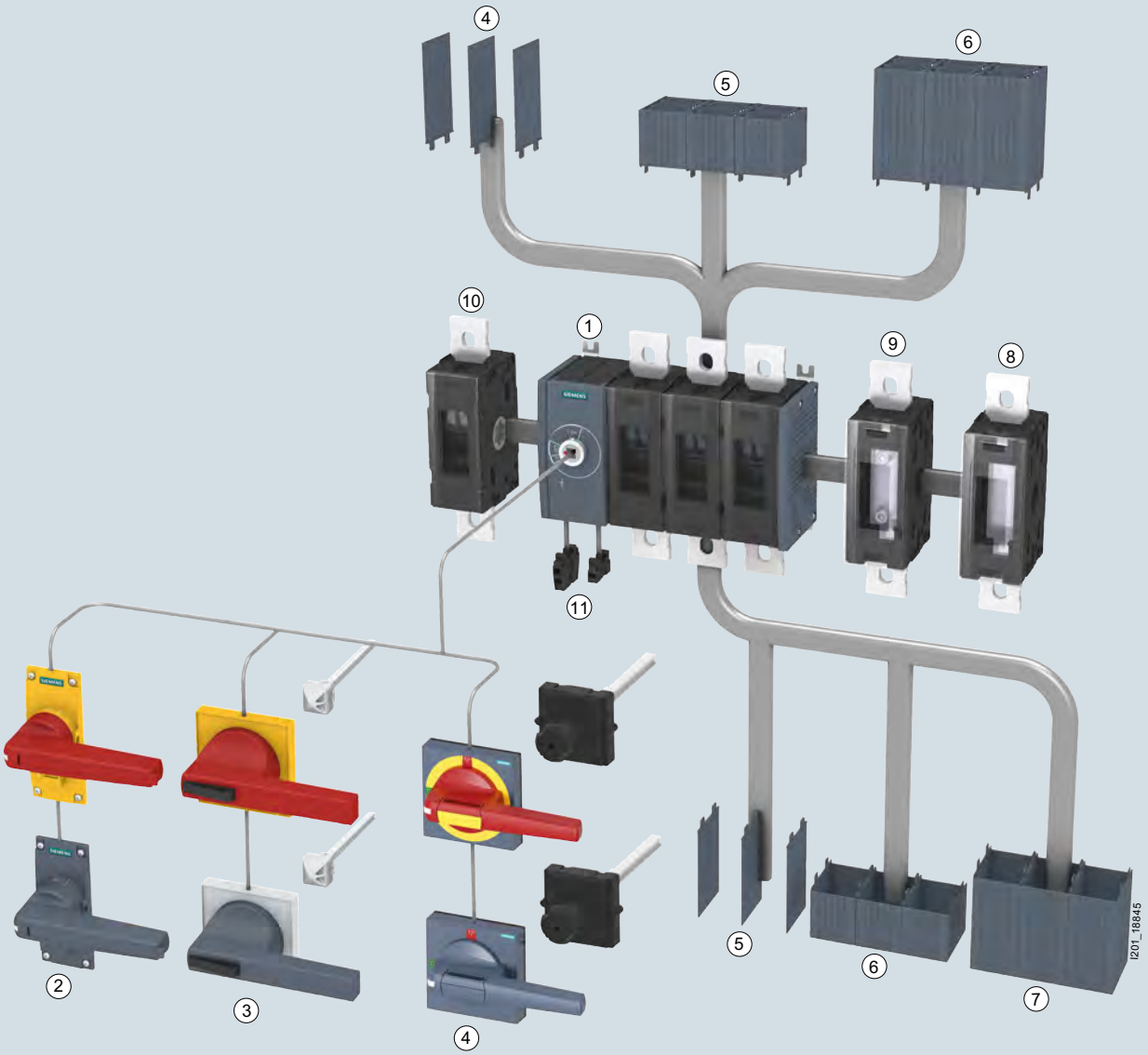
Technical features

Overview of components and accessories: 3KD switch disconnectors, 3/4-pole, sizes 3 to 5, flat terminal



1. 3KD switch disconnectors
2. Direct operating mechanism
3. 8UC/3KD9 Door-coupling rotary operating mechanism
4. 8UD1 Door-coupling rotary operating mechanism
5. Phase barriers
6. Cable connection covers, short
7. Cable connection covers
8. N/PE terminal (with permanent jumper)
9. Neutral conductor (with removable jumper)
10. 4th contact element
11. Auxiliary switch

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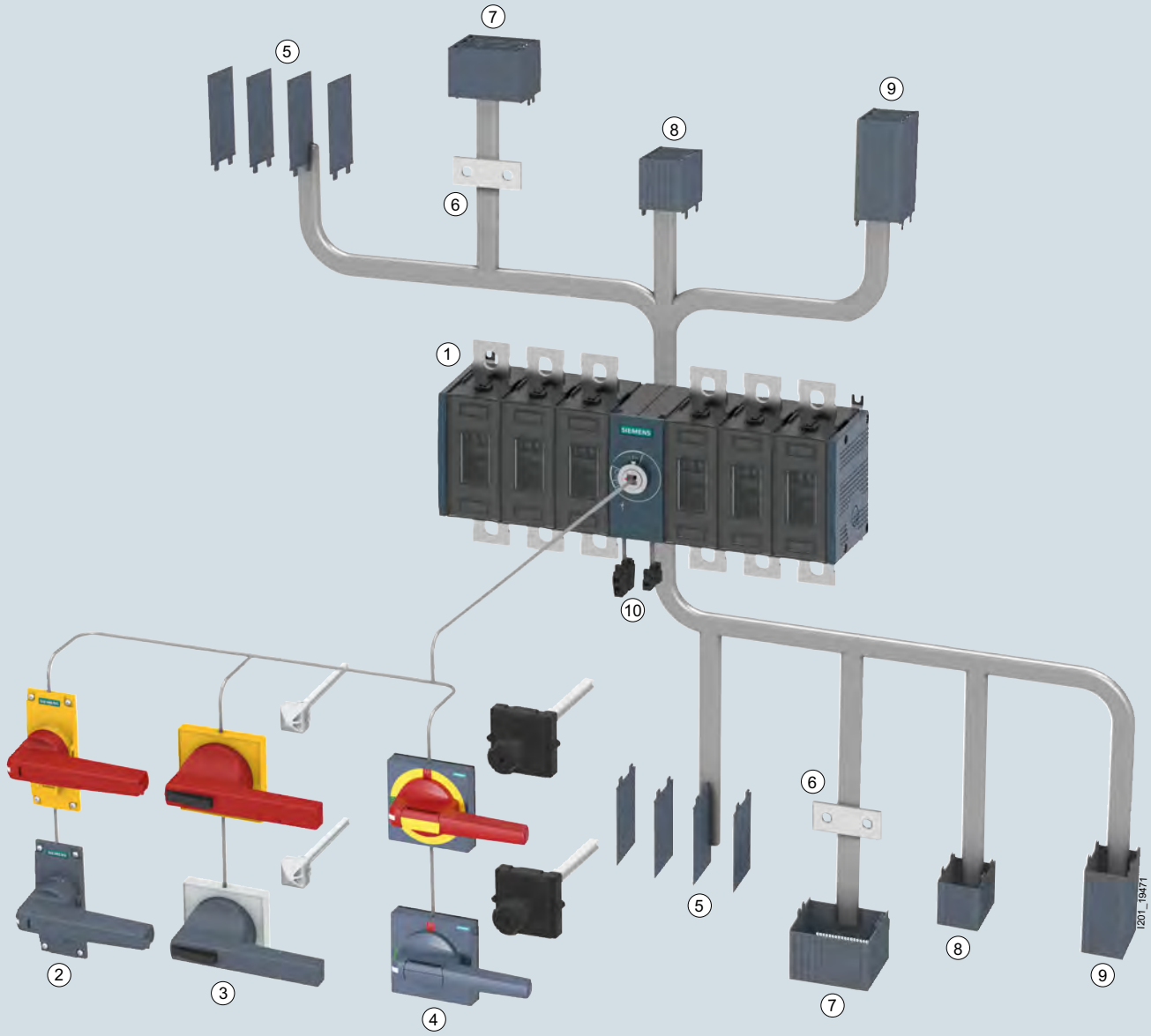
Overview of components and accessories: 3KD switch disconnectors, 6-pole for DC applications, sizes 3 to 5, flat terminal



1 3KD switch disconnectors
2 Direct operating mechanism
3 8UC/3KD9 Door-coupling rotary operating mechanism
4 8UD1 Door-coupling rotary operating mechanism
5 Phase barriers
6 Bridging bar
7 Cable connection cover for bridging bars
8 Cable connection cover, short
9 Cable connection cover
10 Auxiliary switch

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Technical specifications

3KD switch disconnectors, 3/4-pole, sizes 1 and 2

Standards		**IEC 60947-1, IEC 60947-3**							
Type		**3KD16**	**3KD22**	**3KD26**	**3KD28**	**3KD30**	**3KD32**	**3KD34**	**3KD36...N**
Size		**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**
General technical details									
Rated uninterrupted current I_u	A	16	32	63	80	100	125	160	200
Conventional free-air thermal current I_{th}[1]	A	16	32	63	80	100	125	160	200
Rated operational voltage U_e									
• At 50/60 Hz AC (tolerance up to + 10 % permissible)	V	690							
• At DC - 2 conducting paths series-connected	V	220							
• At DC - 3 conducting paths series-connected	V	440							
Rated insulation voltage U_i	V	1000							
Rated impulse withstand voltage U_{imp}	kV	8	8	8	8	8	8	8	8
Overvoltage category		III	III	III	III	III	III	III	III
Pollution degree		3	3	3	3	3	3	3	3
Operating and short-circuit behavior									
Rated operational current I_e									
• At AC-21A, AC-22A, 400 to 690 V	A	16	32	63	80	100	125	160	200
• At AC-23, 400 V	A	16	32	63	80	100	125	160	160
• At AC-23, 500 V	A	16	32	63	80	100	125	160	160
• At AC-23, 690 V	A	16	32	63	80	100	125	125	125
• At DC-21A, 220/440 V	A	16	32	63	80	100	125	160	160
• At DC-22A, 220/440 V	A	16	32	63	80	100	125	160	160
• At DC-23A, 220/440 V	A	16	32	63	80	100	125	160	160
Motor switching capacity AC-23A[2]									
• At 400 V	kW	7.5	15	30	37	55	55	90	90
• At 500 V	kW	7.5	18.5	37	55	55	75	110	110
• At 690 V	kW	11	30	55	75	90	110	110	110
Rated short-time withstand current I_{cw} (with t = 1 s, rms value, 690 V AC/440 V DC)	kA	3	3	3	4	4	4	4	4
Rated short-circuit making capacity I_{cm} (at 690 V AC/440 V DC)	kA	7	7	7	12	12	12	12	12
Rated current of upstream fuse[3]	A	63	63	63	160	160	160	160	200
Rated conditional short-circuit current with upstream fuse[3]									
• At 400/500 V AC	kA	100	100	100	100	100	100	100	50
• At 690 V AC	kA	100	100	100	65	65	65	65	50
Let-through current combined with upstream fuse[3]									
• At 400/500 V AC	kA	7	7	7	17.9	17.9	17.9	17.9	18
• At 690 V AC	kA	7.5	7.5	7.5	18.7	18.7	18.7	18.7	19
Let-through I^2t value combined with upstream fuse[3]									
• At 400/500 V	kA^2s	13.3	13.3	13.3	135.6	135.6	135.6	135.6	211
• At 690 V	kA^2s	13.7	13.7	13.7	178.3	178.3	178.3	178.3	226
Power loss per pole with thermal current I_{th}	W	0.2	0.6	2	2	3	4.5	7	10
Service life, operating cycles									
• Mechanical		15000	15000	15000	15000	15000	15000	15000	15000
• Electrical, at AC-23A, 690 V/50...60 Hz		6000	6000	6000	1500	1500	1500	1500	1500
• Electrical, at DC-23A, 220/440 V		1500	1500	1500	1500	1500	1000	1000	1000
Degree of protection									
• With masking plate or cable connection cover		IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20
• Without masking plate or terminal cover		IP20	IP20	IP20	IP00[4]/IP20				IP00
Ambient conditions									
• Ambient temperature during operation	°C	-25 ... +70 (no derating of I_{th} at -5 to +55 °C)							
• Ambient temperature during storage	°C	-50 ... +80							
• Mounting position[5]		Any							
Main conductor connections									
Conductor cross-section, max.	mm^2	35	35	35	70 (95)[6]	70 (95)[6]	70 (95)[6]	70 (95)[6]	95
Busbar systems, max. dimensions (number x width x thickness)									
• Flat terminals	mm	--			1 x 20 x 3[7]				
• Box terminals	mm	1 x 9 x 2			1 x 14 x 3				
Tightening torque									
• Flat terminals	Nm	--			15 ... 22				
• Box terminals	Nm	5 ... 6.5			6.5 ... 8				

1) Configuring note: Max. permissible operating temperature at connections 125 °C

2) Values are provided as a guide only and may vary depending on the make of motor

3) Valid for the combination of 3KD and fuse type 3NA38 for I_u = 16 ... 160 A; 3NA31 for I_u = 200 A, characteristic gG

4) Relevant only for devices with flat terminals

5) With mounting positions other than the vertical, please contact Technical Support.

6) 95 mm^2 valid for variants with flat terminals.

7) When using busbars that are 20 mm wide, these must be insulated.

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Technical specifications (continued)

3KD switch disconnectors, 3/4-pole, sizes 3 to 5

Standards		**IEC 60947-1, IEC 60947-3**									
Type		**3KD36..-.P**	**3KD38**	**3KD40**	**3KD42**	**3KD44**	**3KD46**	**3KD48**	**3KD50**	**3KD52**	**3KD54**
Size		**3**	**3**	**3**	**3**	**4**	**4**	**4**	**5**	**5**	**5**
General technical details											
Rated uninterrupted current I_u	A	200	250	315	400	500	630	800	1000	1250	1600
Conventional free-air thermal current I_{th}[1]	A	200	250	315	400	500	630	800	1000	1250	1600
Rated operational voltage U_e											
• At 50/60 Hz AC (tolerance up to + 10 % permissible)	V	690									
• At DC - 2 conducting paths series-connected	V	220									
• At DC - 3 conducting paths series-connected	V	440									
Rated insulation voltage U_i	V	1000									
Rated impulse withstand voltage U_{imp}	kV	12	12	12	12	12	12	12	12	12	12
Overvoltage category		IV	IV	IV	IV	IV	IV	IV	IV	IV	IV
Pollution degree		3	3	3	3	3	3	3	3	3	3
Operating and short-circuit behavior											
Rated operational current I_e[2] [3]											
• At AC-21A, AC-22A, 400 to 690 V	A	200	250	315	400	500	630	800	1000	1250	1600
• At AC-23, 400 V	A	200	250	315	400	500	630	670	800	800	800
• At AC-23, 500 V	A	200	250	315	350	500	630	630	800	800	800
• At AC-23, 690 V	A	200	250	315	315	500	500	500	800	800	800
• At DC-21A, 220/440 V	A	200	250	315	400	500	630	800	1000	1250	1600
• At DC-22A, 220/440 V	A	200	250	315	400	500	630	800	--	--	--
• At DC-23A, 220/440 V	A	200	250	315	400	500	630	800	--	--	--
Motor switching capacity AC-23A[4]											
• At 400 V	kW	110	132	160	220	280	355	355	400	400	400
• At 500 V	kW	132	160	220	250	355	400	400	560	560	560
• At 690 V	kW	185	220	280	315	500	500	500	800	800	800
Rated short-time withstand current I_{cw} (with t = 1 s, rms value, 690 V AC/440 V DC)	kA	13	13	13	13	30	30	30	50	50	50
Rated short-circuit making capacity I_{cm} (at 690 V AC/440 V DC)	kA	26	26	26	26	63	63	63	105	105	105
Rated current of upstream fuse[5]	A	250	250	400	400	630	630	800	1000	1250	1600
Rated conditional short-circuit current with upstream fuse[5]											
• At 400/500 V AC	kA	100	100	65	65	100	100	100	100	80	80
• At 690 V AC	kA	65	65	35	35	65	65	50	--	--	--
Let-through current combined with upstream fuse[5]											
• At 400/500 V AC	kA	25.1	25.1	35.2	35.2	61.6	61.6	63.7	95.9	103.4	110
• At 690 V AC	kA	22.7	22.7	27.96	27.96	54.5	54.5	70.4	--	--	--
Let-through I^2t value combined with upstream fuse[5]											
• At 400/500 V	kA^2s	427	427	1165	1165	3687	3687	7471	15400	25960	30900
• At 690 V	kA^2s	348	348	1157	1157	4450	4450	10300	--	--	--
Power loss per pole with thermal current I_{th}	W	4	7	10	17	15	22	35	47	70	120
Service life, operating cycles											
• Mechanical		10000	10000	10000	10000	8000	8000	8000	6000	6000	6000
• Electrical, at AC-23A, 690 V/50...60 Hz		1000	1000	1000	1000	1000	1000	1000	500	500	500
• Electrical, at DC-23A, 220/440 V		1000	1000	1000	1000	1000	1000	500	500	500	500
Degree of protection											
• With masking plate or cable connection cover		IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20
• Without masking plate or terminal cover		IP00	IP00	IP00	IP00	IP00	IP00	IP00	IP00	IP00	IP00
Ambient conditions											
• Ambient temperature during operation	°C	-25 ... +70 (no derating of I_{th} at -5 ... +55 °C)									
• Ambient temperature during storage	°C	-50 ... +80									
• Mounting position[6]		Any									
Main conductor connections											
Conductor cross-section, max.	mm^2	240				2 x 240			2 x 240		
Busbar systems, max. dimensions (number x width x thickness)											
• Flat terminals	mm	1 x 30 x 10				2 x 40 x 5			2 x 60 x 10		
• Box terminals	mm	1 x 30 x 10				2 x 40 x 5			2 x 60 x 10		
Tightening torque											
• Flat terminals	Nm	30 ... 44				50 ... 75			50 ... 75		
• Box terminals	Nm	--				--			--		

[1] Max. permissible operating temperature at connections 125 °C

[2] With size 3 switch disconnectors, phase barriers or terminal covers (accessories) are required for:
- Busbar systems at AC-21A, AC-22A and U_e > 400 V, AC-23A and
- When cable lugs are connected

[3] With size 4 at AC-23A, phase barriers or terminal covers must be installed (accessories).

[4] Values are provided as a guide only and may vary depending on the make of motor

[5] Valid for the combination of 3KD and fuse type 3NA..., characteristic gG.

[6] Contact Technical Support for other mounting positions.

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Technical specifications (continued)

3KD switch disconnectors, 6-pole for DC applications up to 1200 V, sizes 1 and 2

Standards		**IEC 60947-1, IEC 60947-3**						
Type		**3KD16**	**3KD22**	**3KD26**	**3KD28**	**3KD30**	**3KD32**	**3KD34**
Size		**1**	**1**	**1**	**2**	**2**	**2**	**2**
General technical details								
Rated uninterrupted current I_u	A	16	32	63	80	100	125	160
Conventional free-air thermal current I_{th} [1]	A	16	32	63	80	100	125	160
Rated operational voltage U_e								
• At DC - with pollution degree 2	V	1200	1200	1200	1200	1200	1200	1200
• At DC - with pollution degree 3	V	1000	1000	1000	1000 [2]	1000 [2]	1000 [2]	1000 [2]
Rated insulation voltage U_i								
• At DC - with pollution degree 2	V	1250	1250	1250	1250	1250	1250	1250
• At DC - with pollution degree 3	V	1000	1000	1000	1000 [3]	1000 [3]	1000 [3]	1000 [3]
Rated impulse withstand voltage U_{imp}	kV	8	8	8	8	8	8	8
Overvoltage category		III	III	III	III	III	III	III
Operating and short-circuit behavior								
Rated operational current I_e								
• At DC-21A, 1200 V	A	16	32	63	80	100	125	160
• At DC-21B, 1200 V	A	--	--	--	--	--	--	--
Rated short-time withstand current I_{cw}								
• with t = 1 s, rms value, 1200 V DC	kA	3	3	3	4	4	4	4
Rated short-circuit making capacity I_{cm}								
• At 1200 V DC	kA	4.3	4.3	4.3	5.7	5.7	5.7	5.7
Power loss per pole with thermal current I_{th}	W	0.2	0.6	2	2	3	4.5	7
Service life, operating cycles								
• Mechanical		15000	15000	15000	15000	15000	15000	15000
• Electrical, at DC-21, 1200 V		1500	1500	1500	1500	1500	1500	1500
Degree of protection								
• With masking plate or cable connection cover		IP20	IP20	IP20	IP20	IP20	IP20	IP20
• Without masking plate or terminal cover		IP20	IP20	IP20	IP00 [4]/IP20			
Ambient conditions								
• Ambient temperature during operation	°C	-25 ... +70 (no derating of I_{th} at -5 to +40 °C)						
• Ambient temperature during storage	°C	-50 ... +80						
• Mounting position		Any						
Main conductor connections								
Conductor cross-section, max.	mm^2	35	35	35	70	70	70	70
Busbar systems, max. dimensions (number x width x thickness)								
• Flat terminals	mm	--			1 x 20 x 3 [5]			
• Box terminals	mm	1 x 9 x 2			1 x 14 x 3			
Tightening torque								
• Flat terminals	Nm	--			15 ... 22			
• Box terminals	Nm	5 ... 6.5			6.5 ... 8			

1) Configuring note: Max. permissible operating temperature at connections 110 °C

2) Valid for version with box terminal, version with flat terminal max. 1200 V

3) Valid for version with box terminal, version with flat terminal max. 1250 V

4) Relevant only for devices with flat terminals

5) When using busbars that are 20 mm wide, these must be insulated.

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Technical specifications (continued)

3KD switch disconnectors, 6-pole for DC applications up to 1200 V, sizes 3 to 5

Standards		**IEC 60947-1, IEC 60947-3**									
Type		**3KD36**	**3KD38**	**3KD40**	**3KD42**	**3KD44**	**3KD46**	**3KD48**	**3KD50**	**3KD52**	**3KD54**
Size		**3**	**3**	**3**	**3**	**4**	**4**	**4**	**5**	**5**	**5**
General technical details											
Rated uninterrupted current I_u	A	200	250	315	400	500	630	800	1000	1250	1600
Conventional free-air thermal current I_{th} [1]	A	200	250	315	400	500	630	800	1000	1250	1600
Rated operational voltage U_e											
• At DC - with pollution degree 2	V	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
• At DC - with pollution degree 3	V	1200	1200	1200	1200	1000	1000	1000	1200	1200	1200
Rated insulation voltage U_i											
• At DC - with pollution degree 2	V	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250
• At DC - with pollution degree 3	V	1250	1250	1250	1250	1000	1000	1000	1250	1250	1250
Rated impulse withstand voltage U_{imp}	kV	12	12	12	12	12	12	12	12	12	12
Overvoltage category		IV	IV	IV	IV	IV	IV	IV	IV	IV	IV
Operating and short-circuit behavior											
Rated operational current I_e [2]											
• At DC-21A, 1200 V	A	--	--	--	--	--	--	--	--	--	--
• At DC-21B, 1200 V	A	200	250	315	400	500	630	800	1000	1250	1600
Rated short-time withstand current I_{cw}											
• with t = 1 s, rms value, 1200 V DC	kA	10	10	10	10	20	20	20	20	20	20
Rated short-circuit making capacity I_{cm}											
• At 1200 V DC	kA	14.2	14.2	14.2	14.2	28.4	28.4	28.4	28.4	28.4	28.4
Power loss per pole with thermal current I_{th}	W	4	7	10	17	15	22	35	47	70	120
Service life, operating cycles											
• Mechanical		10000	10000	10000	10000	8000	8000	8000	6000	6000	6000
• Electrical, at DC-21, 1200 V		200	200	200	200	100	100	100	100	100	100
Degree of protection											
• With masking plate or cable connection cover		IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20
• Without masking plate or terminal cover		IP00	IP00	IP00	IP00	IP00	IP00	IP00	IP00	IP00	IP00
Ambient conditions											
• Ambient temperature during operation	°C	-25 ... +70 (no derating of I_{th} at -5 to +40 °C)									
• Ambient temperature during storage	°C	-50 ... +80									
• Mounting position		Any									
Main conductor connections											
Conductor cross-section, max.	mm^2	240				2 x 240			2 x 240		
Busbar systems, max. dimensions (number x width x thickness)											
• Flat terminals	mm	1 x 30 x 10				2 x 40 x5			2 x 60 x 10		
• Box terminals	mm	--				--			--		
Tightening torque											
• Flat terminals	Nm	30 ... 44				50 ... 75			50 ... 75		
• Box terminals	Nm	--				--			--		

[1] Configuring note: Max. permissible operating temperature at connections 110 °C

[2] For switch disconnectors size 3 and 4, phase barriers or contact connection covers (accessories) are required when connecting cable lugs

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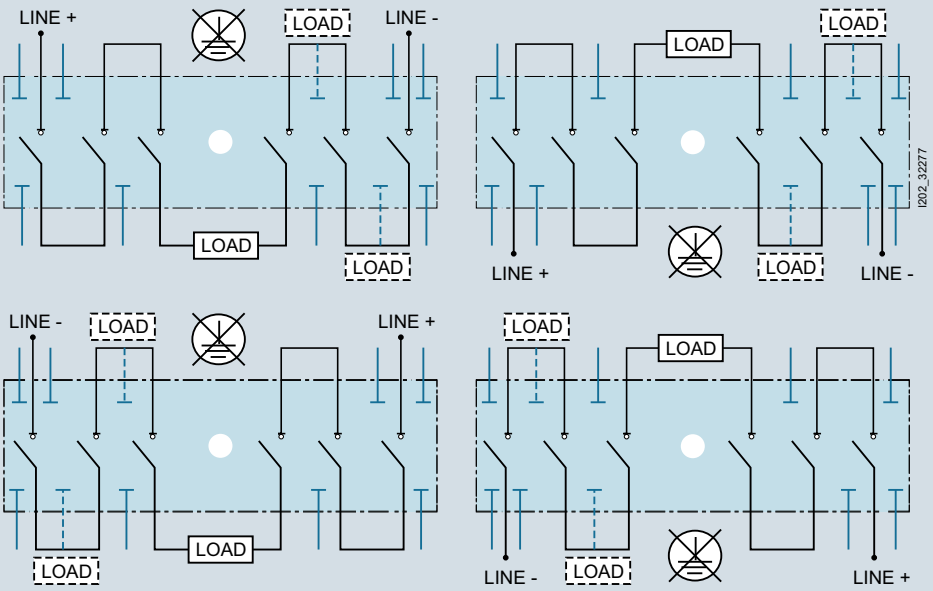
Circuit diagrams

3KD switch disconnectors, 6-pole for DC applications up to 1200 V, all sizes



Typical circuit diagrams for 3KD 6-pole for DC applications up to 1200 V, all sizes in which 3 of the 6 poles in each case are to be connected in series using the connecting bridges, see page 7/66

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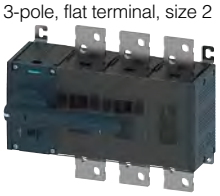
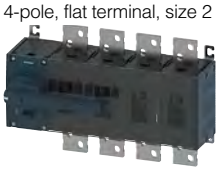
Selection and ordering data

	Rated uninterrupted current I_u	Size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A								kg
Complete assemblies with direct operating mechanism gray, front operating mechanism									
The switch disconnectors are designed for floor mounting; sizes 1 and 2 can optionally be mounted on standard mounting rails									
	3-pole								
3-pole, flat terminal, size 2	**Flat terminals**[1]								
	80	2		3KD2832-0NE10-0		1	1 unit	1CL	1.092
	100			3KD3032-0NE10-0		1	1 unit	1CL	1.088
	125			3KD3232-0NE10-0		1	1 unit	1CL	1.086
	160			3KD3432-0NE10-0		1	1 unit	1CL	1.086
	200			3KD3632-0NE10-0		1	1 unit	1CL	0.088
 3-pole, flat terminal, size 5	200	3		3KD3632-0PE10-0		1	1 unit	1CL	3.000
	250			3KD3832-0PE10-0		1	1 unit	1CL	2.980
	315			3KD4032-0PE10-0		1	1 unit	1CL	3.000
	400			3KD4232-0PE10-0		1	1 unit	1CL	3.000
	500	4		3KD4432-0QE10-0		1	1 unit	1CL	7.520
	630			3KD4632-0QE10-0		1	1 unit	1CL	7.500
	800			3KD4832-0QE10-0		1	1 unit	1CL	7.540
	1000	5		3KD5032-0RE10-0		1	1 unit	1CL	17.440
	1250			3KD5232-0RE10-0		1	1 unit	1CL	17.420
	1600			3KD5432-0RE10-0		1	1 unit	1CL	17.340
3-pole, box terminal, size 2	**Box terminals**								
	16	1		3KD1632-2ME10-0		1	1 unit	1CL	0.831
	32			3KD2232-2ME10-0		1	1 unit	1CL	0.830
	63			3KD2632-2ME10-0		1	1 unit	1CL	0.839
	80	2		3KD2832-2NE10-0		1	1 unit	1CL	1.206
	100			3KD3032-2NE10-0		1	1 unit	1CL	1.205
	125			3KD3232-2NE10-0		1	1 unit	1CL	1.208
	160			3KD3432-2NE10-0		1	1 unit	1CL	1.200
	4-pole								
4-pole, flat terminal, size 2	**Flat terminals**[1]								
	80	2		3KD2842-0NE10-0		1	1 unit	1CL	1.344
	100			3KD3042-0NE10-0		1	1 unit	1CL	1.345
	125			3KD3242-0NE10-0		1	1 unit	1CL	1.346
	160			3KD3442-0NE10-0		1	1 unit	1CL	1.348
	200			3KD3642-0NE10-0		1	1 unit	1CL	1.346
 4-pole, flat terminal, size 5	200	3		3KD3642-0PE10-0		1	1 unit	1CL	3.700
	250			3KD3842-0PE10-0		1	1 unit	1CL	3.700
	315			3KD4042-0PE10-0		1	1 unit	1CL	3.700
	400			3KD4242-0PE10-0		1	1 unit	1CL	3.700
	500	4		3KD4442-0QE10-0		1	1 unit	1CL	9.320
	630			3KD4642-0QE10-0		1	1 unit	1CL	9.200
	800			3KD4842-0QE10-0		1	1 unit	1CL	9.340
	1000	5		3KD5042-0RE10-0		1	1 unit	1CL	21.560
	1250			3KD5242-0RE10-0		1	1 unit	1CL	21.600
	1600			3KD5442-0RE10-0		1	1 unit	1CL	21.580
4-pole, box terminal, size 2	**Box terminals**								
	16	1		3KD1642-2ME10-0		1	1 unit	1CL	1.001
	32			3KD2242-2ME10-0		1	1 unit	1CL	1.005
	63			3KD2642-2ME10-0		1	1 unit	1CL	0.999
	80	2		3KD2842-2NE10-0		1	1 unit	1CL	1.498
	100			3KD3042-2NE10-0		1	1 unit	1CL	1.493
	125			3KD3242-2NE10-0		1	1 unit	1CL	1.494
	160			3KD3442-2NE10-0		1	1 unit	1CL	1.498

[1] Cable connection covers must be provided for switch disconnectors with flat terminals and direct operating mechanisms.

* You can order this quantity or a multiple thereof.

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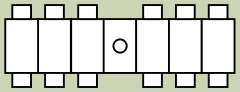
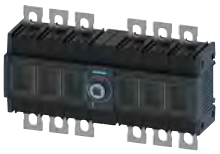
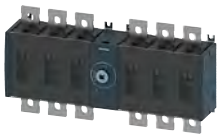
Basic units

Selection and ordering data

	Rated uninterrupted current I_u	Size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A								kg
Basic units without handle, front operating mechanisms NEW									
	The switch disconnectors are designed for floor mounting. Sizes 1 and 2 can optionally also be mounted on standard mounting rails.								
	Up to 1200 V DC								
	Flat terminals								
 3KD2860-0NE20-0	80	2		3KD2860-0NE20-0		1	1 unit	1CL	1.783
	100	2		3KD3060-0NE20-0		1	1 unit	1CL	1.774
	125	2		3KD3260-0NE20-0		1	1 unit	1CL	1.777
	160	2		3KD3460-0NE20-0		1	1 unit	1CL	1.778
3KD3660-0PE20-0	200	3		3KD3660-0PE20-0		1	1 unit	1CL	4.839
	250	3		3KD3860-0PE20-0		1	1 unit	1CL	0.005
	315	3		3KD4060-0PE20-0		1	1 unit	1CL	4.840
	400	3		3KD4260-0PE20-0		1	1 unit	1CL	4.831
 3KD4460-0QE20-0	500	4		3KD4460-0QE20-0		1	1 unit	1CL	12.641
	630	4		3KD4660-0QE20-0		1	1 unit	1CL	1.049
	800	4		3KD4860-0QE20-0		1	1 unit	1CL	0.013
3KD5060-0RE20-0	1000	5		3KD5060-0RE20-0		1	1 unit	1CL	297.000
	1250	5		3KD5260-0RE20-0		1	1 unit	1CL	0.030
	1600	5		3KD5460-0RE20-0		1	1 unit	1CL	0.030
	Box terminals								
3KD1660-2ME20-0	16	1		3KD1660-2ME20-0		1	1 unit	1CL	1.328
	32	1		3KD2260-2ME20-0		1	1 unit	1CL	1.326
	63	1		3KD2660-2ME20-0		1	1 unit	1CL	1.327
3KD2860-2NE20-0	80	2		3KD2860-2NE20-0		1	1 unit	1CL	1.984
	100	2		3KD3060-2NE20-0		1	1 unit	1CL	1.982
	125	2		3KD3260-2NE20-0		1	1 unit	1CL	1.978
	160	2		3KD3460-2NE20-0		1	1 unit	1CL	1.982

* You can order this quantity or a multiple thereof.

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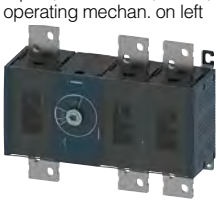
Basic units without handle, front operating mechanisms

The switch disconnectors are designed for floor mounting;
sizes 1 and 2 can optionally be mounted on standard mounting rails

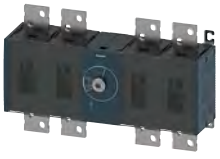
Rated uninterrupted current I_u	Size	DT	Operating mechanism on left: Article No. www.siemens.com/product?Article No.	Price per PU	DT	Operating mechanism in center: Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
A											kg
3-pole											
Flat terminals[1]											
80	2		3KD2830-0NE10-0			3KD2830-0NE20-0		1	1 unit	1CL	1.051
100			3KD3030-0NE10-0			3KD3030-0NE20-0		1	1 unit	1CL	1.049
125			3KD3230-0NE10-0			3KD3230-0NE20-0		1	1 unit	1CL	1.050
160			3KD3430-0NE10-0			3KD3430-0NE20-0		1	1 unit	1CL	1.049
200			3KD3630-0NE10-0			3KD3630-0NE20-0		1	1 unit	1CL	1.052
200	3		3KD3630-0PE10-0			3KD3630-0PE20-0		1	1 unit	1CL	2.750
250			3KD3830-0PE10-0			3KD3830-0PE20-0		1	1 unit	1CL	2.891
315			3KD4030-0PE10-0			3KD4030-0PE20-0		1	1 unit	1CL	2.894
400			3KD4230-0PE10-0			3KD4230-0PE20-0		1	1 unit	1CL	2.894
500	4		3KD4430-0QE10-0			3KD4430-0QE20-0		1	1 unit	1CL	7.360
630			3KD4630-0QE10-0			3KD4630-0QE20-0		1	1 unit	1CL	7.422
800			3KD4830-0QE10-0			3KD4830-0QE20-0		1	1 unit	1CL	7.440
1000	5		3KD5030-0RE10-0			3KD5030-0RE20-0		1	1 unit	1CL	17.120
1250			3KD5230-0RE10-0			3KD5230-0RE20-0		1	1 unit	1CL	17.160
1600			3KD5430-0RE10-0			3KD5430-0RE20-0		1	1 unit	1CL	17.080
Box terminals											
16	1		3KD1630-2ME10-0			3KD1630-2ME20-0		1	1 unit	1CL	0.783
32			3KD2230-2ME10-0			3KD2230-2ME20-0		1	1 unit	1CL	0.782
63			3KD2630-2ME10-0			3KD2630-2ME20-0		1	1 unit	1CL	0.778
80	2		3KD2830-2NE10-0			3KD2830-2NE20-0		1	1 unit	1CL	1.145
100			3KD3030-2NE10-0			3KD3030-2NE20-0		1	1 unit	1CL	1.143
125			3KD3230-2NE10-0			3KD3230-2NE20-0		1	1 unit	1CL	1.143
160			3KD3430-2NE10-0			3KD3430-2NE20-0		1	1 unit	1CL	1.128
4-pole											
Flat terminals[1]											
80	2		3KD2840-0NE10-0			3KD2840-0NE20-0		1	1 unit	1CL	1.312
100			3KD3040-0NE10-0			3KD3040-0NE20-0		1	1 unit	1CL	1.311
125			3KD3240-0NE10-0			3KD3240-0NE20-0		1	1 unit	1CL	1.315
160			3KD3440-0NE10-0			3KD3440-0NE20-0		1	1 unit	1CL	1.313
200			3KD3640-0NE10-0			3KD3640-0NE20-0		1	1 unit	1CL	1.314
200	3		3KD3640-0PE10-0			3KD3640-0PE20-0		1	1 unit	1CL	3.550
250			3KD3840-0PE10-0			3KD3840-0PE20-0		1	1 unit	1CL	3.540
315			3KD4040-0PE10-0			3KD4040-0PE20-0		1	1 unit	1CL	3.540
400			3KD4240-0PE10-0			3KD4240-0PE20-0		1	1 unit	1CL	3.548
500	4		3KD4440-0QE10-0			3KD4440-0QE20-0		1	1 unit	1CL	9.162
630			3KD4640-0QE10-0			3KD4640-0QE20-0		1	1 unit	1CL	9.220
800			3KD4840-0QE10-0			3KD4840-0QE20-0		1	1 unit	1CL	9.201
1000	5		3KD5040-0RE10-0			3KD5040-0RE20-0		1	1 unit	1CL	21.300
1250			3KD5240-0RE10-0			3KD5240-0RE20-0		1	1 unit	1CL	21.400
1600			3KD5440-0RE10-0			3KD5440-0RE20-0		1	1 unit	1CL	21.340
Box terminals											
16	1		3KD1640-2ME10-0			3KD1640-2ME20-0		1	1 unit	1CL	0.954
32			3KD2240-2ME10-0			3KD2240-2ME20-0		1	1 unit	1CL	0.954
63			3KD2640-2ME10-0			3KD2640-2ME20-0		1	1 unit	1CL	0.954
80	2		3KD2840-2NE10-0			3KD2840-2NE20-0		1	1 unit	1CL	1.430
100			3KD3040-2NE10-0			3KD3040-2NE20-0		1	1 unit	1CL	1.434
125			3KD3240-2NE10-0			3KD3240-2NE20-0		1	1 unit	1CL	1.434
160			3KD3440-2NE10-0			3KD3440-2NE20-0		1	1 unit	1CL	1.431

3-pole, flat terminal, size 2, operating mechan. on left


3-pole, flat terminal, size 5, operat. mechan. in center

3-pole, box terminal, size 2, operating mechan. on left

4-pole, flat terminal, size 2, operating mechan. on left


4-pole, flat terminal, size 5, operat. mechan. in center

4-pole, box terminal, size 2, operating mechan. on left

1) Phase barriers for size 2 included in scope of supply

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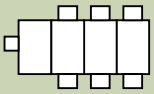
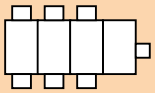
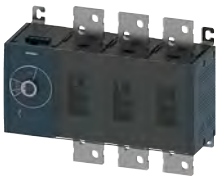
Basic units

Rated uninterrupted current I_u	Size	DT	Operating mechanism on left NEW: Article No. www.siemens.com/product?Article No.	Price per PU	DT	Operating mechanism on right: Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
A											kg
Basic units without handle, side operating mechanisms											
The switch disconnectors with side operating mechanism are suitable for door-coupling rotary operating mechanisms.											
3-pole											
Flat terminals											
80	2		3KD2834-0NE10-0			3KD2834-0NE40-0		1	1 unit	1CL	1.139
100	2		3KD3034-0NE10-0			3KD3034-0NE40-0		1	1 unit	1CL	0.001
125	2		3KD3234-0NE10-0			3KD3234-0NE40-0		1	1 unit	1CL	1.138
160	2		3KD3434-0NE10-0			3KD3434-0NE40-0		1	1 unit	1CL	0.001
200	2		3KD3634-0NE10-0			3KD3634-0NE40-0		1	1 unit	1CL	1.135
200	3		3KD3634-0PE10-0			3KD3634-0PE40-0		1	1 unit	1CL	2.964
250	3		3KD3834-0PE10-0			3KD3834-0PE40-0		1	1 unit	1CL	2.968
315	3		3KD4034-0PE10-0			3KD4034-0PE40-0		1	1 unit	1CL	2.977
400	3		3KD4234-0PE10-0			3KD4234-0PE40-0		1	1 unit	1CL	2.958
500	4		3KD4434-0QE10-0			3KD4434-0QE40-0		1	1 unit	1CL	7.516
630	4		3KD4634-0QE10-0			3KD4634-0QE40-0		1	1 unit	1CL	7.620
800	4		3KD4834-0QE10-0			3KD4834-0QE40-0		1	1 unit	1CL	6.500
1000	5		3KD5034-0RE10-0			3KD5034-0RE40-0		1	1 unit	1CL	17.240
1250	5		3KD5234-0RE10-0			3KD5234-0RE40-0		1	1 unit	1CL	17.500
1600	5		3KD5434-0RE10-0			3KD5434-0RE40-0		1	1 unit	1CL	17.300
Box terminals											
16	1		3KD1634-2ME10-0			3KD1634-2ME40-0		1	1 unit	1CL	0.897
32	1		3KD2234-2ME10-0			3KD2234-2ME40-0		1	1 unit	1CL	0.897
63	1		3KD2634-2ME10-0			3KD2634-2ME40-0		1	1 unit	1CL	0.897
80	2		3KD2834-2NE10-0			3KD2834-2NE40-0		1	1 unit	1CL	1.242
100	2		3KD3034-2NE10-0			3KD3034-2NE40-0		1	1 unit	1CL	1.243
125	2		3KD3234-2NE10-0			3KD3234-2NE40-0		1	1 unit	1CL	1.243
160	2		3KD3434-2NE10-0			3KD3434-2NE40-0		1	1 unit	1CL	1.238

3-pole, flat terminal, size 2, operating mechan. on right

3-pole, flat terminal, size 3, operating mechanism on left

3-pole, flat terminal, size 4, operating mechan. on right


3-pole, flat terminal, size 5, operating mechanism on left

3-pole, box terminal, size 1, operating mechan. on right

3-pole, box terminal, size 2, operating mechanism on left

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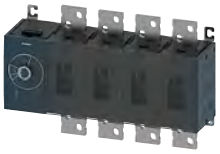
Basic units without handle, side operating mechanism (continued)

The switch disconnectors with side operating mechanism are suitable for door-coupling rotary operating mechanisms.

	Rated uninterrupted current I_u	Size	DT	Operating mechanism on left NEW Article No. www.siemens.com/product?Article No.	Price per PU	DT	Operating mechanism on right Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A											kg
4-pole												
Flat terminals												
4-pole, flat terminal, size 2, operating mechan. on right	80	2		3KD2844-0NE10-0			3KD2844-0NE40-0		1	1 unit	1CL	1.349
	100	2		3KD3044-0NE10-0			3KD3044-0NE40-0		1	1 unit	1CL	1.354
	125	2		3KD3244-0NE10-0			3KD3244-0NE40-0		1	1 unit	1CL	1.350
	160	2		3KD3444-0NE10-0			3KD3444-0NE40-0		1	1 unit	1CL	1.353
	200	2		3KD3644-0NE10-0			3KD3644-0NE40-0		1	1 unit	1CL	1.353
4-pole, flat terminal, size 3, operating mechanism on left	200	3		3KD3644-0PE10-0			3KD3644-0PE40-0		1	1 unit	1CL	3.616
	250	3		3KD3844-0PE10-0			3KD3844-0PE40-0		1	1 unit	1CL	3.623
	315	3		3KD4044-0PE10-0			3KD4044-0PE40-0		1	1 unit	1CL	3.639
	400	3		3KD4244-0PE10-0			3KD4244-0PE40-0		1	1 unit	1CL	3.602
4-pole, flat terminal, size 4, operating mechan. on right	500	4		3KD4444-0QE10-0			3KD4444-0QE40-0		1	1 unit	1CL	9.283
	630	4		3KD4644-0QE10-0			3KD4644-0QE40-0		1	1 unit	1CL	9.260
	800	4		3KD4844-0QE10-0			3KD4844-0QE40-0		1	1 unit	1CL	7.240
 4-pole, flat terminal, size 5, operating mechanism on left	1000	5		3KD5044-0RE10-0			3KD5044-0RE40-0		1	1 unit	1CL	21.560
	1250	5		3KD5244-0RE10-0			3KD5244-0RE40-0		1	1 unit	1CL	21.500
	1600	5		3KD5444-0RE10-0			3KD5444-0RE40-0		1	1 unit	1CL	21.320
Box terminals												
4-pole, box terminal, size 1, operating mechan. on right	16	1		3KD1644-2ME10-0			3KD1644-2ME40-0		1	1 unit	1CL	0.105
	32	1		3KD2244-2ME10-0			3KD2244-2ME40-0		1	1 unit	1CL	0.105
	63	1		3KD2644-2ME10-0			3KD2644-2ME40-0		1	1 unit	1CL	0.105
4-pole, box terminal, size 2, operating mechanism on left	80	2		3KD2844-2NE10-0			3KD2844-2NE40-0		1	1 unit	1CL	1.503
	100	2		3KD3044-2NE10-0			3KD3044-2NE40-0		1	1 unit	1CL	1.504
	125	2		3KD3244-2NE10-0			3KD3244-2NE40-0		1	1 unit	1CL	1.501
	160	2		3KD3444-2NE10-0			3KD3444-2NE40-0		1	1 unit	1CL	1.501

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Selection and ordering data

Additional poles

Version	Circuit symbol	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm							kg
4th contact element (switching pole)	N — N							
Flat terminals								
For size 2; 3KD....-.N	--		**3KD9205-0**		1	1 unit	1CL	0.338
For size 3; 3KD....-.P			**3KD9305-0**		1	1 unit	1CL	0.914
For size 4; 3KD....-.Q			**3KD9405-0**		1	1 unit	1CL	1.949
For size 5; 3KD....-.R			**3KD9505-0**		1	1 unit	1CL	5.130

4th contact element, flat terminal, for size 2

Box terminals								
For size 1; 3KD....-.M			**3KD9105-2**		1	1 unit	1CL	0.269
For size 2; 3KD....-.N			**3KD9205-2**		1	1 unit	1CL	0.380

4th contact element, box terminal, for size 2

Neutral conductor terminals with removable jumper								
Flat terminals								
For size 2; 3KD....-.N			**3KD9206-0**		1	1 unit	1CL	0.318
For size 3; 3KD....-.P			**3KD9306-0**		1	1 unit	1CL	0.800
For size 4; 3KD....-.Q			**3KD9406-0**		1	1 unit	1CL	1.564
For size 5; 3KD....-.R			**3KD9506-0**		1	1 unit	1CL	4.526

Neutral conductor terminal, flat terminal, for size 2

Box terminals								
For size 1; 3KD....-.M			**3KD9106-2**		1	1 unit	1CL	0.255
For size 2; 3KD....-.N			**3KD9206-2**		1	1 unit	1CL	0.348

Neutral conductor terminal, box terminal, for size 2

N/PE terminals with permanent jumper								
Flat terminals								
For size 2; 3KD....-.N			**3KD9206-7**		1	1 unit	1CL	0.299
For size 3; 3KD....-.P			**3KD9306-7**		1	1 unit	1CL	0.731
For size 4; 3KD....-.Q			**3KD9406-7**		1	1 unit	1CL	1.456
For size 5; 3KD....-.R			**3KD9506-7**		1	1 unit	1CL	4.143

N/PE terminal, flat terminal, for size 2

Box terminals								
For size 1; 3KD....-.M			**3KD9106-8**		1	1 unit	1CL	0.249
For size 2; 3KD....-.N			**3KD9206-8**		1	1 unit	1CL	0.330

N/PE terminal, box terminal, for size 2

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Direct operating mechanisms

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Direct operating mechanisms in standard version and flat version								
	Standard version							
	Can be locked with up to max. 3 padlocks, requires additional mounting depth in locked state							
Direct operating mechanism, gray, for size 2	**Gray**							
	For size 1; 3KD....-.M		3KD9101-1		1	1 unit	1CL	0.129
	For size 2; 3KD....-.N		3KD9201-1		1	1 unit	1CL	0.141
	For size 3; 3KD....-.P		3KD9301-1		1	1 unit	1CL	0.220
	For size 4; 3KD....-.Q		3KD9401-1		1	1 unit	1CL	0.565
	For size 5; 3KD....-.R		3KD9501-1		1	1 unit	1CL	0.842
Direct operating mechanism, red/yellow, for size 2	**Red/Yellow**							
	For size 1; 3KD....-.M		3KD9101-2		1	1 unit	1CL	0.149
	For size 2; 3KD....-.N		3KD9201-2		1	1 unit	1CL	0.155
	For size 3; 3KD....-.P		3KD9301-2		1	1 unit	1CL	0.230
	For size 4; 3KD....-.Q		3KD9401-2		1	1 unit	1CL	0.574
	For size 5; 3KD....-.R		3KD9501-2		1	1 unit	1CL	0.820
	Flat version (suitable for distribution boards)							
	Can be locked with one padlock, requires no additional mounting depth in locked state							
Direct operating mechanism, flat version, gray, for size 2	**Gray**							
	For size 1; 3KD....-.M		3KD9101-0		1	1 unit	1CL	0.129
	For size 2; 3KD....-.N		3KD9201-0		1	1 unit	1CL	0.140
Direct operating mechanism, flat version, red/yellow, for size 2	**Red/Yellow**							
	For size 1; 3KD....-.M		3KD9101-8		1	1 unit	1CL	0.130
	For size 2; 3KD....-.N		3KD9201-8		1	1 unit	1CL	0.154

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Accessories and spare parts

Door-coupling rotary operating mechanisms

Note

For 3KD switch disconnectors with side operating mechanism (left or right), only door-coupling rotary operating mechanisms without "Test" can be used.

If door-coupling rotary operating mechanisms without "Test" are used on 3KD, the test function must be mechanically blocked on the switch. The blocking pin required for this is included in the scope of supply of the 3KD.

	Version	Handle length	Shaft size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	mm x mm							kg
Door-coupling rotary operating mechanisms, complete, 8UD1 series NEW										
	Door-coupling rotary operating mechanism, complete, labeling 0 - I • Handle with masking plate • Coupling driver without tolerance compensation • Shaft 300 mm • Labeling 0 - I									
	Gray									
	For size 1/2; 3KD....-.M/N	45	8 x 8		8UD1171-2AD11		1	1 unit	1CL	0.526
	Red/Yellow									
	For size 1/2; 3KD....-.M/N	45	8 x 8		8UD1171-2AD15		1	1 unit	1CL	0.525
	Door-coupling rotary operating mechanism, complete, labeling Test - 0 - I • Handle with masking plate • Mounting tolerance compensation • Shaft 300 mm • Labeling Test - 0 - I									
	Gray									
	For size 1/2; 3KD....-.M/N	45	8 x 8		8UD1171-2AF21		1	1 unit	1CL	0.571
	For size 3; 3KD....-.P	100	8 x 8		8UD1141-2AF21		1	1 unit	1CL	0.848
	For size 4; 3KD....-.Q	140	10 x 10		8UD1151-3AF21		1	1 unit	1CL	0.651
	For size 5; 3KD....-.R	200	12 x 12		8UD1161-4AF21		1	1 unit	1CL	0.793
	Red/Yellow									
	For size 1/2; 3KD....-.M/N	45	8 x 8		8UD1171-2AF25		1	1 unit	1CL	0.571
	For size 3; 3KD....-.P	100	8 x 8		8UD1141-2AF25		1	1 unit	1CL	0.848
	For size 4; 3KD....-.Q	140	10 x 10		8UD1151-3AF25		1	1 unit	1CL	0.651
	For size 5; 3KD....-.R	200	12 x 12		8UD1161-4AF25		1	1 unit	1CL	0.793

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	Version	Handle length	Shaft size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	mm x mm							kg
Handles for door-coupling rotary operating mechanisms, 8UD1 series NEW										
	Handles without extension shaft and coupling driver, labeling 0 - I									
	• With masking plate									
	• Labeling 0 - I									
Handle without extension shaft, gray, for sizes 1/2	**Gray**									
	For size 1/2; 3KD....-.M/N	45	8 x 8		8UD1771-2AD01		1	1 unit	1CL	0.164
	For size 3; 3KD....-.P	100	8 x 8		8UD1841-2AD01		1	1 unit	1CL	0.236
	For size 4; 3KD....-.Q	140	10 x 10		8UD1851-3AD01		1	1 unit	1CL	On request
	For size 5; 3KD....-.R	200	12 x 12		8UD1861-4AD01		1	1 unit	1CL	On request
Handle without extension shaft, red/yellow, for sizes 1/2	**Red/Yellow**									
	For size 1/2; 3KD....-.M/N	45	8 x 8		8UD1771-2AD05		1	1 unit	1CL	0.164
	For size 3; 3KD....-.P	100	8 x 8		8UD1841-2AD05		1	1 unit	1CL	0.236
	For size 4; 3KD....-.Q	140	10 x 10		8UD1851-3AD05		1	1 unit	1CL	On request
	For size 5; 3KD....-.R	200	12 x 12		8UD1861-4AD05		1	1 unit	1CL	On request
	Handles without extension shaft and coupling driver, labeling Test - 0 - I									
	• With masking plate									
	• Labeling Test - 0 - I									
Handle without extension shaft, gray, for sizes 1/2	**Gray**									
	For size 1/2; 3KD....-.M/N	45	8 x 8		8UD1771-2AF01		1	1 unit	1CL	0.164
	For size 3; 3KD....-.P	100	8 x 8		8UD1841-2AF01		1	1 unit	1CL	0.236
	For size 4; 3KD....-.Q	140	10 x 10		8UD1851-3AF01		1	1 unit	1CL	On request
	For size 5; 3KD....-.R	200	12 x 12		8UD1861-4AF01		1	1 unit	1CL	On request
Handle without extension shaft, red/yellow, for sizes 1/2	**Red/Yellow**									
	For size 1/2; 3KD....-.M/N	45	8 x 8		8UD1771-2AF05		1	1 unit	1CL	0.164
	For size 3; 3KD....-.P	100	8 x 8		8UD1841-2AF05		1	1 unit	1CL	0.236
	For size 4; 3KD....-.Q	140	10 x 10		8UD1851-3AF05		1	1 unit	1CL	On request
	For size 5; 3KD....-.R	200	12 x 12		8UD1861-4AF05		1	1 unit	1CL	On request

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Accessories and spare parts

Version	Handle length	Shaft size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm x mm							kg
Handles, illuminated, without extension shaft and coupling driver, labeling 0 - I									
• With masking plate									
• Illuminated									
• Labeling 0 - I									
Gray									
For size 1/2; 3KD....-.M/N	45	8 x 8		8UD1771-2CD01		1	1 unit	1CL	On request
For size 3; 3KD....-.P	100	8 x 8		8UD1841-2CD01		1	1 unit	1CL	On request
For size 4; 3KD....-.Q	140	10 x 10		8UD1851-3CD01		1	1 unit	1CL	On request
For size 5; 3KD....-.R	200	12 x 12		8UD1861-4CD01		1	1 unit	1CL	On request

Handle without extension shaft, gray, for sizes 1/2

Red/Yellow									
For size 1/2; 3KD....-.M/N	45	8 x 8		8UD1771-2CD05		1	1 unit	1CL	On request
For size 3; 3KD....-.P	100	8 x 8		8UD1841-2CD05		1	1 unit	1CL	On request
For size 4; 3KD....-.Q	140	10 x 10		8UD1851-3CD05		1	1 unit	1CL	On request
For size 5; 3KD....-.R	200	12 x 12		8UD1861-4CD05		1	1 unit	1CL	On request

Handle without extension shaft, red/yellow, for sizes 1/2

Handles, illuminated, without extension shaft and coupling driver, labeling Test - 0 - I									
• With masking plate									
• Illuminated									
• Labeling Test - 0 - I									
Gray									
For size 1/2; 3KD....-.M/N	45	8 x 8		8UD1771-2CF01		1	1 unit	1CL	On request
For size 3; 3KD....-.P	100	8 x 8		8UD1841-2CF01		1	1 unit	1CL	On request
For size 4; 3KD....-.Q	140	10 x 10		8UD1851-3CF01		1	1 unit	1CL	On request
For size 5; 3KD....-.R	200	12 x 12		8UD1861-4CF01		1	1 unit	1CL	On request

Handle without extension shaft, gray, for sizes 1/2

Red/Yellow									
For size 1/2; 3KD....-.M/N	45	8 x 8		8UD1771-2CF05		1	1 unit	1CL	On request
For size 3; 3KD....-.P	100	8 x 8		8UD1841-2CF05		1	1 unit	1CL	On request
For size 4; 3KD....-.Q	140	10 x 10		8UD1851-3CF05		1	1 unit	1CL	On request
For size 5; 3KD....-.R	200	12 x 12		8UD1861-4CF05		1	1 unit	1CL	On request

Handle without extension shaft, red/yellow, for sizes 1/2

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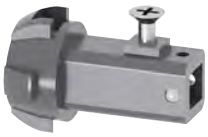
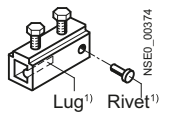
	Version	Handle length	Shaft size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	mm x mm							kg
Other accessories for door-coupling rotary operating mechanisms, 8UD1 series										
	Extension shafts									
8UC6032	**300 mm long**									
	For size 1/2/3, 3KD....-.M/N/P	--	8 x 8		**8UC6032**		1	1 unit	1CL	0.135
	For size 4; 3KD....-.Q	--	10 × 10		**8UC6033**		1	1 unit	1CL	0.215
	For size 5; 3KD....-.R	--	12 × 12		**8UC6034**		1	1 unit	1CL	0.316
8UC6082	**600 mm long**									
	For size 1/2/3, 3KD....-.M/N/P	--	8 x 8		**8UC6082**		1	1 unit	1CL	0.265
	For size 4; 3KD....-.Q	--	10 × 10		**8UC6083**		1	1 unit	1CL	0.424
	For size 5; 3KD....-.R	--	12 × 12		**8UC6084**		1	1 unit	1CL	0.628
	Coupling drivers with tolerance compensation NEW									
8UD1900-2GA00	For size 1/2, 3KD....-.M/N	--	8 x 8		**8UD1900-2GA00**		1	1 unit	1CB	0.061
	For size 3; 3KD....-.P		8 x 8		**8UD1900-6GA00**		1	1 unit	1CB	On request
	For size 4; 3KD....-.Q		10 x 10		**8UD1900-3GA00**		1	1 unit	1CL	On request
	For size 5; 3KD....-.R		12 x 12		**8UD1900-4GA00**		1	1 unit	1CL	On request
	Coupling drivers without tolerance compensation NEW									
 8UD1900-2HA00	For size 1/2, 3KD....-.M/N	--	8 x 8		**8UD1900-2HA00**		1	1 unit	1CB	0.015
	For size 3; 3KD....-.P		8 x 8		**8UD1900-6HA00**		1	1 unit	1CB	On request
	For size 4; 3KD....-.Q		10 x 10		**8UD1900-3HA00**		1	1 unit	1CL	On request
	For size 5; 3KD....-.R		12 x 12		**8UD1900-4HA00**		1	1 unit	1CL	On request
	Shaft couplings									
 8UC6021 to 8UC6024	For size 1/2/3, 3KD....-.M/N/P	--	8 x 8		**8UC6022**		1	1 unit	1CL	0.022
	For size 4; 3KD....-.Q	--	10 × 10		**8UC6023**		1	1 unit	1CL	0.084
	For size 5; 3KD....-.R	--	12 × 12		**8UC6024**		1	1 unit	1CL	0.078

[1] Non-interchangeability features

7

* You can order this quantity or a multiple thereof.

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Accessories and spare parts

	Version	Shaft size handle end[1]	Shaft size switch end[1]	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm x mm	mm x mm							kg
Door-coupling rotary operating mechanisms, 8UC/3KD9 series										
	Door-coupling rotary operating mechanisms including 300 mm extension shaft and coupling driver									
	Lockable with up to 5 padlocks. Degree of protection when installed is IP65.									
	Gray									
	For size 1; 3KD....-.M	8 x 8	8 x 8		3KD9115-1		1	1 unit	1CL	0.436
	For size 2; 3KD....-.N	8 x 8	8 x 8		3KD9215-1		1	1 unit	1CL	0.442
	For size 3; 3KD....-.P	10 x 10	8 x 8		3KD9315-1		1	1 unit	1CL	1.008
	For size 4; 3KD....-.Q	10 x 10	10 x 10		3KD9415-1		1	1 unit	1CL	1.021
	For size 5; 3KD....-.R	12 x 12	12 x 12		3KD9515-1		1	1 unit	1CL	1.138
Door-coupling rotary operating mechanism, gray, for sizes 1/2										
	Red/Yellow									
	For size 1; 3KD....-.M	8 x 8	8 x 8		3KD9115-2		1	1 unit	1CL	0.372
	For size 2; 3KD....-.N	8 x 8	8 x 8		3KD9215-2		1	1 unit	1CL	0.378
	For size 3; 3KD....-.P	10 x 10	8 x 8		3KD9315-2		1	1 unit	1CL	0.937
	For size 4; 3KD....-.Q	10 x 10	10 x 10		3KD9415-2		1	1 unit	1CL	0.999
	For size 5; 3KD....-.R	12 x 12	12 x 12		3KD9515-2		1	1 unit	1CL	1.138
Door-coupling rotary operating mechanism, red/yellow, for sizes 1/2										
Handles for door-coupling rotary operating mechanisms, 8UC/3KD9 series										
	Handles without extension shaft and coupling driver									
	Gray									
	For size 1; 3KD....-.M	8 x 8	--		3KD9115-3		1	1 unit	1CL	0.183
	For size 2; 3KD....-.N	8 x 8	--		3KD9215-3		1	1 unit	1CL	0.191
	For size 3; 3KD....-.P	10 x 10	--		3KD9315-3		1	1 unit	1CL	0.502
	For size 4; 3KD....-.Q	10 x 10	--		3KD9415-3		1	1 unit	1CL	0.487
	For size 5; 3KD....-.R	12 x 12	--		3KD9515-3		1	1 unit	1CL	0.529
Handle without extension shaft, gray, for sizes 1/2										
	Red/Yellow									
	For size 1; 3KD....-.M	8 x 8	--		3KD9115-4		1	1 unit	1CL	0.182
	For size 2; 3KD....-.N	8 x 8	--		3KD9215-4		1	1 unit	1CL	0.191
	For size 3; 3KD....-.P	10 x 10	--		3KD9315-4		1	1 unit	1CL	0.495
	For size 4; 3KD....-.Q	10 x 10	--		3KD9415-4		1	1 unit	1CL	0.485
	For size 5; 3KD....-.R	12 x 12	--		3KD9515-4		1	1 unit	1CL	0.522
Handle without extension shaft, red/yellow, for sizes 1/2										

[1] With different shaft sizes – at the handle/at the switch – the shaft cross-section changes over the length of the shaft (does not apply to sizes 1 and 2)

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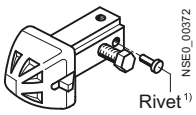
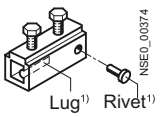
	Version	Shaft size handle end[2]	Shaft size switch end[2]	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm x mm	mm x mm							kg
Other accessories for door-coupling rotary operating mechanisms, 8UC/3KD9 series										
	Extension shafts									
	300 mm long									
3KD9302-0, extension shaft, 300 mm long, for size 3	For sizes 1/2	8 x 8	8 x 8		8UC6032		1	1 unit	1CL	0.135
	For size 3; 3KD....-.P	10 x 10	8 x 8		3KD9302-0		1	1 unit	1CL	0.202
	For size 4; 3KD....-.Q	10 x 10	10 x 10		8UC6033		1	1 unit	1CL	0.215
	For size 5; 3KD....-.R	12 x 12	12 x 12		8UC6034		1	1 unit	1CL	0.316
	600 mm long									
3KD9302-1, extension shaft, 600 mm long, for size 3	For sizes 1/2	8 x 8	8 x 8		8UC6082		1	1 unit	1CL	0.265
	For size 3; 3KD....-.P	10 x 10	8 x 8		3KD9302-1		1	1 unit	1CL	0.420
	For size 4; 3KD....-.Q	10 x 10	10 x 10		8UC6083		1	1 unit	1CL	0.424
	For size 5; 3KD....-.R	12 x 12	12 x 12		8UC6084		1	1 unit	1CL	0.628
	Coupling drivers									
	For 8 x 8 mm shafts				8UC6017-2AA		1	1 unit	1CL	0.047
8UC6013 coupling driver	For 10 x 10 mm shafts				8UC6013		1	1 unit	1CL	0.236
	For 12 x 12 mm shafts				8UC6014		1	1 unit	1CL	0.234
	Shaft couplings									
	For 8 x 8 mm shafts				8UC6022		1	1 unit	1CL	0.022
Adapter	For 10 x 10 mm shafts				8UC6023		1	1 unit	1CL	0.084
	For 12 x 12 mm shafts				8UC6024		1	1 unit	1CL	0.078

1) Non-interchangeability features

2) With different shaft sizes – at the handle/at the switch – the shaft cross-section changes over the length of the shaft (does not apply to sizes 1 and 2)

Auxiliary switches

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
								kg
	Auxiliary switch modules for sizes 1 and 2							
	Unit is supplied without auxiliary switches, a maximum of 2 auxiliary switches can be installed.							
	• Standard version		3KD9103-5		1	1 unit	1CL	0.154
	• Version with test function		3KD9103-6		1	1 unit	1CL	0.158
Auxiliary switch module, standard version	• Version with leading NO contact + test function		3KD9103-7		1	1 unit	1CL	0.160
	Auxiliary switches for sizes 1 and 2							
	With soldered-on 50 cm connecting cables							
	• 1 CO contact		3KD9103-1		1	1 unit	1CL	0.112
3KD9103-3	• 1 CO, solid-state compatible		3KD9103-3		1	1 unit	1CL	0.110

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Accessories and spare parts

3SB3400-0B auxiliary switch

3SB3400-0A auxiliary switch

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Auxiliary switches for sizes 3 to 5							
	Auxiliary switches with screw terminal for installation on operating mechanism module. Auxiliary switches with spring-type terminal 3SB3403-.. from the 3SB3 program can also be used							
	• 1 NO	►	**3SB3400-0B**		1	1 unit	41J	0.010
	• 1 NO with gold-plated contacts		**3SB3400-0BA**		1	1 unit	41J	0.011
	• 1 NC	►	**3SB3400-0C**		1	1 unit	41J	0.010
	• 1 NC with gold-plated contacts		**3SB3400-0CA**		1	1 unit	41J	0.010
	• 1 NO + 1 NC	►	**3SB3400-0A**		1	1 unit	41J	0.016
	• 1 NO + 1 NC with gold-plated contacts		**3SB3400-0AA**		1	1 unit	41J	0.016
	• 2 NO		**3SB3400-0D**		1	1 unit	41J	0.017
	• 2 NO with gold-plated contacts		**3SB3400-0DA**		1	1 unit	41J	0.017
	• 2 NC		**3SB3400-0E**		1	1 unit	41J	0.017
	• 2 NC with gold-plated contacts		**3SB3400-0EA**		1	1 unit	41J	0.017

Accessories for DC applications NEW

	Version	For size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Connecting bridges								
Flat terminals	For connecting two poles								
	Flat terminals								
		2; 3KD....-.N		**3KD9218-0**		1	1 unit	1CL	0.022
	For 400 A two units are required	3; 3KD....-.P		**3KD9318-0**		1	1 unit	1CL	0.072
	For 800 A two units are required	4; 3KD....-.Q		**3KD9418-0**		1	1 unit	1CL	0.494
	For 1250 A and 1600 A two units are required	5; 3KD....-.R		**3KD9518-0**		1	1 unit	1CL	1.640
Box terminals	***Box terminals***								
		1; 3KD....-.M		**3KD9118-1**		1	1 unit	1CL	0.013
		2; 3KD....-.N		**3KD9218-1**		1	1 unit	1CL	0.041
	Cable connection covers for connecting bridges								
	As touch protection for flat terminals								
		2; 3KD....-.N		**3KD9204-0**		1	1 unit	1CL	0.023
		3; 3KD....-.P		**3KD9304-0**		1	1 unit	1CL	0.039
		4; 3KD....-.Q		**3KD9404-0**		1	1 unit	1CL	0.100
		5; 3KD....-.R		**3KD9504-0**		1	1 unit	1CL	0.207

Other accessories

	Version	For size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Phase barriers								
Phase barrier for size 2 devices with 3 or 4 poles	For 3KD with flat terminals								
	For 3-pole devices (6 units)								
		2; 3KD....-.N		**3KD9108-6**		1	1 unit	1CL	0.140
		3; 3KD....-.P		**3KD9308-6**		1	1 unit	1CL	0.169
		4; 3KD....-.Q		**3KD9408-6**		1	1 unit	1CL	0.203
		5; 3KD....-.R		**3KD9508-6**		1	1 unit	1CL	0.480
	For 4-pole devices (8 units)								
		2; 3KD....-.N		**3KD9108-8**		1	1 unit	1CL	0.151
		3; 3KD....-.P		**3KD9308-8**		1	1 unit	1CL	0.194
		4; 3KD....-.Q		**3KD9408-8**		1	1 unit	1CL	0.244
		5; 3KD....-.R		**3KD9508-8**		1	1 unit	1CL	0.540

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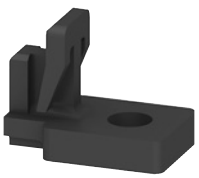
	Version	For size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Cable connection covers									
	For 3KD with flat terminals								
	For 3-pole devices (6 units)								
	Standard length								
Cable connection cover, standard length, for size 2 devices with 3 poles		2; 3KD....-.N		3KD9204-6		1	1 unit	1CL	0.375
		3; 3KD....-.P		3KD9304-6		1	1 unit	1CL	0.560
		4; 3KD....-.Q		3KD9404-6		1	1 unit	1CL	0.090
		5; 3KD....-.R		3KD9504-6		1	1 unit	1CL	1.746
	Short version								
Cable connection cover, short version, for size 2 devices with 3 poles		2; 3KD....-.N		3KD9204-7		1	1 unit	1CL	0.347
		3; 3KD....-.P		3KD9304-7		1	1 unit	1CL	0.404
		4; 3KD....-.Q		3KD9404-7		1	1 unit	1CL	0.600
	For 4-pole devices (8 units)								
	Standard length								
Cable connection cover, standard length, for size 2 devices with 4 poles		2; 3KD....-.N		3KD9204-8		1	1 unit	1CL	0.473
		3; 3KD....-.P		3KD9304-8		1	1 unit	1CL	0.616
		4; 3KD....-.Q		3KD9404-8		1	1 unit	1CL	1.664
		5; 3KD....-.R		3KD9504-8		1	1 unit	1CL	2.088
	Short version								
Cable connection cover, short version, for size 2 devices with 4 poles		2; 3KD....-.N		3KD9204-5		1	1 unit	1CL	0.378
		3; 3KD....-.P		3KD9304-5		1	1 unit	1CL	0.502
		4; 3KD....-.Q		3KD9404-5		1	1 unit	1CL	0.846
	Spare cable connection cover (1 unit)								
	Standard length								
		5; 3KD....-.R		3KD9504-1		1	1 unit	1CL	0.434
	Short version								
		2; 3KD....-.N		3KD9204-1		1	1 unit	1CL	0.105
		3; 3KD....-.P		3KD9304-1		1	1 unit	1CL	0.110
		4; 3KD....-.Q		3KD9404-1		1	1 unit	1CL	0.126
Mounting brackets (4 units)									
	Spare part, is included in the scope of supply of the 3KD.								
	**Mounting brackets**	1 and 2		3KD9120-1		1	1 unit	1CL	0.091

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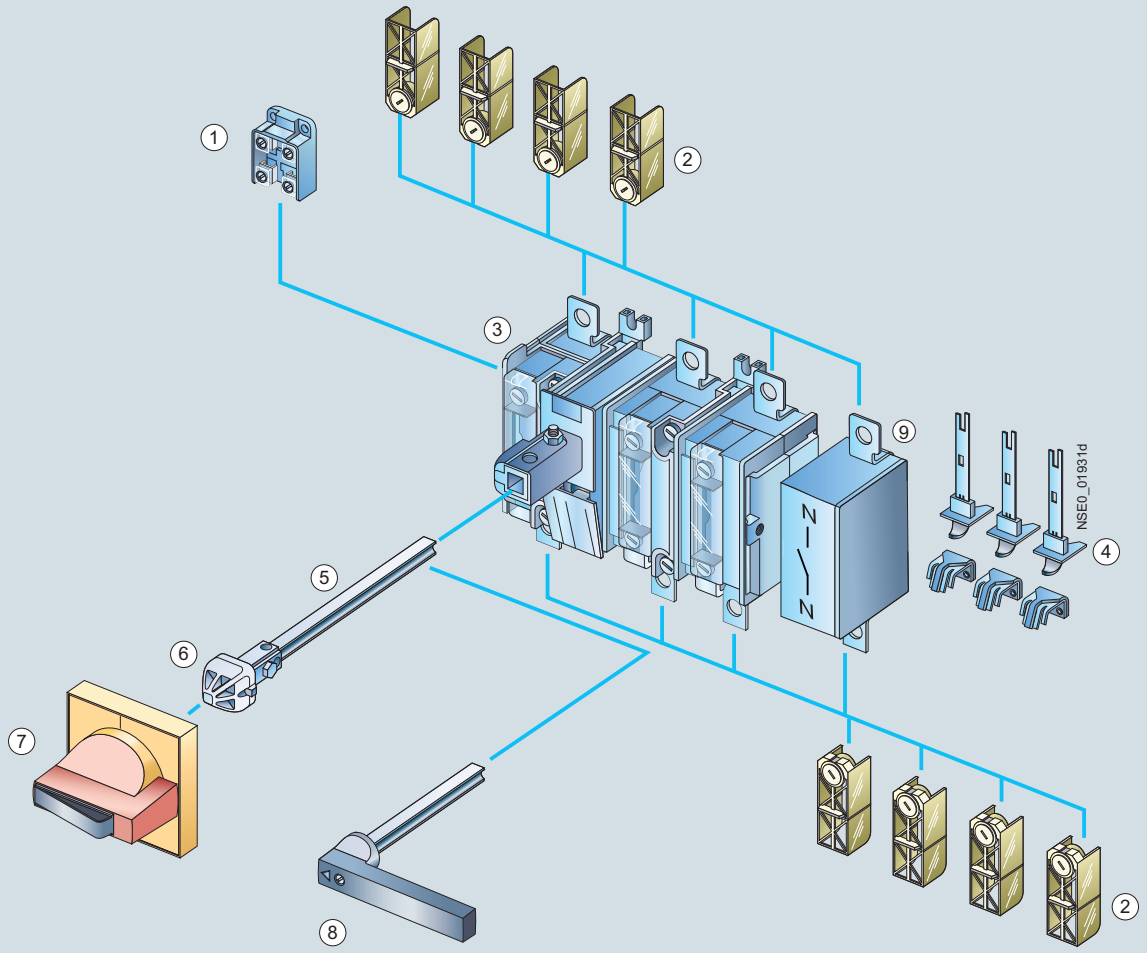
Overview



① Auxiliary switch (3SB for 3KA; 3KX for 3KE)
② IP20 terminal cover (Operator side)
③ 3K switch disconnector
④ Arcing contacts (only for 3KE)
⑤ Extension shaft
⑥ Coupling driver
⑦ 8UC7 door-coupling rotary operating mechanism in standard version (ti-grey) or EMERGENCY-STOP version (red/yellow).

All components from the switch to the actuator are provided with non-interchangeability features.

⑧ 8UC9 handle for fixed mounting in standard version (black) or EMERGENCY-STOP version (red).
⑨ 4th pole (optional, only for 3KA)

For the 3KA switch disconnectors, complete kits for standard and EMERGENCY-STOP application are available for installation in the side and rear panels of control cabinets.

A changeover operating mechanism is available for the use of two switch disconnectors of the 3KE series as load changeover switches.

A switch coupling permits simultaneous switching of two 3KE switch disconnectors with identical or different rated operational currents.

Identical accessories for 3KA switch disconnectors and for 3KL and 3KM switch disconnectors with fuses simplify stock keeping.

Application

3KA and 3KE switch disconnectors are used as main control, EMERGENCY-STOP, maintenance and transfer switches in distribution boards for residential and non-residential buildings as well as industrial switchboards. As three and four-pole versions, they ensure making and breaking of the specified rated current under load. At the same time, they constitute a safety isolating function and isolating distance in all low-voltage circuits.

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Technical specifications

Standards		IEC 60947-1, IEC 60947-3, VDE 0660 Part 107						
Type		**3KA50**	**3KA51**	**3KA52[1)]**	**3KA53[1)]**	**3KA55[1)]**	**3KA57[1)]**	**3KA58[1)]**
Rated uninterrupted current I_u	A	63	80	125	160	250	400	630[3)]
Conventional free-air thermal current I_{th}[2)]	A	63	80	125	160	250	400	630[3)]
Rated insulation voltage U_i	V	690	690	1000	1000	1000	1000	1000
Rated impulse withstand voltage U_{imp}	kV	6	6	8	8	8	8	8
Rated operational voltage U_e								
50/60 Hz AC	V	690						
DC	V	440 (3 conducting paths series-connected)						
	V	220 (2 conducting paths series-connected)						
	V	110 (1 conducting path)						
Rated short-circuit making capacity I_{cm} with upstream fuses[4)] At 50/60 Hz 690 V AC, peak value	kA	220	220	220	220	176	176	105
Rated conditional short-circuit current with upstream fuses[4)]	kA	100	100	100	100	80	80	50
At 50/60 Hz 690 V AC, rms value								
Max. rated current I_n of the fuses	A	63	80	160	160	400	400	630
Permissible let-through current of the fuses	kA	8	10	17	17	30[5)]	30[5)]	40[5)]
Maximum permissible let-through I^2t value	kA^{2}s	55	55	223	223	1000	1000	2600
Permissible let-through current of an upstream circuit breaker At 50/60 Hz 690 V AC, peak value	kA	7	8	8	15	25	25	32
Rated short-circuit making capacity without fuses At AC 50 Hz/60 Hz 690 V, peak value	kA	7	7	7	9	20	25	35
Breaking capacity (infeed from the top or bottom)								
At 400 V AC								
• Breaking current I_c (at p.f. = 0.35, rms value)	A	500	650	1000	1280	2000	3200	5040
• Rated operational current I_e at								
- AC-21A, AC-22A, AC-23A	A	63	80	125	160	250	400	630[6)]
• Motor switching capacity AC-23A	kW	30	40	65	80	132	200	350
At 500 V AC								
• Breaking current I_c (at p.f. = 0.35, rms value)	A	500	640	1000	1280	2000	3200	3200
• Rated operational current I_e at								
- AC-21A, AC-22A	A	63	80	125	160	250	400	630
- AC-23A	A	63	80	125	160	250	400	400
• Motor switching capacity AC-23A	kW	40	50	90	110	185	280	280
At 690 V AC								
• Breaking current I_c (at p.f. = 0.35, rms value)	A	500	500	1000	1280	2000	3200	3200
• Rated operational current I_e at								
- AC-21A, AC-22A	A	63	80	125	160	250	400	630
- AC-23A	A	63	63	125	160	250	400	400
• Motor switching capacity AC-23A	kW	50	50	110	150	220	375	375
At 440 V DC (3 conducting paths series-connected)[7)]								
• Breaking current I_c (L/R = 15 ms)	A	250	260	500	640	1000[8)]	1600	1600
• Rated operational current I_e for DC-23A	A	63	63	125	160	250[9)]	400	400
Rated short-time current I_{cw} (1 s current, rms value)	kA	2.5	2.5	3.2	3.2	8	11	15
Permissible ambient temperature	°C	-25 ... +55 for operation[3)]						
	°C	-50 ... +80 when stored						
Mechanical endurance, operating cycles		15 000	15 000	15 000	15 000	12 000	12 000	12 000
Degree of protection		IP00/IP20 (from the operator side, with busbar and terminal covers)						
Power loss of the switch disconnector at I_{th}	W	7	12	22	22	33	72	170
Main conductor connections								
Busbar systems, max. dimensions (W x T)	mm	25 x 9	25 x 9	45 x 10	45 x 10	40 x 12	40 x 12	40 x 15
Cable lug, max. conductor cross-section (stranded)	mm^2	35	35	70	120	150	2 x 150 or 1 x 240	2 x 240
Tightening torque	Nm	6 ... 7.5	6 ... 7.5	7 ... 10	18 ... 22	35 ... 45	35 ... 45	35 ... 45
Terminal screws		M6	M6	M6	M8	M10	M10	M10
Protective conductor connections								
Flat bars	mm	--	--	--	--	20 x 2.5	20 x 2.5	20 x 2.5
Cable lug, max. conductor cross-section (stranded)	mm^2	--	--	--	--	70	120	120

1) Technical specifications for approval on request.

2) Configuring note: Max. permissible operating temperature at connections 100 °C.

3) With 3KA58 for operation -25 °C ... +35 °C, 570 A at 55 °C.

4) Only available with fuses 3NA38, 3NA32 or 3ND18, 3ND12 (otherwise only 105 kA/50 kA).

5) 3ND1 switching device protection fuse.

6) AC-23B.

7) 220 V DC (L1 and L3 series-connected) or 110 V DC (one conducting path) at DC-23A.

8) At 440 V L/R = 4 ms, at 220 V L/R = 15 ms.

9) At 440 V DC-22A, at 220 V DC-23A.

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Introduction

Standards		**IEC 60947-1, IEC 60947-3, VDE 0660 Part 107**			
Type		**3KE42**	**3KE43**	**3KE44**	**3KE45**
Rated uninterrupted current I_u	A	250	400	630	1000
Rated insulation voltage U_i	V	1000 AC, 1200 DC			
Rated impulse withstand voltage U_{imp}	kV	8	8	8	8
Rated operational voltage U_e					
50/60 Hz AC	V	690			
DC	V	440 (3 conducting paths series-connected)			
	V	220 (2 conducting paths series-connected)			
Rated short-circuit making capacity I_{cm} At 50/60 Hz 690 V AC, peak value	kA	35	35	60	60
Rated short-circuit making capacity with upstream fuses At 50/60 Hz 690 V AC, peak value	kA	105	105	105	84
Rated conditional short-circuit current with upstream fuses Rms value at 50/60 Hz 690 V AC	A	50	50	50	40
Maximum permissible let-through I^2t value	kA^2s	2150	2150	5400	19000
Permissible let-through current of an upstream circuit breaker					
At 50/60 Hz 690 V AC, peak value	kA	35	35	60	60
Max. rated current I_n of the fuse	A	400	400	630	1000
Permissible let-through current of the fuses (peak value)	kA	38	38	60	75
Breaking capacity (infeed from the top or bottom)					
At 400 V AC					
• Breaking current I_c (rms value at p.f. = 0.35)	A	1000	1000	2520	2520
• Rated operational current I_e at					
- AC-21A	A	250	400	630	1000
- AC-22A	A	250	330	630	800
- AC-23A	A	125	125	315	315
At 500 V AC					
• Breaking current I_c (rms value at p.f. = 0.35)	A	1000	1000	2520	2520
• Rated operational current I_e at					
- AC-21A	A	250	400	630	1000
- AC-22A	A	250	330	630	800
- AC-23A	A	125	125	315	315
At 690 V AC					
• Breaking current I_c (rms value at p.f. = 0.35)	A	1000	1000	2520	2520
• Rated operational current I_e at					
- AC-21A	A	250	400	630	1000
- AC-22A	A	250	330	630	800
- AC-23A	A	125	125	315	315
At 440 V DC (3 conducting paths series-connected)					
• Breaking current I_c (L/R = 5 ms)	A	1000	1000	2520	2520
• Rated operational current I_e at					
- DC-21A	A	250	400	630	1000
- DC-22A	A	250	250	630	630
Rated short-time current I_{cw} (1 s current, rms value)	kA	12.5	12.5	21	21
Permissible ambient temperature	°C	-25 ... +55 for operation			
	°C	-50 ... +80 when stored			
Mechanical endurance, operating cycles		10000			
Degree of protection		IP00			
Power loss of the switch disconnector at I_{th}	W	15	33	78	180
Main conductor connections					
Busbar systems, max. dimensions (W x T)	mm	25 x 10	25 x 10	2 x 40 x 10	2 x 40 x 10
Cable lug, max. conductor cross-section (stranded)	mm^2	2 x 150	2 x 150, 1 x 240	2 x 240	2 x 240

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Application

3KA switch disconnectors are implemented as main control switches and EMERGENCY-STOP switches for normal switching duty and isolation of main circuits and auxiliary circuits. Another field of application is the switching of three-phase motors and other loads in the event of maintenance and repair.

Main control and EMERGENCY-STOP switches are manually operated switch disconnectors according to IEC 60947-3 and VDE 0660 Part 107 (EN 60947-3) and comply with the conditions for switch disconnectors and the requirements of the machinery directive EN 60204-1.

Selection and ordering data

All switch disconnectors with degree of protection IP00
The conductor connecting screws are included in the scope of supply

Rated uninterrupted current I_u	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
A							kg
Complete versions with 8UC7 door-coupling rotary operating mechanism (black handle)							
3-pole for motor loads and for power distribution							
63		3KA5030-1GE01		1	1 unit	1CL	1.372
80		3KA5130-1GE01		1	1 unit	1CL	1.365
125		3KA5230-1GE01		1	1 unit	1CL	2.217
160		3KA5330-1GE01		1	1 unit	1CL	2.398
250		3KA5530-1GE01		1	1 unit	1CL	5.387
400		3KA5730-1GE01		1	1 unit	1CL	10.284
630		3KA5830-1GE01		1	1 unit	1CL	6.065
4-pole[1] for power distribution							
63		3KA5040-1GE01		1	1 unit	1CL	2.449
80		3KA5140-1GE01		1	1 unit	1CL	2.474
125		3KA5240-1GE01		1	1 unit	1CL	2.455
160		3KA5340-1GE01		1	1 unit	1CL	2.601
250		3KA5540-1GE01		1	1 unit	1CL	5.979
400		3KA5740-1GE01		1	1 unit	1CL	6.070
630		3KA5840-1GE01		1	1 unit	1CL	6.570
Basic switch versions without handle							
3KA5330-1AE01							
3-pole for motor loads and for power distribution							
63		3KA5030-1AE01		1	1 unit	1CL	0.905
80		3KA5130-1AE01		1	1 unit	1CL	0.900
125		3KA5230-1AE01		1	1 unit	1CL	1.874
160	►	3KA5330-1AE01		1	1 unit	1CL	1.997
250		3KA5530-1AE01		1	1 unit	1CL	4.450
400		3KA5730-1AE01		1	1 unit	1CL	4.582
630		3KA5830-1AE01		1	1 unit	1CL	5.096
3KA5340-1AE01							
4-pole[1] for power distribution							
63		3KA5040-1AE01		1	1 unit	1CL	2.080
80		3KA5140-1AE01		1	1 unit	1CL	2.053
125		3KA5240-1AE01		1	1 unit	1CL	2.060
160		3KA5340-1AE01		1	1 unit	1CL	2.220
250		3KA5540-1AE01		1	1 unit	1CL	4.970
400		3KA5740-1AE01		1	1 unit	1CL	5.120
630		3KA5840-1AE01		1	1 unit	1CL	5.641
8UC7 EMERGENCY-STOP door-coupling rotary operating mechanisms (red handle, yellow indicator plate) for basic switch versions without handle							
8UC7121-3BB10							
3-pole for motor loads and for power distribution							
63		8UC7121-3BB10		1	1 unit	1CL	0.358
80		8UC7121-3BB10		1	1 unit	1CL	0.358
125		8UC7222-3BB20		1	1 unit	1CL	0.420
160		8UC7222-3BB20		1	1 unit	1CL	0.420
250		8UC7323-3BB30		1	1 unit	1CL	1.002
400		8UC7323-3BB30		1	1 unit	1CL	1.002
630		8UC7323-3BB30		1	1 unit	1CL	1.002
4-pole[1] for power distribution							
63		8UC7222-3BB20		1	1 unit	1CL	0.420
80		8UC7222-3BB20		1	1 unit	1CL	0.420
125		8UC7222-3BB20		1	1 unit	1CL	0.420
160		8UC7222-3BB20		1	1 unit	1CL	0.420
250		8UC7323-3BB30		1	1 unit	1CL	1.002
400		8UC7323-3BB30		1	1 unit	1CL	1.002
630		8UC7323-3BB30		1	1 unit	1CL	1.002

[1] Rated values reduced in the event of strong harmonics caused by frequency converter operation.

8UC7 EMERGENCY-STOP door-coupling rotary operating mechanisms (red handle, yellow indicator plate), see page 7/76

*** You can order this quantity or a multiple thereof.**

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Floor mounting

	Rated uninterrupted current I_u	DT	**3-pole, assembly kits for mounting in control cabinet side panels** **Assembly kits (front IP40)** Comprising: Lockable handle and three terminal covers for the infeed side	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A		Article No. www.siemens.com/product?Article No. Price per PU				kg
Black handle							
3KA5330-1AE01 with 3KX3536-2AA	63		3KX3516-2AA	1	1 unit	1CL	0.620
	80		3KX3516-2AA	1	1 unit	1CL	0.620
	125		3KX3536-2AA	1	1 unit	1CL	0.893
	160		3KX3536-2AA	1	1 unit	1CL	0.893
	250		3KX3556-2AA	1	1 unit	1CL	1.526
	400		3KX3556-2AA	1	1 unit	1CL	1.526
	630		3KX3556-2AA	1	1 unit	1CL	1.526
EMERGENCY-STOP red handle							
	63		3KX3516-2BA	1	1 unit	1CL	0.587
	80		3KX3516-2BA	1	1 unit	1CL	0.587
	125		3KX3536-2BA	1	1 unit	1CL	0.840
	160		3KX3536-2BA	1	1 unit	1CL	0.840
	250		3KX3556-2BA	1	1 unit	1CL	1.533
	400		3KX3556-2BA	1	1 unit	1CL	1.533
	630		3KX3556-2BA	1	1 unit	1CL	1.533

* You can order this quantity or a multiple thereof.

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All switch disconnectors with degree of protection IP00
With high speed closing and opening
The conductor connecting screws are included in the scope of supply.

	Rated uninterrupted current I_u	DT	**3-pole, operating mechanism and actuation from the front** **Direct operating mechanisms** Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A							kg
Complete versions with black handle								
3KE4330-0BA	250		3KE4230-0BA		1	1 unit	1CL	4.140
	400		3KE4330-0BA		1	1 unit	1CL	4.157
	630		3KE4430-0BA		1	1 unit	1CL	7.252
	1000		3KE4530-0BA		1	1 unit	1CL	7.764
Basic switch versions without handle								
	250		3KE4230-0AA		1	1 unit	1CL	3.886
	400		3KE4330-0AA		1	1 unit	1CL	0.383
	630		3KE4430-0AA		1	1 unit	1CL	6.876
	1000		3KE4530-0AA		1	1 unit	1CL	7.430
EMERGENCY-STOP red handles + coupling sockets for basic switch versions without handle								
	250		8UC9371 + 3KX2210-0H		1 + 1	1 unit	1CL	0.140 + 0.230
	400		8UC9371 + 3KX2210-0H		1 + 1	1 unit	1CL	0.140 + 0.230
	630		8UC9375 + 3KX2210-0H		1 + 1	1 unit	1CL	0.160 + 0.230
	1000		8UC9375 + 3KX2210-0H		1 + 1	1 unit	1CL	0.160 + 0.230

Rated uninterrupted current I_u	DT	**3-pole, operating mechanism and actuation from the front** **Door-coupling rotary operating mechanisms (lockable)** Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
A							kg
Complete versions with 8UC7 door-coupling rotary operating mechanism (black handle)							
250		3KE4230-0GA		1	1 unit	1CL	4.983
400		3KE4330-0GA		1	1 unit	1CL	5.046
630		3KE4430-0GA		1	1 unit	1CL	7.740
1000		3KE4530-0GA		1	1 unit	1CL	8.267
Basic switch versions without handle							
250		3KE4230-0AA		1	1 unit	1CL	3.886
400		3KE4330-0AA		1	1 unit	1CL	0.383
630		3KE4430-0AA		1	1 unit	1CL	6.876
1000		3KE4530-0AA		1	1 unit	1CL	7.430
8UC7 EMERGENCY-STOP door-coupling rotary operating mechanisms (red handle, yellow indicator plate) for basic switch versions without handle							
250, 400, 630, 1000		8UC7324-3BB44		1	1 unit	1CL	1.186

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Floor mounting

Rated uninterrupted current I_u	DT	3-pole, rear operating mechanism and actuation		PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
A		Article No. www.siemens.com/product?Article No.	Price per PU				kg
Basic switch versions without handle							
Direct operating mechanisms							
250		3KE4230-0CA		1	1 unit	1CL	4.964
400		3KE4330-0CA		1	1 unit	1CL	4.946
630		3KE4430-0CA		1	1 unit	1CL	6.532
1000		3KE4530-0CA		1	1 unit	1CL	7.907
Direct operating mechanisms (lockable)							
250		3KE4230-0CA		1	1 unit	1CL	4.964
400		3KE4330-0CA		1	1 unit	1CL	4.946
630		3KE4430-0CA		1	1 unit	1CL	6.532
1000		3KE4530-0CA		1	1 unit	1CL	7.907
Handles (black) + masking plates + display plates (silver) for basic switch versions without handle							
Direct operating mechanisms							
250		8UC9370		1	1 unit	1CL	0.128
		+					
		8UB9530		1	1 unit	1CL	0.026
		+					
		8UC9631-0B		1	1 unit	1CL	0.010
400		8UC9370		1	1 unit	1CL	0.128
		+					
		8UB9530		1	1 unit	1CL	0.026
		+					
		8UC9631-0B		1	1 unit	1CL	0.010
630		8UC9374		1	1 unit	1CL	0.180
		+					
		8UB9530		1	1 unit	1CL	0.026
		+					
		8UC9631-0B		1	1 unit	1CL	0.010
1000		8UC9374		1	1 unit	1CL	0.180
		+					
		8UB9530		1	1 unit	1CL	0.026
		+					
		8UC9631-0B		1	1 unit	1CL	0.010
Direct operating mechanisms (lockable)							
250		8UC9370		1	1 unit	1CL	0.128
		+					
		8UC9563		1	1 unit	1CL	0.270
		+					
		8UC9631-0B		1	1 unit	1CL	0.010
400		8UC9370		1	1 unit	1CL	0.128
		+					
		8UC9563		1	1 unit	1CL	0.270
		+					
		8UC9631-0B		1	1 unit	1CL	0.010
630		8UC9374		1	1 unit	1CL	0.180
		+					
		8UC9563		1	1 unit	1CL	0.270
		+					
		8UC9631-0B		1	1 unit	1CL	0.010
1000		8UC9374		1	1 unit	1CL	0.180
		+					
		8UC9563		1	1 unit	1CL	0.270
		+					
		8UC9631-0B		1	1 unit	1CL	0.010

* You can order this quantity or a multiple thereof.

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Rated uninterrupted current I_u	DT	**3-pole, rear operating mechanism and actuation**		PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
A		Article No. www.siemens.com/product?Article No.	Price per PU				kg
EMERGENCY-STOP red handles + masking plates + display plates (yellow) for basic switch versions without handle							
Direct operating mechanisms							
250		8UC9371		1	1 unit	1CL	0.140
		+					
		8UB9530		1	1 unit	1CL	0.026
		+					
		8UC9633-0B		1	1 unit	1CL	0.010
400		8UC9371		1	1 unit	1CL	0.140
		+					
		8UB9530		1	1 unit	1CL	0.026
		+					
		8UC9633-0B		1	1 unit	1CL	0.010
630		8UC9375		1	1 unit	1CL	0.160
		+					
		8UB9530		1	1 unit	1CL	0.026
		+					
		8UC9633-0B		1	1 unit	1CL	0.010
1000		8UC9375		1	1 unit	1CL	0.160
		+					
		8UB9530		1	1 unit	1CL	0.026
		+					
		8UC9633-0B		1	1 unit	1CL	0.010
Direct operating mechanisms (lockable)							
250		8UC9371		1	1 unit	1CL	0.140
		+					
		8UC9563		1	1 unit	1CL	0.270
		+					
		8UC9633-0B		1	1 unit	1CL	0.010
400		8UC9371		1	1 unit	1CL	0.140
		+					
		8UC9563		1	1 unit	1CL	0.270
		+					
		8UC9633-0B		1	1 unit	1CL	0.010
630		8UC9375		1	1 unit	1CL	0.160
		+					
		8UC9563		1	1 unit	1CL	0.270
		+					
		8UC9633-0B		1	1 unit	1CL	0.010
1000		8UC9375		1	1 unit	1CL	0.160
		+					
		8UC9563		1	1 unit	1CL	0.270
		+					
		8UC9633-0B		1	1 unit	1CL	0.010

Rated uninterrupted current I_u	DT	**3-pole, rear rotary operating mechanisms (lockable)** **Door-coupling rotary operating mechanisms (lockable)**		PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
A		Article No. www.siemens.com/product?Article No.	Price per PU				kg
Basic switch versions without handle							
250		3KE4230-0CA		1	1 unit	1CL	4.964
400		3KE4330-0CA		1	1 unit	1CL	4.946
630		3KE4430-0CA		1	1 unit	1CL	6.532
1000		3KE4530-0CA		1	1 unit	1CL	7.907
8UC7 door-coupling rotary operating mechanisms (black handle) for basic switch versions without handle							
250, 400, 630, 1000		8UC7314-1BB44		1	1 unit	1CL	1.174
8UC7 EMERGENCY-STOP door-coupling rotary operating mechanisms (red handle, yellow indicator plate) for basic switch versions without handle							
250, 400, 630, 1000		8UC7324-3BB44		1	1 unit	1CL	1.186

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Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
3KA50 30/3KA51 30								
3KX3552-3DA01	**Terminal covers**							
	For 3-pole devices (1 set = 6 units)	►	3KX3552-3DA01		1	1 unit	1CL	0.080
	For 4-pole devices (1 set = 8 units)		3KX3552-3DB01		1	1 unit	1CL	0.107
	Door-coupling rotary operating mechanisms IP65							
	Black handle, shaft 300 mm		8UC7111-1BB10		1	1 unit	1CL	0.356
	EMERGENCY-STOP (yellow/red), shaft 300 mm		8UC7121-3BB10		1	1 unit	1CL	0.358
3KX3516-1AA	**Operating mechanisms for fixed mounting** Black handle, shaft 250 mm	►	3KX3516-1AA		1	1 unit	1CL	0.080
	Extension shaft 300 mm long		8UC6031		1	1 unit	1CL	0.068
	Extension shaft 600 mm long		8UC6081		1	1 unit	1CL	0.136
	Shaft connecting pieces		8UC6021		1	1 unit	1CL	0.027
3SB1400-0A	**Auxiliary switches**							
	1 NO + 1 NC		3SB1400-0A		1	1 unit	41J	0.019
	2 NO		3SB1400-0G		1	1 unit	41J	0.019
	2 NC		3SB1400-0H		1	1 unit	41J	0.020
3KA50 40/3KA51 40/3KA52/3KA53								
3KX3552-3DA01	**Terminal covers**							
	For 3-pole 3KA52 devices (1 set = 6 units)	►	3KX3552-3DA01		1	1 unit	1CL	0.080
	For 3KA53	►	3KX3553-3DA01		1	1 unit	1CL	0.151
	For 4-pole 3KA52 devices (1 set = 8 units)		3KX3552-3DB01		1	1 unit	1CL	0.107
	For 3KA53		3KX3553-3DB01		1	1 unit	1CL	0.190
8UC7412-1BB20	**Door-coupling rotary operating mechanisms IP65**							
	Black handle, shaft 300 mm		8UC7212-1BB20		1	1 unit	1CL	0.420
	EMERGENCY-STOP (yellow/red), shaft 300 mm		8UC7222-3BB20		1	1 unit	1CL	0.420
	Operating mechanisms for fixed mounting Black handle, shaft 250 mm	►	3KX3536-1AA		1	1 unit	1CL	0.170
	Extension shaft 300 mm long		8UC6032		1	1 unit	1CL	0.135
	Extension shaft 600 mm long		8UC6082		1	1 unit	1CL	0.265
	Shaft connecting pieces		8UC6022		1	1 unit	1CL	0.022
3SB1400-0A	**Auxiliary switches**							
	1 NO + 1 NC		3SB1400-0A		1	1 unit	41J	0.019
	2 NO		3SB1400-0G		1	1 unit	41J	0.019
	2 NC		3SB1400-0H		1	1 unit	41J	0.020
	1 NO + 1 NC, 20 ms leading		3KX3552-3EA01		1	1 unit	1CL	0.022
3KA55/3KA57/3KA58								
	Terminal covers							
	For 3-pole devices (1 set = 6 units)	►	3KX3557-3DA01		1	1 unit	1CL	0.293
	For 4-pole devices (1 set = 8 units)		3KX3557-3DB01		1	1 unit	1CL	0.385
	Door-coupling rotary operating mechanisms IP65							
	Black handle, shaft 300 mm		8UC7313-1BB30		1	1 unit	1CL	0.941
	EMERGENCY-STOP (yellow/red), shaft 300 mm		8UC7323-3BB30		1	1 unit	1CL	1.002
3KX3176-1E	**Operating mechanisms for fixed mounting** Black handle, shaft 250 mm	►	3KX3176-1E		1	1 unit	1CL	0.287
	Extension shaft 300 mm long		8UC6033		1	1 unit	1CL	0.215
	Extension shaft 600 mm long		8UC6083		1	1 unit	1CL	0.424
	Shaft connecting pieces		8UC6023		1	1 unit	1CL	0.084
3SB1400-0A	**Auxiliary switches**							
	1 NO + 1 NC		3SB1400-0A		1	1 unit	41J	0.019
	2 NO		3SB1400-0G		1	1 unit	41J	0.019
	2 NC		3SB1400-0H		1	1 unit	41J	0.020
	1 NO + 1 NC, 20 ms leading		3KX3552-3EA01		1	1 unit	1CL	0.022

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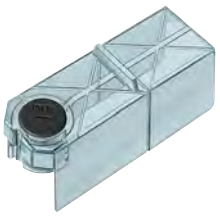
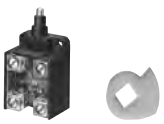
	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
3KE42/3KE43								
	Changeover switches							
3KX2210-0D	**Changeover switches with break-before-make feature** Switch I ON – Switch II OFF Switch I OFF – Switch II OFF Switch I OFF – Switch II ON		3KX2210-0D		1	1 unit	1CL	2.450
	Door-coupling rotary operating mechanisms IP65 Black handle for changeover switch with break-before-make feature, shaft 300 mm		8UC7414-1BF44		1	1 unit	1CL	1.196
	Direct operating mechanisms Handle (black) for fixed mounting		8UC9381		1	1 unit	1CL	0.265
	Changeover switches without break-before-make feature Switch I ON – Switch II OFF Switch I ON – Switch II ON Switch I OFF – Switch II ON		3KX2210-0E		1	1 unit	1CL	2.451
	Door-coupling rotary operat. mechan. IP65 Black handle for changeover switch without break-before-make feature, shaft 300 mm		8UC7414-1FG44		1	1 unit	1CL	1.113
	Direct operating mechanisms Handle (black) for fixed mounting		8UC9381		1	1 unit	1CL	0.265
	Parallel switches Switch I ON – Switch II ON Switch I OFF – Switch II OFF		3KX2250-1A		1	1 unit	1CL	0.780
	Door-coupling rotary operating mechanisms IP65 Handle (black), shaft 300 mm		8UC7414-1BB44		1	1 unit	1CL	1.204
	EMERGENCY-STOP door-coupling rotary operating mechanisms IP65 Handle (red), shaft 300 mm		8UC7424-3BB44		1	1 unit	1CL	1.134
	Direct operating mechanisms Handle (black) for fixed mounting		8UC9381		1	1 unit	1CL	0.265
	Further accessories							
 3KX3557-3DA01	**Terminal covers** (1 set = 6 units)	►	3KX3557-3DA01		1	1 unit	1CL	0.293
	Door-coupling rotary operat. mechan. IP65							
	Black handle, shaft 300 mm		8UC7314-1BB44		1	1 unit	1CL	1.174
	EMERGENCY-STOP (yellow/red), shaft 300 mm		8UC7324-3BB44		1	1 unit	1CL	1.186
	Extension shaft 300 mm long		8UC6034		1	1 unit	1CL	0.316
	Extension shaft 600 mm long		8UC6084		1	1 unit	1CL	0.628
 3KX2231-1A	**Auxiliary switches with switching cam** 1 NO + 1 NC (complete mounting kit)		3KX2231-1A		1	1 unit	1CL	0.055
	Grounding brackets		3KX2252-1A		1	1 unit	1CL	0.049
	Arc chutes (spare part with 3 arc-splitter assemblies)		3KY2202-0B		1	1 unit	1CL	0.640
3KY2204-0A	**Arcing contacts** (spare part with 3 fixed and 3 movable contacts)		3KY2204-0A		1	1 unit	1CL	0.201

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Accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
3KE44/3KE45								
3KX2210-0D	***Changeover switches***							
	Changeover switches with break-before-make feature Switch I ON – Switch II OFF Switch I OFF – Switch II OFF Switch I OFF – Switch II ON		3KX2210-0D		1	1 unit	1CL	2.450
	Door-coupling rotary operating mechanisms IP65 Black handle for changeover switch with break-before-make feature, shaft 300 mm		8UC7414-1BF44		1	1 unit	1CL	1.196
	Direct operating mechanisms Handle (black) for fixed mounting		8UC9381		1	1 unit	1CL	0.265
	Changeover switches without break-before-make feature Switch I ON – Switch II OFF Switch I ON – Switch II ON Switch I OFF – Switch II ON		3KX2210-0E		1	1 unit	1CL	2.451
	Door-coupling rotary operating mechanisms IP65 Black handle for changeover switch without break-before-make feature, shaft 300 mm		8UC7414-1FG44		1	1 unit	1CL	1.113
	Direct operating mechanisms Handle (black) for fixed mounting		8UC9381		1	1 unit	1CL	0.265
	Parallel switches Switch I ON – Switch II ON Switch I OFF – Switch II OFF		3KX2250-1A		1	1 unit	1CL	0.780
	Door-coupling rotary operating mechanisms IP65 Handle (black), shaft 300 mm		8UC7414-1BB44		1	1 unit	1CL	1.204
	EMERGENCY-STOP door-coupling rotary operating mechanisms IP65 Handle (red), shaft 300 mm		8UC7424-3BB44		1	1 unit	1CL	1.134
	Direct operating mechanisms Handle (black) for fixed mounting		8UC9381		1	1 unit	1CL	0.265
	Further accessories							
	Terminal covers (top and bottom)		3KX2252-0C		1	1 unit	1CL	0.418
	Door-coupling rotary operating mechanisms IP65							
	Black handle, shaft 300 mm		8UC7314-1BB44		1	1 unit	1CL	1.174
	EMERGENCY-STOP (yellow/red), shaft 300 mm		8UC7324-3BB44		1	1 unit	1CL	1.186
	Extension shaft 300 mm long		8UC6034		1	1 unit	1CL	0.316
	Extension shaft 600 mm long		8UC6084		1	1 unit	1CL	0.628
3KX2231-1A	**Auxiliary switches** 1 NO + 1 NC (complete mounting kit)		3KX2231-1A		1	1 unit	1CL	0.055
	Grounding brackets		3KX2252-1A		1	1 unit	1CL	0.049
3KY2232-0A	**Arc chutes** (spare part with 3 arc-splitter assemblies)		3KY2232-0A		1	1 unit	1CL	1.031
	Arcing contacts Spare part with 3 fixed and 3 movable contacts		3KY2234-0A		1	1 unit	1CL	0.110

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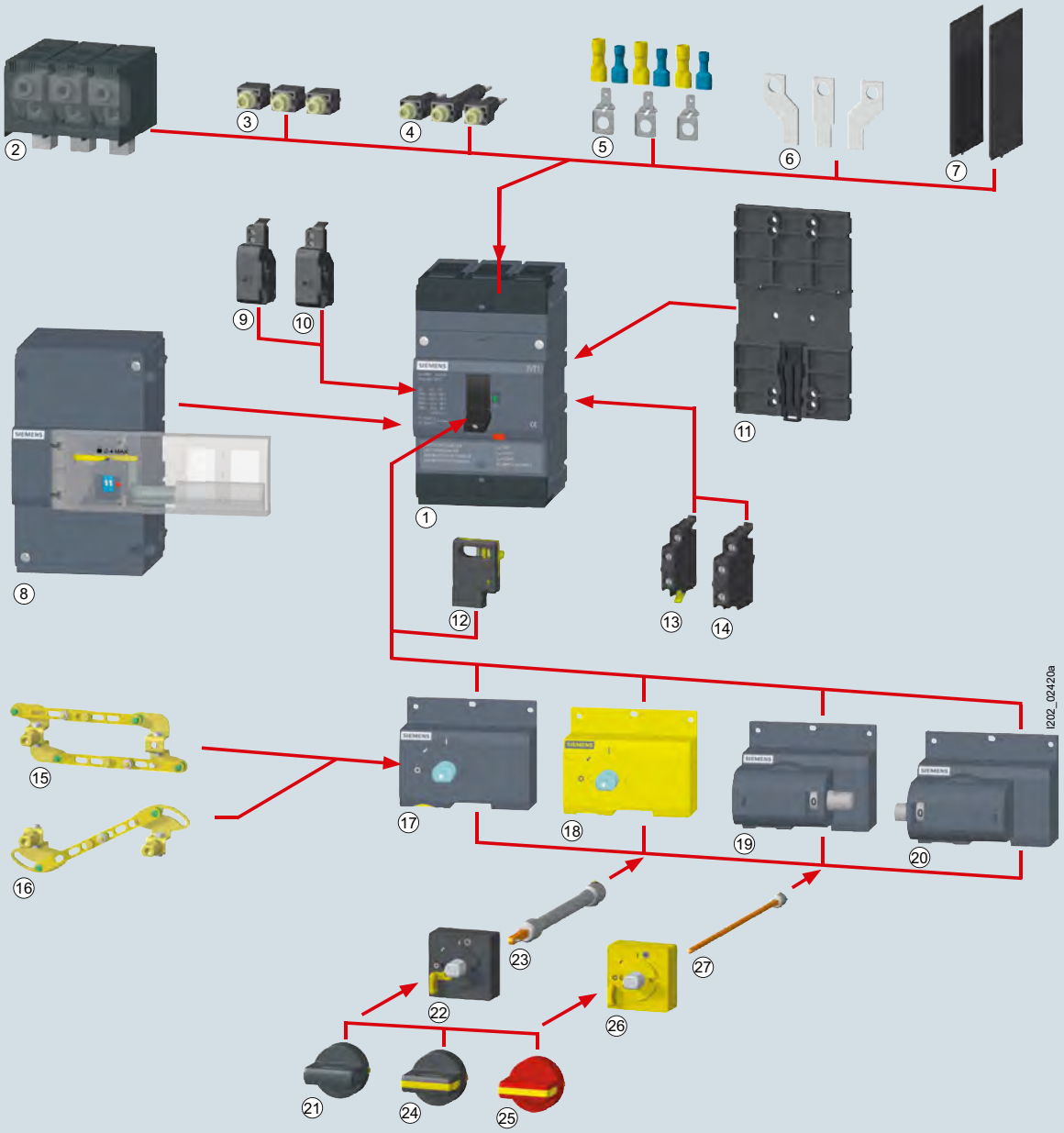
Overview



1 Switch disconnector
2 Circular conductor terminal
3 Front connection
4 Rear connection
5 Auxiliary conductor terminal
6 Front connecting bus with increased pole spacing
7 Insulating barriers
8 Lateral rotary operating mechanism
9 Shunt release
10 Undervoltage release
11 Adapter to install on 35 mm DIN rail
12 Locking device type lever
13 Signal switch
14 Auxiliary switch
15 Mechanical parallel switching
16 Mechanical interlocking
17 Front rotary operating mechanism
18 Front rotary operating mechanism
19 Lateral rotary operating mechanism (right)
20 Lateral rotary operating mechanism (left)
21 Non lockable knob
22 Coupling driver
23 Telescopic extension shaft
24 Lockable knob
25 Lockable knob
26 Coupling driver
27 Extension shaft

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Introduction

Application

3VT switch disconnectors can be used as main control switches for sub-distribution boards, repair and transfer switches for cables, busbars or unit combinations.

As three and four-pole versions, they ensure making and breaking of the specified rated current under load. At the same time, they constitute a safety isolating function and isolating distance in all low-voltage circuits.

The position of the operating toggle lever always matches that of the contacts (positive operation).

All 3VT switch disconnectors meet the requirements of IEC 60947-1 and IEC 60947-3.

Technical specifications

Standards	A	**IEC 60947-1, IEC 60947-3**				
Rated uninterrupted current I_u	A	160	250	630	1000	1600
Number of poles		3 and 4	3 and 4	3 and 4	3	3
Rated insulation voltage U_i	V	690				
Utilization category						
• 690 V AC		AC-23A	AC-23B			
• 440 V DC		DC-22A	DC-23B			
Rated operational voltage U_e						
• 50/60 Hz AC	V	690				
• DC		440 (3 conducting paths series-connected)				
Rated short-time withstand current I_{cw}	kA_{rms}	2/1s	3/5s	7.5/5s	15/1s	20/1s
Rated impulse withstand voltage U_{imp}	kV	8				
Rated short-circuit making capacity I_{cm}						
• At 415 V AC	kA	2.8	4	14	30	40
• At 440 V DC	kA	2.8	4	14	30	40
Endurance						
• Mechanical	Operating cycles	20000	30000	20000	10000	10000
• Electrical at 415 V AC	Operating cycles	6000	3000	5000	4000	4000
Switching frequency	Operating cycles/h	120	120	120	120	120
Power loss per pole	W	15	18	75	100	120

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Selection and ordering data

	Version	Rated uninterrupted current I_u	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A							kg
3VT1 switch disconnectors									
	3-pole	160		**3VT1716-2DE36-0AA0**		1	1 unit	1CC	0.997
	4-pole	160		**3VT1716-2EE46-0AA0**		1	1 unit	1CC	1.310

Accessories

Auxiliary switches and auxiliary releases

	Rated operational voltage U_s	Frequency	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V	Hz							kg
Auxiliary switches									
	Changeover contact (1 CO)								
	• 60 ... 250 AC/DC	50/60		**3VT9100-2AB10**		1	1 unit	1CC	0.020
	• 5 ... 60 AC/DC	50/60		**3VT9100-2AB20**		1	1 unit	1CC	0.020
Alarm switches									
	Changeover contact (1 CO)								
	• 60 ... 250 AC/DC	50/60		**3VT9100-2AH10**		1	1 unit	1CC	0.020
	• 5 ... 60 AC/DC	50/60		**3VT9100-2AH20**		1	1 unit	1CC	0.021
Shunt releases									
	• 12 DC	--		**3VT9100-1SB00**		1	1 unit	1CC	0.050
	• 24, 48 AC/DC	50/60		**3VT9100-1SC00**		1	1 unit	1CC	0.091
	• 110, 230 AC 110, 220 DC	50/60		**3VT9100-1SD00**		1	1 unit	1CC	0.094
	• 230, 400 AC 220 DC	50/60		**3VT9100-1SE00**		1	1 unit	1CC	0.093
Undervoltage releases									
	• 24, 48 AC	50/60		**3VT9100-1UC00**		1	1 unit	1CC	0.091
	• 110, 230 AC	50/60		**3VT9100-1UD00**		1	1 unit	1CC	0.093
	• 230, 400 AC	50/60		**3VT9100-1UE00**		1	1 unit	1CC	0.094
	• 24, 48 DC	--		**3VT9100-1UU00**		1	1 unit	1CC	0.089
	• 110, 220 DC	--		**3VT9100-1UV00**		1	1 unit	1CC	0.091

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3VT1 switch disconnectors up to 160 A

Manual operating mechanisms

	Version	Color	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Rotary operating mechanisms									
	Manual rotary operating mechanisms								
	• Not lockable	Gray		3VT9100-3HA10		1	1 unit	1CC	0.112
	• Lockable with padlock	Gray		3VT9100-3HA20		1	1 unit	1CC	0.122
	• Lockable with padlock	Yellow		3VT9100-3HB20		1	1 unit	1CC	0.120
	• For lateral operation, mounted on left side, not lockable	Gray		3VT9100-3HC10		1	1 unit	1CC	0.179
	• For lateral operation, mounted on right side, not lockable	Gray		3VT9100-3HD10		1	1 unit	1CC	0.179
	Handle for manual rotary operating mechanisms								
	• Not lockable	Black		3VT9100-3HE10		1	1 unit	1CC	0.022
	• Lockable with padlock	Black		3VT9100-3HE20		1	1 unit	1CC	0.022
	• Lockable with padlock	Red		3VT9100-3HF20		1	1 unit	1CC	0.020
	Coupling drivers for door-coupling operating mechanism, can be defeated								
	For use with black handle 3VT9100-3HE..								
	• Degree of protection IP40	Black		3VT9100-3HG10		1	1 unit	1CC	0.091
	• Degree of protection IP66	Black		3VT9100-3HG20		1	1 unit	1CC	0.091
	For use with red handle 3VT9100-3HF20								
	• Degree of protection IP40	Yellow		3VT9100-3HH10		1	1 unit	1CC	0.094
	• Degree of protection IP66	Yellow		3VT9100-3HH20		1	1 unit	1CC	0.091

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	Version	Color	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Extension shafts								
	• Length 350 mm, can be shortened			3VT9100-3HJ10		1	1 unit	1CC	0.134
	• Length 199 ... 352 mm, extendable			3VT9100-3HJ20		1	1 unit	1CC	0.113
Mechanical interlocks									
	Mechanical interlocks			3VT9100-8LA00		1	1 unit	1CC	0.116
Mechanical parallel switching									
	Mechanical parallel switching			3VT9100-8LB00		1	1 unit	1CC	0.126

Motorized operating mechanisms

	Rated operational voltage U_s	Frequency	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	V	Hz							
Motorized operating mechanisms, lateral mounting									
	With locking mechanism for 3 padlocks								
	24 AC/DC	50/60		3VT9100-3MA00		1	1 unit	1CC	0.903
	48 AC/DC	50/60		3VT9100-3MB00		1	1 unit	1CC	0.900
	110 AC/DC	50/60		3VT9100-3MD00		1	1 unit	1CC	0.911
	230 AC/220 DC	50/60		3VT9100-3ME00		1	1 unit	1CC	0.899
Accessories for motorized operating mechanisms									
	Extension cables for motorized operating mechanism 12 cables, length 60 cm			3VT9100-3MF00		1	1 unit	1CC	0.059

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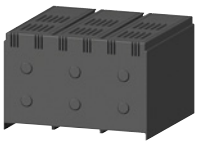
3VT1 switch disconnectors up to 160 A

Connection accessories

	Version	Conductor cross-sections mm²	Connection type	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Connection methods										
	3-pole									
	Front connecting bars For increased pole spacing (1 set = 3 units)	--	Al/Cu busbars, cable lugs		3VT9100-4ED30		1	1 unit	1CC	0.109
	Front terminals (1 set = 3 units)	--	Al/Cu busbars, cable lugs		3VT9100-4TA30		1	1 unit	1CC	0.055
	Rear terminals (1 set = 3 units)	--	Al/Cu busbars, cable lugs		3VT9100-4RC30		1	1 unit	1CC	0.178
	**Multiple feed-in terminals** Terminal covers, degree of protection IP20 (included in scope of supply) (1 set = 3 units)	2 x 25 ... 120	Cu/Al cables		3VT9100-4TF30		1	1 unit	1CC	0.260
	Auxiliary conductor terminals (1 set = 3 units)	1.5 ... 2.5; 4 ... 6	Flexible Cu conductors		3VT9100-4TN30		1	1 unit	1CC	0.026
	4-pole									
	Front terminals For 4th pole (for use with 3VT9100-4TA30 connection method) (1 set = 1 unit)	--	Al/Cu busbars, cable lugs		3VT9100-4TA00		1	1 unit	1CC	0.025
	Rear terminals For 4th pole (for use with 3VT9100-4RC30 connection method) (1 set = 1 unit)	--	Al/Cu busbars, cable lugs		3VT9100-4RC00		1	1 unit	1CC	0.091
	Multiple feed-in terminals Terminal covers, degree of protection IP20 (included in scope of supply) (1 set = 1 unit)	2 x 25 ... 120	Cu/Al cables		3VT9100-4TF40		1	1 unit	1CC	0.333
	Auxiliary conductor terminals For 4th pole (for use with 3VT9100-4TN30 connection method) (1 set = 1 unit)	1.5 ... 2.5; 4 ... 6	Flexible Cu conductors		3VT9100-4TN00		1	1 unit	1CC	0.019

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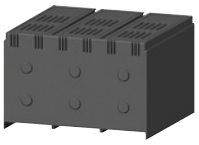
Further accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Phase barriers, covers, locking devices								
	Phase barriers Included in scope of supply of switch disconnector. If infeed is from below, the switch disconnectors must also be fitted on the sides of terminals 2, 4 and 6 with these phase barriers.							
	• For 3-pole version, 2 units		3VT9100-8CE30		1	1 unit	1CC	0.037
	• For 4-pole version, 1 unit (for use with 3VT9100-8CE30)		3VT9100-8CE00		1	1 unit	1CC	0.025
	**Terminal covers, degree of protection IP20** Increases degree of protection of connection point to IP20, e.g. when used with cable lugs.							
	• 3-pole version		3VT9100-8CA30		1	1 unit	1CC	0.090
	• 4-pole version		3VT9100-8CA40		1	1 unit	1CC	0.106
	Locking devices for toggle levers • Allows the switch disconnector to be locked in the "manual off" position. • Locking is by means of a padlock with a diameter of 3 ... 4 mm.		3VT9100-3HL00		1	1 unit	1CC	0.015
Mounting adapters								
	3/4-pole version							
	Mounting adapters for mounting on a 35 mm standard mounting rail		3VT9100-4PP30		1	1 unit	1CC	0.061

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3VT2 switch disconnectors up to 250 A

Selection and ordering data

	Version	Rated uninterrupted current I_u	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A							kg
3VT2 switch disconnectors									
	3-pole	250		3VT2725-2DE36-0AA0		1	1 unit	1CC	2.915
	4-pole	250		3VT2725-2EE46-0AA0		1	1 unit	1CC	3.771

Accessories

Auxiliary switches and auxiliary releases

	Rated operational voltage U_s	Frequency	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V	Hz							kg
Auxiliary switches and alarm switches									
	With NO contact (1 NO)								
	60 ... 500 AC/DC	50/60		3VT9300-2AC10		1	1 unit	1CC	0.035
	5 ... 60 AC/DC	50/60		3VT9300-2AC20		1	1 unit	1CC	0.034
	With NC contact (1 NC)								
	60 ... 500 AC/DC	50/60		3VT9300-2AD10		1	1 unit	1CC	0.036
	5 ... 60 AC/DC	50/60		3VT9300-2AD20		1	1 unit	1CC	0.036
	With double contact (2 NC)								
	60 ... 500 AC/DC	50/60		3VT9300-2AE10		1	1 unit	1CC	0.050
	5 ... 60 AC/DC	50/60		3VT9300-2AE20		1	1 unit	1CC	0.050
	With double contacts (1 NO and 1 NC)								
	60 ... 500 AC/DC	50/60		3VT9300-2AF10		1	1 unit	1CC	0.051
	5 ... 60 AC/DC	50/60		3VT9300-2AF20		1	1 unit	1CC	0.048
	With double contact (2 NO)								
	60 ... 500 AC/DC	50/60		3VT9300-2AG10		1	1 unit	1CC	0.048
	5 ... 60 AC/DC	50/60		3VT9300-2AG20		1	1 unit	1CC	0.040
	Changeover contact (1 CO)								
	60 ... 250 AC/DC	50/60		3VT9300-2AH10		1	1 unit	1CC	0.037
	5 ... 60 AC/DC	50/60		3VT9300-2AH20		1	1 unit	1CC	0.036
	Leading contacts								
	250 AC	50/60		3VT9300-2AJ00		1	1 unit	1CC	0.086

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3VT2 switch disconnectors up to 250 A

	Rated operational voltage U_s	Frequency	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V	Hz							kg
Shunt releases									
	24, 40, 48 AC/DC	50/60		3VT9300-1SC00		1	1 unit	1CC	0.147
	110 AC/DC	50/60		3VT9300-1SD00		1	1 unit	1CC	0.145
	230, 400, 500 AC/220 DC	50/60		3VT9300-1SE00		1	1 unit	1CC	0.148
Undervoltage releases									
	24, 40, 48 AC/DC	50/60		3VT9300-1UC00		1	1 unit	1CC	0.146
	110 AC/DC	50/60		3VT9300-1UD00		1	1 unit	1CC	0.145
	230, 400, 500 AC/220 DC	50/60		3VT9300-1UE00		1	1 unit	1CC	0.144
	With leading contact[1]								
	24, 40, 48 AC/DC	50/60		3VT9300-1UC10		1	1 unit	1CC	0.155
	110 AC/DC	50/60		3VT9300-1UD10		1	1 unit	1CC	0.159
	230, 400, 500 AC/220 DC	50/60		3VT9300-1UE10		1	1 unit	1CC	0.151

[1] Not suitable for 3VT9200-3M..0 motorized operating mechanism.

Manual operating mechanisms

	Version	Color	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
									kg
Rotary operating mechanisms									
	Manual rotary operating mechanisms								
	• Not lockable	Gray		3VT9200-3HA10		1	1 unit	1CC	0.253
	• Lockable with padlock	Gray		3VT9200-3HA20		1	1 unit	1CC	0.261
	• Lockable with padlock	Yellow label		3VT9200-3HB20		1	1 unit	1CC	0.260
	• For lateral operation, mounted on left side, not lockable	Gray		3VT9200-3HC10		1	1 unit	1CC	0.424
	• For lateral operation, mounted on right side, not lockable	Gray		3VT9200-3HD10		1	1 unit	1CC	0.424
	Handle for manual rotary operating mechanisms								
	• Not lockable	Black		3VT9300-3HE10		1	1 unit	1CC	0.079
	• Lockable with padlock	Black		3VT9300-3HE20		1	1 unit	1CC	0.080
	• Lockable with padlock	Red		3VT9300-3HF20		1	1 unit	1CC	0.080

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3VT2 switch disconnectors up to 250 A

	Version	Color	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Coupling drivers for door-coupling operating mechanism								
	For use with black handle 3VT9300-3HE..								
	• Degree of protection IP40	Black		3VT9300-3HG10		1	1 unit	1CC	0.210
	• Degree of protection IP66	Black		3VT9300-3HG20		1	1 unit	1CC	0.212
	For use with red handle 3VT9300-3HF20								
	• Degree of protection IP40	Yellow		3VT9300-3HH10		1	1 unit	1CC	0.210
	• Degree of protection IP66	Yellow		3VT9300-3HH20		1	1 unit	1CC	0.211
	Coupling drivers for door-coupling operating mechanism, can be defeated								
	For use with black handle 3VT9300-3HE..								
	• Degree of protection IP40	Black		3VT9300-3HG30		1	1 unit	1CC	0.213
	For use with red handle 3VT9300-3HF20								
	• Degree of protection IP40	Yellow		3VT9300-3HH30		1	1 unit	1CC	0.204
	Extension shafts								
	• Length 365 mm, can be shortened			3VT9300-3HJ10		1	1 unit	1CC	0.211
	• Length 245 ... 410 mm, extendable			3VT9300-3HJ20		1	1 unit	1CC	0.259

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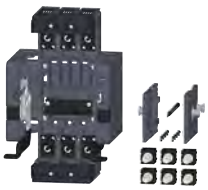
Motorized operating mechanisms

	Rated operational voltage U_s	Frequency	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V	Hz							kg
Motorized operating mechanisms with stored-energy mechanism									
	With locking mechanism for 3 padlocks, degree of protection IP00								
	24 AC/DC	50/60		3VT9200-3MJ00		1	1 unit	1CC	1.550
	48 AC/DC	50/60		3VT9200-3ML00		1	1 unit	1CC	1.553
	110 AC/DC	50/60		3VT9200-3MN00		1	1 unit	1CC	1.542
	230 AC/220 DC	50/60		3VT9200-3MQ00		1	1 unit	1CC	1.552
	Motorized operating mechanism with operating cycle counter								
	24 AC/DC	50/60		3VT9200-3MJ10		1	1 unit	1CC	1.560
	48 AC/DC	50/60		3VT9200-3ML10		1	1 unit	1CC	1.570
	110 AC/DC	50/60		3VT9200-3MN10		1	1 unit	1CC	1.574
	230 AC/220 DC	50/60		3VT9200-3MQ10		1	1 unit	1CC	1.572
Accessories for motorized operating mechanisms									
	Operating cycle counter with cable Length 110 cm			3VT9300-3MF10		1	1 unit	1CC	0.003
	Extension cables for motorized operating mechanism 12 cables, length 60 cm			3VT9300-3MF00		1	1 unit	1CC	0.061

Mounting accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
								kg
Plug-in base assembly kits								
	3-pole		3VT9200-4PA30		1	1 unit	1CC	1.764
	4-pole		3VT9200-4PA40		1	1 unit	1CC	2.289
Withdrawable unit kit								
	**3-pole**		3VT9200-4WA30		1	1 unit	1CC	3.462
	4-pole		3VT9200-4WA40		1	1 unit	1CC	3.830

* You can order this quantity or a multiple thereof.

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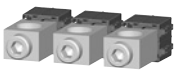
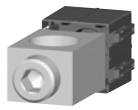
3VT2 switch disconnectors up to 250 A

Connection accessories

	Version	Conductor cross-sections	Connection type	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm^2								kg
Connection methods										
	3-pole									
	Front connecting bars									
	For increased pole spacing, short (1 set = 3 units)	--	Al/Cu busbars, cable lugs, flexibars		3VT9200-4ED30		1	1 unit	1CC	0.298
	For increased pole spacing, long (1 set = 3 units)	--	Al/Cu busbars, cable lugs, flexibars		3VT9200-4EE30		1	1 unit	1CC	0.469
	Front terminals Included in scope of supply of all switch disconnectors (1 set = 3 units)	--	Al/Cu busbars, cable lugs, flexibars		3VT9200-4TA30		1	1 unit	1CC	0.119
	Rear terminals (1 set = 3 units)	--	Al/Cu busbars, cable lugs		3VT9200-4RC30		1	1 unit	1CC	0.254
	Multiple feed-in terminals[1]									
	For 1 cable (1 set = 3 units)	1 x 25 ... 150	Cu/Al cables		3VT9215-4TD30		1	1 unit	1CC	0.201
		1 x 150 ... 240	Cu/Al cables		3VT9224-4TD30		1	1 unit	1CC	0.339
	For 2 cables (1 set = 3 units)	2 x 25 ... 150	Cu/Al cables		3VT9215-4TF30		1	1 unit	1CC	0.485
		2 x 150 ... 240	Cu/Al cables		3VT9224-4TF30		1	1 unit	1CC	0.618
	For 6 cables (1 set = 3 units)	6 x 6 ... 35	Cu/Al cables		3VT9203-4TF30		1	1 unit	1CC	0.298
	Auxiliary conductor terminals (1 set = 3 units)	1.5 ... 2.5; 4 ... 6	Flexible Cu conductors		3VT9200-4TN30		1	1 unit	1CC	0.029
	Box terminals (1 set = 3 units)	16 ... 150	Cu cables, flexibars		3VT9200-4TC30		1	1 unit	1CC	0.251
	4-pole									
	Rear connections for the 4th pole									
	Use with 3VT9200-4RC30 connection method (1 set = 1 unit)	--	Al/Cu busbars/ cable lugs		3VT9200-4RC00		1	1 unit	1CC	0.091
	Multiple feed-in terminals for the 4th pole									
	Use with 3VT9215-4TD30 or 3VT9224-4TD30 connection method, for 1 cable (1 set = 1 unit)	1 x 25 ... 150	Cu/Al cables		3VT9215-4TD00		1	1 unit	1CC	0.074
		1 x 150 ... 240	Cu/Al cables		3VT9224-4TD00		1	1 unit	1CC	0.124
	Use with 3VT9215-4TF30 or 3VT9224-4TF30 connection method, for 2 cables (1 set = 1 unit)	2 x 25 ... 150	Cu/Al cables		3VT9215-4TF00		1	1 unit	1CC	0.169
		2 x 150 ... 240	Cu/Al cables		3VT9224-4TF00		1	1 unit	1CC	0.207
	Use with 3VT9203-4TF30 connection method, for 6 cables (1 set = 1 unit)	6 x 6 ... 35	Cu/Al cables		3VT9203-4TF00		1	1 unit	1CC	0.114

[1] Use terminal cover 3VT9200-8CB30 to increase termination point protection to IP20.

* You can order this quantity or a multiple thereof.

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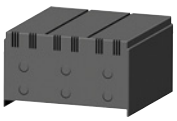
	Version	Conductor cross-sections	Connection type	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm^2								kg
	Box terminals for the 4th pole									
	Use with 3VT9200-4TC30 connection method (1 set = 1 unit)	16 ... 150	Cu cables, flexibars		3VT9200-4TC00		1	1 unit	1CC	0.089

Further accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
								kg
	Phase barriers, covers, locking devices							
	Phase barriers Included in scope of supply of switch disconnector If infeed is from below, the switch disconnectors must also be fitted on the sides of terminals 2, 4 and 6 with these phase barriers.							
	• For 3-pole version, 2 units		3VT9300-8CE30		1	1 unit	1CC	0.094
	• For 4-pole version, 1 unit for use with 3VT9300-8CE30		3VT9300-8CE00		1	1 unit	1CC	0.050
	**Terminal covers, degree of protection IP20** Increases degree of protection of termination point to IP20, e.g. when used with circular conductor terminals, intended for fixed mounting, plug-in and withdrawable versions							
	• 3-pole version		3VT9200-8CB30		1	1 unit	1CC	0.136
	• 4-pole version		3VT9200-8CB40		1	1 unit	1CC	0.195
	Locking devices for toggle levers • Allows the switch disconnector to be locked in the "manual off" position. • Locking is by means of up to 3 padlocks with a diameter of 4 ... 6 mm.		3VT9200-3HL00		1	1 unit	1CC	0.022
	Sealing devices Sealing for: • Overcurrent releases • Accessory compartment covers • Terminal covers • Manual operating mechanisms • Motorized operating mechanisms		3VT9200-8BN00		1	1 unit	1CC	0.005
	Connecting cables For connecting switch disconnector accessories for withdrawable versions (can also be used for plug-in and fixed-mounted versions)		3VT9300-4PL00		1	1 unit	1CC	0.166
	Position signaling switches For indicating the position of the switch disconnector in plug-in or withdrawable devices		3VT9300-4WL00		1	1 unit	1CC	0.020
	Coding sets Prevents use of the wrong switching unit in plug-in or withdrawable devices		3VT9200-4WN00		1	1 unit	1CC	0.014
	Covers for pushbuttons For motorized operating mechanisms; the cover may be equipped with a sealing device.		3VT9300-3MF20		1	1 unit	1CC	0.015

*** You can order this quantity or a multiple thereof.**

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3VT3 switch disconnectors up to 630 A

Selection and ordering data

	Version	Rated uninterrupted current I_u	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A							kg
3VT3 switch disconnectors									
	3-pole	630		3VT3763-2DE36-0AA0		1	1 unit	1CC	5.412
	4-pole	630		3VT3763-2EE46-0AA0		1	1 unit	1CC	6.967

Accessories

Auxiliary switches and auxiliary releases

	Rated operational voltage U_s	Frequency	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V	Hz							kg
Auxiliary switches and alarm switches									
	With NO contact (1 NO)								
	60 ... 500 AC/DC	50/60		3VT9300-2AC10		1	1 unit	1CC	0.035
	5 ... 60 AC/DC	50/60		3VT9300-2AC20		1	1 unit	1CC	0.034
	With NC contact (1 NC)								
	60 ... 500 AC/DC	50/60		3VT9300-2AD10		1	1 unit	1CC	0.036
	5 ... 60 AC/DC	50/60		3VT9300-2AD20		1	1 unit	1CC	0.036
	With double contact (2 NC)								
	60 ... 500 AC/DC	50/60		3VT9300-2AE10		1	1 unit	1CC	0.050
	5 ... 60 AC/DC	50/60		3VT9300-2AE20		1	1 unit	1CC	0.050
	With double contact (1 NO + 1 NC)								
	60 ... 500 AC/DC	50/60		3VT9300-2AF10		1	1 unit	1CC	0.051
	5 ... 60 AC/DC	50/60		3VT9300-2AF20		1	1 unit	1CC	0.048
	With double contact (2 NC)								
	60 ... 500 AC/DC	50/60		3VT9300-2AG10		1	1 unit	1CC	0.048
	5 ... 60 AC/DC	50/60		3VT9300-2AG20		1	1 unit	1CC	0.040
	Changeover contact (1 CO)								
	60 ... 250 AC/DC	50/60		3VT9300-2AH10		1	1 unit	1CC	0.037
	5 ... 60 AC/DC	50/60		3VT9300-2AH20		1	1 unit	1CC	0.036
	Leading contacts								
	250 AC	50/60		3VT9300-2AJ00		1	1 unit	1CC	0.086

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	Rated operational voltage U_s	Frequency	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V	Hz							kg
Shunt releases									
	12 DC	--		3VT9300-1SB00		1	1 unit	1CC	0.149
	24, 40, 48 AC/DC	50/60		3VT9300-1SC00		1	1 unit	1CC	0.147
	110 AC/DC	50/60		3VT9300-1SD00		1	1 unit	1CC	0.145
	230, 400, 500 AC/220 DC	50/60		3VT9300-1SE00		1	1 unit	1CC	0.148
Undervoltage releases									
	24, 40, 48 AC/DC	50/60		3VT9300-1UC00		1	1 unit	1CC	0.146
	110 AC/DC	50/60		3VT9300-1UD00		1	1 unit	1CC	0.145
	230, 400, 500 AC/220 DC	50/60		3VT9300-1UE00		1	1 unit	1CC	0.144
	With leading contact[1)]								
	24, 40, 48 AC/DC	50/60		3VT9300-1UC10		1	1 unit	1CC	0.155
	110 AC/DC	50/60		3VT9300-1UD10		1	1 unit	1CC	0.159
	230, 400, 500 AC/220 DC	50/60		3VT9300-1UE10		1	1 unit	1CC	0.151

1) Not suitable for 3VT9300-3M..0 motorized operating mechanism.

Manual operating mechanisms

	Version	Color	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
									kg
Rotary operating mechanisms									
	Manual rotary operating mechanisms								
	• Not lockable	Gray		3VT9300-3HA10		1	1 unit	1CC	0.308
	• Lockable with padlock	Gray		3VT9300-3HA20		1	1 unit	1CC	0.315
	• Lockable with padlock	Yellow label		3VT9300-3HB20		1	1 unit	1CC	0.316
	• For lateral operation, mounted on left side, not lockable	Gray		3VT9300-3HC10		1	1 unit	1CC	0.464
	• For lateral operation, mounted on right side, not lockable	Gray		3VT9300-3HD10		1	1 unit	1CC	0.466
	Handle for manual rotary operating mechanisms								
	• Not lockable	Black		3VT9300-3HE10		1	1 unit	1CC	0.079
	• Lockable with padlock	Black		3VT9300-3HE20		1	1 unit	1CC	0.080
	• Lockable with padlock	Red		3VT9300-3HF20		1	1 unit	1CC	0.080

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3VT3 switch disconnectors up to 630 A

	Version	Color	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Coupling drivers for door-coupling operating mechanism								
	For use with black handle 3VT9300-3HE...								
	• Degree of protection IP40	Black		**3VT9300-3HG10**		1	1 unit	1CC	0.210
	• Degree of protection IP66	Black		**3VT9300-3HG20**		1	1 unit	1CC	0.212
	For use with red handle 3VT9300-3HF20								
	• Degree of protection IP40	Yellow		**3VT9300-3HH10**		1	1 unit	1CC	0.210
	• Degree of protection IP66	Yellow		**3VT9300-3HH20**		1	1 unit	1CC	0.211
	Coupling drivers for door-coupling operating mechanism, can be defeated								
	For use with black handle 3VT9300-3HE..								
	• Degree of protection IP40	Black		**3VT9300-3HG30**		1	1 unit	1CC	0.213
	For use with red handle 3VT9300-3HF20								
	• Degree of protection IP40	Yellow		**3VT9300-3HH30**		1	1 unit	1CC	0.204
	Extension shafts								
	• Length 365 mm, can be shortened			**3VT9300-3HJ10**		1	1 unit	1CC	0.211
	• Length 245 ... 410 mm, extendable			**3VT9300-3HJ20**		1	1 unit	1CC	0.259

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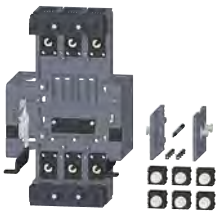
Motorized operating mechanisms

	Rated operational voltage U_s	Frequency (with AC)	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V	Hz							kg
Motorized operating mechanism with stored energy mechanism									
	With locking mechanism for 3 padlocks, degree of protection IP00								
	24 V AC/DC	50/60		3VT9300-3MJ00		1	1 unit	1CC	1.695
	48 V AC/DC	50/60		3VT9300-3ML00		1	1 unit	1CC	1.725
	110 V AC/DC	50/60		3VT9300-3MN00		1	1 unit	1CC	1.718
	230 V AC/220 V DC	50/60		3VT9300-3MQ00		1	1 unit	1CC	1.716
	Motorized operat. mech. with operat. cycle counter								
	24 V AC/DC	50/60		3VT9300-3MJ10		1	1 unit	1CC	1.750
	48 V AC/DC	50/60		3VT9300-3ML10		1	1 unit	1CC	1.762
	110 V AC/DC	50/60		3VT9300-3MN10		1	1 unit	1CC	1.745
	230 V AC/220 V DC	50/60		3VT9300-3MQ10		1	1 unit	1CC	1.750
Accessories for motorized operating mechanisms									
	Operating cycle counter with cable Length 110 cm			3VT9300-3MF10		1	1 unit	1CC	0.003
	Extension cables for motorized operating mechanism 12 cables, length 60 cm			3VT9300-3MF00		1	1 unit	1CC	0.061

Mounting accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
								kg
Plug-in base assembly kits								
	3-pole		3VT9300-4PA30		1	1 unit	1CC	3.262
	4-pole		3VT9300-4PA40		1	1 unit	1CC	4.236
Withdrawable unit kit								
	**3-pole**		3VT9300-4WA30		1	1 unit	1CC	4.984
	4-pole		3VT9300-4WA40		1	1 unit	1CC	5.936

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3VT3 switch disconnectors up to 630 A

Connection accessories

	Version	Conductor cross-sections mm²	Connection type	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Connection methods										
	3-pole									
	Front connecting bars									
	For increased pole spacing, short (1 set = 3 units)	--	Al/Cu busbars, cable lugs, flexibars		3VT9300-4ED30		1	1 unit	1CC	0.494
	For increased pole spacing, long (1 set = 3 units)	--	Al/Cu busbars, cable lugs, flexibars		3VT9300-4EE30		1	1 unit	1CC	0.651
	Front terminals Included in scope of supply of all switch disconnectors (1 set = 3 units)		Al/Cu busbars, cable lugs, flexibars		3VT9300-4TA30		1	1 unit	1CC	0.200
	Rear terminals (1 set = 3 units)	--	Al/Cu busbars, cable lugs		3VT9300-4RC30		1	1 unit	1CC	0.556
	Multiple feed-in terminals[1]									
	For 1 cable (1 set = 3 units)	1 x 25 ... 150	Cu/Al cables		3VT9315-4TD30		1	1 unit	1CC	0.336
		1 x 150 ... 240	Cu/Al cables		3VT9324-4TD30		1	1 unit	1CC	0.304
	For 2 cables (1 set = 3 units)	2 x 25 ... 150	Cu/Al cables		3VT9315-4TF30		1	1 unit	1CC	0.906
		2 x 150 ... 240	Cu/Al cables		3VT9324-4TF30		1	1 unit	1CC	0.823
	For 6 cables (1 set = 3 units)	6 x 6 ... 35	Cu/Al cables		3VT9303-4TF30		1	1 unit	1CC	0.295
	Auxiliary conductor terminals (1 set = 3 units)	1.5 ... 2.5; 4 ... 6	Flexible Cu conductors		3VT9300-4TN30		1	1 unit	1CC	0.033
	Box terminals (1 set = 3 units)	35 ... 240	Cu cables, flexibars		3VT9300-4TC30		1	1 unit	1CC	0.443
	4-pole									
	Rear connections for the 4th pole									
	Use with 3VT9300-4RC30 connection method (1 set = 1 unit)	--	Al/Cu busbars, cable lugs		3VT9300-4RC00		1	1 unit	1CC	0.198
	Multiple feed-in terminals for the 4th pole									
	Use with 3VT9315-4TD30 or 3VT9324-4TD30 connection method, for 1 cable (1 set = 1 unit)	1 x 25 ... 150	Cu/Al cables		3VT9315-4TD00		1	1 unit	1CC	0.138
		1 x 150 ... 240	Cu/Al cables		3VT9324-4TD00		1	1 unit	1CC	0.112
	Use with 3VT9315-4TF30 or 3VT9324-4TF30 connection method, for 2 cables (1 set = 1 unit)	2 x 25 ... 150	Cu/Al cables		3VT9315-4TF00		1	1 unit	1CC	0.306
		2 x 150 ... 240	Cu/Al cables		3VT9324-4TF00		1	1 unit	1CC	0.285
	Use with 3VT9303-4TF30 connection method, for 6 cables (1 set = 1 unit)	6 x 6 ... 35	Cu/Al cables		3VT9303-4TF00		1	1 unit	1CC	0.111

[1] Use terminal cover 3VT9300-8CB30 to increase termination point protection to IP20.

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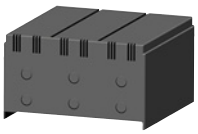
	Version	Conductor cross-sections	Connection type	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm^2								kg
	Box terminals for the 4th pole									
	Use with 3VT9300-4TC30 connection method (1 set = 1 unit)	35 ... 240	Cu cables, flexibars		3VT9300-4TC00		1	1 unit	1CC	0.159

Further accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
								kg
Phase barriers, covers, locking devices								
	Phase barriers Included in scope of supply of switch disconnector. If infeed is from below, the switch disconnectors must also be fitted on the sides of terminals 2, 4 and 6 with these phase barriers.							
	• For 3-pole version, 2 units		3VT9300-8CE30		1	1 unit	1CC	0.094
	• For 4-pole version, 1 unit for use with 3VT9300-8CE30		3VT9300-8CE00		1	1 unit	1CC	0.050
	**Terminal covers, degree of protection IP20** Increases degree of protection of termination point to IP20, e.g. when used with circular conductor terminals. Intended for fixed mounting, plug-in and draw-out versions.							
	• 3-pole version		3VT9300-8CB30		1	1 unit	1CC	0.210
	• 4-pole version		3VT9300-8CB40		1	1 unit	1CC	0.279
	Locking devices for toggle levers • Allows the switch disconnector to be locked in the "manual off" position. • Locking is by means of up to 3 padlocks with a diameter of 4 ...6 mm.		3VT9300-3HL00		1	1 unit	1CC	0.026
	Sealing devices Sealing for: • Overcurrent releases • Accessory compartment covers • Terminal covers • Manual operating mechanisms • Motorized operating mechanisms		3VT9300-8BN00		1	1 unit	1CC	0.008
	Connecting cables For connecting switch disconnector accessories for withdrawable versions (can also be used for plug-in and fixed-mounted versions)		3VT9300-4PL00		1	1 unit	1CC	0.166
	Position signaling switches For indicating the position of the switch disconnector in plug-in or withdrawable versions		3VT9300-4WL00		1	1 unit	1CC	0.020
	Coding sets Prevents use of the wrong switching unit in plug-in or withdrawable devices		3VT9300-4WN00		1	1 unit	1CC	0.015
	Covers for pushbuttons For motorized operating mechanisms; the cover may be equipped with a sealing device		3VT9300-3MF20		1	1 unit	1CC	0.015

*** You can order this quantity or a multiple thereof.**

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3VT4 switch disconnectors up to 1000 A

Selection and ordering data

	Version	Rated uninterrupted current I_u	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A							kg
3VT4 switch disconnectors									
	3-pole	1000		**3VT4710-2DE36-0AA0**		1	1 unit	1CC	20.546

For accessories, see "3VT5 Switch Disconnectors up to 1600 A" next page.

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Selection and ordering data

	Version	Rated uninterrupted current I_u	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A							kg
3VT5 switch disconnectors									
	3-pole	1600		**3VT5716-2DE36-0AA0**		1	1 unit	1CC	23.751

Accessories

Auxiliary switches and auxiliary releases

	Rated operational voltage U_s	Frequency	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V	Hz							kg
Auxiliary switches and alarm switches									
	2 x NC, 2 x NO								
	60 ... 500 AC / 60 ... 240 DC	50/60		**3VT9500-2AF10**		1	1 unit	1CC	0.065
	5 ... 60 AC/DC	50/60		**3VT9500-2AF20**		1	1 unit	1CC	0.065
Shunt releases									
	24 AC/DC	50/60		**3VT9500-1SF00**		1	1 unit	1CC	0.232
	48 AC/DC	50/60		**3VT9500-1SG00**		1	1 unit	1CC	0.228
	110 AC/DC	50/60		**3VT9500-1SH00**		1	1 unit	1CC	0.227
	230 AC/220 DC	50/60		**3VT9500-1SJ00**		1	1 unit	1CC	0.234
	400 AC	50/60		**3VT9500-1SK00**		1	1 unit	1CC	0.229
	500 AC	50/60		**3VT9500-1SL00**		1	1 unit	1CC	0.232
Undervoltage releases									
	24 AC/DC	50/60		**3VT9500-1UF00**		1	1 unit	1CC	0.241
	48 AC/DC	50/60		**3VT9500-1UG00**		1	1 unit	1CC	0.242
	110 AC/DC	50/60		**3VT9500-1UH00**		1	1 unit	1CC	0.243
	230 AC/220 DC	50/60		**3VT9500-1UJ00**		1	1 unit	1CC	0.243
	400 AC	50/60		**3VT9500-1UK00**		1	1 unit	1CC	0.227
	500 AC	50/60		**3VT9500-1UL00**		1	1 unit	1CC	0.242

*** You can order this quantity or a multiple thereof.**

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3VT5 switch disconnectors up to 1600 A

Manual operating mechanisms

	Version		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Rotary operating mechanisms									
	Manual rotary operating mechanisms								
	• Lockable with padlock	Gray		3VT9500-3HA10		1	1 unit	1CC	1.116
	Handle for manual rotary operating mechanisms								
	• Lockable with padlock	Black		3VT9500-3HE10		1	1 unit	1CC	0.290
	• Lockable with padlock	Red		3VT9500-3HF10		1	1 unit	1CC	0.294
	Coupling drivers for door-coupling operating mechanism								
	• Degree of protection IP44			3VT9500-3HG10		1	1 unit	1CC	0.272
	• Degree of protection IP66			3VT9500-3HG20		1	1 unit	1CC	0.274
	Extension shafts								
	• Length 365 mm, can be shortened			3VT9500-3HJ10		1	1 unit	1CC	0.361
Mechanical interlocks									
	Mechanical interlocks								
	• For manual operating mechanisms • For switch disconnectors, fixed-mounted versions • Both switch disconnectors must be equipped with at least one rotary operating mechanism and one handle.			3VT9500-8LA00		1	1 unit	1CC	0.904
	Mechanical interlock by means of Bowden wire								
	• For switch disconnectors, fixed-mounted versions			3VT9500-8LC10		1	1 unit	1CC	2.843

Motorized operating mechanisms

	Rated operational voltage U_s	Frequency	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	V	Hz							
Motorized operating mechanisms									
	Motorized operating mechanisms								
	110 AC/DC	50/60		3VT9500-3MN00		1	1 unit	1CC	4.460
	230 V AC/220 DC	50/60		3VT9500-3MQ00		1	1 unit	1CC	4.454
	Motorized operating mechanism with operating cycle counter								
	110 AC/DC	50/60		3VT9500-3MN10		1	1 unit	1CC	4.498
	230 V AC/220 DC	50/60		3VT9500-3MQ10		1	1 unit	1CC	4.462

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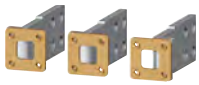
Connection accessories

	Version	Max. permissible cross-section *S*	Cable type	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm^2								kg
Connection methods										
	3-pole									
	Box terminals, double To connect 4 x 70 ... 240 mm^2 cables, two 3VT9524-4TG30 can be used for each pole. 1 set = 3 units	2 x 70 ... 240	Cu/Al cables		3VT9524-4TG30		1	1 unit	1CC	1.472
	Box terminals To connect 3 x 70 ... 240 mm^2 cables per pole, it is possible to combine connection methods 3VT9524-4TG30 and 3VT9524-4TF30 with one another. 1 set = 3 units	70 ... 240 mm	Cu/Al cables		3VT9524-4TF30		1	1 unit	1CC	0.773
	Rear terminals									
	• Up to 1000 A (1 set = 3 units)	--	Busbars		3VT9400-4RC30		1	1 unit	1CC	1.441
	• Up to 1600 A (1 set = 3 units)	--	Busbars		3VT9500-4RC30		1	1 unit	1CC	2.678
	Front terminals For withdrawable version (1 set = 3 units)	--	Busbars		3VT9500-4EF30		1	1 unit	1CC	2.591
	Rear terminals For withdrawable version (1 set = 3 units)	--	Busbars		3VT9500-4RD30		1	1 unit	1CC	3.202
	Multiple feed-in terminals [1) 2)]									
	• For 2 cables (1 set = 3 units)	150 ... 300	Cu/Al cables		3VT9532-4TF30		1	1 unit	1CC	1.048
	• For 3 cables (1 set = 3 units)	150 ... 300	Cu/Al cables		3VT9533-4TF30		1	1 unit	1CC	1.936
	• For 4 cables (1 set = 3 units)	150 ... 300	Cu/Al cables		3VT9534-4TF30		1	1 unit	1CC	1.830

1) It is necessary to use phase barriers or terminal covers (not included in the scope of supply).

2) Has auxiliary conductor terminals, 1.5 ... 6 mm^2.

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3VT5 switch disconnectors up to 1600 A

Further accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Phase barriers, covers, locking devices								
	Phase barriers If infeed is from below, the switch disconnectors must also be fitted on the sides of terminals 2, 4 and 6 with these phase barriers. Not included in scope of supply of switch disconnector.							
	• For fixed-mounted versions		3VT9500-8CE30		1	1 unit	1CC	0.260
	• For withdrawable versions		3VT9500-8CF30		1	1 unit	1CC	0.242
	Terminal covers Increases the degree of protection to IP20. To improve safety during maintenance of the switch disconnector, we recommend installation of a terminal cover on both sides of the withdrawable device.							
	• For fixed-mounted versions with rear terminals		3VT9500-8CD30		1	1 unit	1CC	0.369
	• For withdrawable versions with front terminals		3VT9500-8CC30		1	1 unit	1CC	0.220
	• For fixed-mounting versions with multiple feed-in terminal		3VT9500-8CH30		1	1 unit	1CC	0.730
	Insulation seals Designed for fixed-mounted and withdrawable versions of switch disconnectors with rear terminals. The insulation seals are used to insulate the connection methods for rear connection of the switchboard. Use of the insulation seals is recommended for all connection methods with rear terminals.							
	• For rear terminals		3VT9500-8CG30		1	1 unit	1CC	0.151
	Locking devices for toggle levers • Allows the switch disconnector to be locked in the "manual off" position. • Locking is by means of up to 3 padlocks with a diameter of 4 ... 6 mm.		3VT9500-3HL00		1	1 unit	1CC	0.052
	Sealing devices Sealing for: • Overcurrent releases • Accessory compartment covers		3VT9500-8BN00		1	1 unit	1CC	0.008
	Fixing screws • For withdrawable versions		3VT9500-4SA40		1	1 unit	1CC	0.109
	Covers for pushbuttons • For motorized operating mechanism • The cover may be equipped with a sealing device		3VT9500-3MF20		1	1 unit	1CC	0.030

* You can order this quantity or a multiple thereof.

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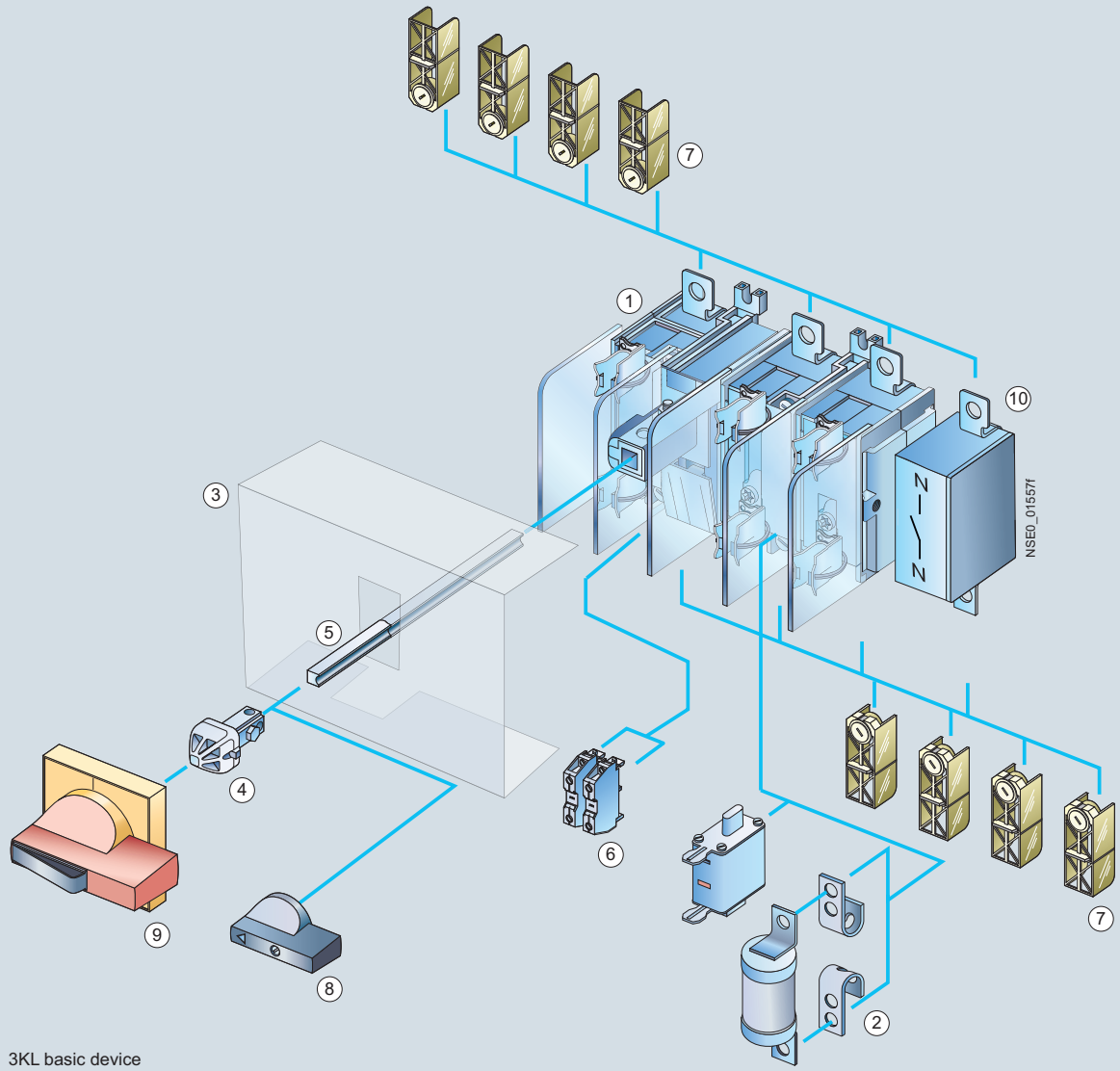
Overview



1. 3KL basic device
2. Fuses, optionally BS 88 or LV HRC fuses
3. Terminal cover, IP20 (vertical to operator side)
4. Coupling driver
5. Extension shaft
6. Standard products from the Siemens 3SB1 range are used as auxiliary switches.

All components from the switch to the actuator are provided with non-interchangeability features.

Optional

7. Single-pole terminal cover from 63 A to 630 A, IP20 (vertical to operator side)
8. 8UC9 knob for fixed mounting in standard version (black) or EMERGENCY-STOP version (red), or
9. 8UC7 door-coupling rotary operating mechanism in standard version (ti-grey) or EMERGENCY-STOP version (red/yellow)
10. 4th pole (optional)

All switch disconnectors feature double contact interruption and an isolating distance. As a result, the fuses of the switch disconnectors are de-energized in the OFF position.
Generally all 3K.5 switch disconnectors can be secured to the shaft with padlock against unauthorized reclosing.

Identical accessories for 3KA switch disconnectors and 3KL and 3KM switch disconnectors with fuses simplify stock keeping.
Please inquire about a special version with reduced values that is particularly resistant to atmospheres high in sulfur, e.g. in the paper and cellulose processing industries.

Application

3KL switch disconnectors with fuses protect against overload and short-circuits as main control and EMERGENCY-STOP switches of switchboard assemblies, distribution boards, power supply and motor outgoing feeders.
In conjunction with Siemens SITOR semiconductor fuses, they are also used in UPS systems, frequency converters and capacitor control systems.

All 3K switch disconnectors are climate-proof and meet the requirements of IEC 60947-1, IEC 60947-3 and VDE 0660 Part 107.

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Technical specifications

Standards		IEC 60947-1, IEC 60947-3, VDE 0660 Part 107						
Type		**3KL50**	**3KL52[1]**	**3KL53[1]**	**3KL55[1]**	**3KL57[1]**	**3KL61[1]**	**3KL62[1]**
Rated uninterrupted current I_u For fuse links according to DIN 43620, (when SITOR semiconductor fuses are used, a reduction of rated current is necessary, see reference to technical information at start of chapter)	A Size	63 00 and 000	125 00 and 000	160 00 and 000	250 1 and 2	400 1 and 2	630 3 and 2	800 3 and 2
Conventional free-air thermal current I_{th}[2]	A	63	125	160	250	400	630	800
Rated insulation voltage U_i	V	690	1000	1000	1000	1000	1000	1000
Rated impulse withstand voltage U_{imp}	kV	6	8	8	8	8	8	8
Rated operational voltage U_e 50/60 Hz AC DC	 V V	 690 440 (3 conducting paths series-connected) 220 (2 conducting paths series-connected) [3]						
Rated short-circuit making capacity with fuses peak value at 50/60 Hz 690 V AC	kA	220	220	220	176	176	105	105
Rated conditional short-circuit current with fuses Rms value at 50/60 Hz 690 V AC	kA	100	100	100	80	80	50	50
Max. rated current I_n of the fuses	A	80	160	160	400	400	630[4]	800
Max. permissible power loss of the installed fuse • NH • BS	 W W	 6 8 (A2/A3)	 9 11.5 (A4)	 11.5 11.5	 32 32	 45 45	 48 48	 62 60.5
Permissible let-through current of the fuses	kA	8	17	17	30[5]	30[5]	50	50
Max. permissible let-through I^2t value	kA^2s	55	223	223	1000	1000	5400	10500
Breaking capacity (infeed from the top or bottom)								
At 400 V AC • Breaking current I_c (at p.f. = 0.35, rms value) • Rated operational current I_e with AC-21A, AC-22A, AC-23A • Motor switching capacity AC-23A	 A A kW	 500 63 30	 1000 125 65	 1280 160 80	 2000 250 132	 3200 400 200	 5100 630[6] 335	 6400 800[6] 400
At 500 V AC • Breaking current I_c (at p.f. = 0.35, rms value) • Rated operational current I_e with AC-21A, AC-22A, AC-23A • Motor switching capacity AC-23A	 A A kW	 500 63 40	 1000 125 90	 1280 160 110	 2000 250 185	 3200 400 280	 5100 630[6] 425	 6400 800[6] 500
At 690 V AC • Breaking current I_c (at p.f. = 0.35, rms value) • Rated operational current I_e with AC-21A, AC-22A, AC-23A • Motor switching capacity AC-23A	 A A kW	 500 63 50	 1000 125 110	 1280 160 150	 2000 250 220	 3200 400 375	 5100 630[5] 560	 6400 800[5] 700
At 440 V DC (3 conducting paths series-connected)[7] • Breaking current I_c (L/R = 15 ms) • Rated operational current I_e for DC-23A	 A A	 250 63	 500 125	 640 160	 1000[8] 250[10]	 1600 400	 2520[9] 630[10]	 2520[9] 630[10]
Rated short-time current I_{cw} (1 s current, rms value)	kA	2.5	3.2	3.2	8	11	32	32
Permissible ambient temperature	°C °C	-25 ... +55 for operation[4], -50 ... +80 when stored						
Mechanical endurance, operating cycles		15000	15000	15000	12000	12000	3000	3000
Degree of protection		IP00/IP20 (from the operator side, with fuse and terminal covers)						
Power loss of the switch disconnector at I_{th} (plus power loss of the fuses)	W	8.5	22	36	33	86	140	225
Main conductor connections Busbar systems, max. dimensions (W x T)	mm	25 x 9	45 x 10	45 x 10	40 x 12	40 x 15	40 x 17	40 x 17
Cable lug, max. conductor cross-section (stranded)	mm^2	35	70	120	150	2 x 150 or 1 x 240	2 x 240	2 x 240
Tightening torque Terminal screws	Nm	6 ... 7.5 M6	7 ... 10 M6	18 ... 22 M8	35 ... 45 M10	35 ... 45 M10	56 M12	56 M12
Protective conductor connections Flat bars Cable lug, max. conductor cross-section (stranded)	 mm mm^2	 -- --	 -- --	 -- --	 20 x 2.5 70	 20 x 2.5 120	 -- --	 -- --

1) Technical specifications for approval on request.

2) Configuring note: Max. permissible operating temperature for fuse blades 135 °C, for connections 100 °C.

3) 110 V (one conducting path).

4) With 3KL61 for operation -25 °C ... +35 °C, at +55 °C: I_{th} = 570 A.

5) With 3ND1 switchboard protection fuse.

6) AC-23B.

7) 220 V DC (L1 and L3 series-connected) or 110 V DC (one conducting path) at DC-23A.

8) At 440 V L/R = 4 ms, at 220 V L/R = 15 ms.

9) Only DC-22A (L/R = 2.5 ms).

10) At 440 V DC-22A, at 220 V DC-23A.

Note:

For the 3KL switch disconnectors, complete kits for standard and EMERGENCY-STOP application are available for installation in the side and rear panels of control cabinets.

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Selection and ordering data

All switch disconnectors with degree of protection IP00
Conductor connecting screws and fuse partitions are generally included in the scope of supply.

	Rated uninterrupted current I_u	LV HRC fuse links[1] acc. to DIN 43620[2]		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		Size	Operational class							
	A									kg
Complete versions with 8UC7 door-coupling rotary operating mechanism (black handle)										
	3-pole for NH fuse systems									
	63	00 and 000	gG, aM		3KL5030-1GB01		1	1 unit	1CL	1.469
	125	00 and 000	gG, aM		3KL5230-1GB01		1	1 unit	1CL	2.369
	160	00 and 000	gG, aM		3KL5330-1GB01		1	1 unit	1CL	2.500
	250	1 and 2	gG, aM		3KL5530-1GB01		1	1 unit	1CL	6.043
	400	2 and 1	gG, aM		3KL5730-1GB01		1	1 unit	1CL	6.248
	630	3 and 2	gG, aM		3KL6130-1GB00		1	1 unit	1CL	18.680
	630[3]	3 and 2[3]	gG, aM[3]		3KL6130-1GB02		1	1 unit	1CL	16.207
	800[3]	3 and 2[3]	gG, aM[3]		3KL6230-1GB02		1	1 unit	1CL	17.271
	4-pole for NH fuse systems									
	63	00 and 000	gG, aM		3KL5040-1GB01		1	1 unit	1CL	2.578
	125	00 and 000	gG, aM		3KL5240-1GB01		1	1 unit	1CL	2.592
	160	00 and 000	gG, aM		3KL5340-1GB01		1	1 unit	1CL	2.733
	250	1 and 2	gG, aM		3KL5540-1GB01		1	1 unit	1CL	6.618
	400	2 and 1	gG, aM		3KL5740-1GB01		1	1 unit	1CL	6.836
	630	3 and 2	gG, aM		3KL6140-1GB00		1	1 unit	1CL	17.340
	3-pole for fuses acc. to BS 88									
	63	Form A2/A3			3KL5030-1GG01		1	1 unit	1CL	1.391
	125	Form A2/A3			3KL5230-1GG01		1	1 unit	1CL	2.325
	125	Form A4			3KL5230-1GJ01		1	1 unit	1CL	2.351
	160	Form A4			3KL5330-1GJ01		1	1 unit	1CL	2.529
	250	Form B1-B3			3KL5530-1GG01		1	1 unit	1CL	4.500
	400	Form B1-B3			3KL5730-1GG01		1	1 unit	1CL	6.538
	630	Form C1-C3			3KL6130-1GG00		1	1 unit	1CL	17.880
	4-pole for fuses acc. to BS 88									
	63	Form A2/A3			3KL5040-1GG01		1	1 unit	1CL	2.529
	125	Form A2/A3			3KL5240-1GG01		1	1 unit	1CL	2.522
	125	Form A4			3KL5240-1GJ01		1	1 unit	1CL	2.603
	160	Form A4			3KL5340-1GJ01		1	1 unit	1CL	2.749
	250	Form B1-B3			3KL5540-1GG01		1	1 unit	1CL	6.616
	400	Form B1-B3			3KL5740-1GG01		1	1 unit	1CL	7.090
	630	Form C1-C3			3KL6140-1GG00		1	1 unit	1CL	17.740
Basic switch versions without handle										
3KL5230-1AB01	**3-pole for NH fuse systems**									
	63	00 and 000	gG, aM	►	3KL5030-1AB01		1	1 unit	1CL	1.014
	125	00 and 000	gG, aM	►	3KL5230-1AB01		1	1 unit	1CL	1.965
	160	00 and 000	gG, aM	►	3KL5330-1AB01		1	1 unit	1CL	2.140
	250	1 and 2	gG, aM	►	3KL5530-1AB01		1	1 unit	1CL	5.344
	400	2 and 1	gG, aM	►	3KL5730-1AB01		1	1 unit	1CL	5.390
	630	3 and 2	gG, aM		3KL6130-1AB0		1	1 unit	1CL	17.640
	630[3]	3 and 2[3]	gG, aM[3]		3KL6130-1AB02		1	1 unit	1CL	14.720
	800[3]	3 and 2[3]	gG, aM[3]		3KL6230-1AB02		1	1 unit	1CL	16.120
3KL5240-1AB01	**4-pole for NH fuse systems**									
	63	00 and 000	gG, aM		3KL5040-1AB01		1	1 unit	1CL	2.169
	125	00 and 000	gG, aM		3KL5240-1AB01		1	1 unit	1CL	2.168
	160	00 and 000	gG, aM		3KL5340-1AB01		1	1 unit	1CL	2.344
	250	1 and 2	gG, aM		3KL5540-1AB01		1	1 unit	1CL	5.577
	400	2 and 1	gG, aM		3KL5740-1AB01		1	1 unit	1CL	5.880
	630	3 and 2	gG, aM		3KL6140-1AB00		1	1 unit	1CL	16.520
3KL5230-1AJ01	**3-pole for fuses acc. to BS 88**									
	63	Form A2/A3			3KL5030-1AG01		1	1 unit	1CL	0.975
	125	Form A2/A3			3KL5230-1AG01		1	1 unit	1CL	1.939
	125	Form A4			3KL5230-1AJ01		1	1 unit	1CL	1.975
	160	Form A4			3KL5330-1AJ01		1	1 unit	1CL	2.170
	250	Form B1-B3			3KL5530-1AG01		1	1 unit	1CL	5.051
	400	Form B1-B3			3KL5730-1AG01		1	1 unit	1CL	5.666
	630	Form C1-C3			3KL6130-1AG00		1	1 unit	1CL	15.075

Fuse monitoring through 5TT3170 safety monitor with a floating signaling contact 1 NO, See chapter "Fuse Systems"

Footnotes, see page 7/106.

*** You can order this quantity or a multiple thereof.**

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Floor mounting

	Rated uninterrupted current I_u	LV HRC fuse links[1] acc. to DIN 43620[2] Size	Operational class	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A									kg
3KL5240-1AJ01 with fuses	**4-pole for fuses acc. to BS 88**									
	63	Form A2/A3			3KL5040-1AG01		1	1 unit	1CL	2.075
	125	Form A2/A3			3KL5240-1AG01		1	1 unit	1CL	2.161
	125	Form A4			3KL5240-1AJ01		1	1 unit	1CL	2.230
	160	Form A4			3KL5340-1AJ01		1	1 unit	1CL	2.390
	250	Form B1-B3			3KL5540-1AG01		1	1 unit	1CL	5.624
	400	Form B1-B3			3KL5740-1AG01		1	1 unit	1CL	6.134
	630	Form C1-C3			3KL6140-1AG00		1	1 unit	1CL	17.020
8UC7 EMERGENCY-STOP door-coupling rotary operating mechanisms (red handle, yellow indicator plate) for basic switch versions without handle										
8UC7121-3BB10	**3-pole for NH fuse systems**									
	63	00 and 000	gG, aM		8UC7121-3BB10		1	1 unit	1CL	0.358
	125	00 and 000	gG, aM		8UC7222-3BB20		1	1 unit	1CL	0.420
	160	00 and 000	gG, aM		8UC7222-3BB20		1	1 unit	1CL	0.420
	250	1 and 2	gG, aM		8UC7323-3BB30		1	1 unit	1CL	1.002
	400	2 and 1	gG, aM		8UC7323-3BB30		1	1 unit	1CL	1.002
	630	3 and 2	gG, aM		8UC7424-3BB44 +		1	1 unit	1CL	1.134
				►	8UC9253		1	1 unit	1CL	0.113
	800	3 and 2	gG, aM		8UC7424-3BB44 +		1	1 unit	1CL	1.134
				►	8UC9253		1	1 unit	1CL	0.113
	4-pole for NH fuse systems									
	63	00 and 000	gG, aM		8UC7222-3BB20		1	1 unit	1CL	0.420
	125	00 and 000	gG, aM		8UC7222-3BB20		1	1 unit	1CL	0.420
	160	00 and 000	gG, aM		8UC7222-3BB20		1	1 unit	1CL	0.420
	250	1 and 2	gG, aM		8UC7323-3BB30		1	1 unit	1CL	1.002
	400	2 and 1	gG, aM		8UC7323-3BB30		1	1 unit	1CL	1.002
	630	3 and 2	gG, aM		8UC7424-3BB44 +		1	1 unit	1CL	1.134
				►	8UC9253		1	1 unit	1CL	0.113
	3-pole for fuses acc. to BS 88									
	63	Form A2/A3			8UC7121-3BB10		1	1 unit	1CL	0.358
	125	Form A2/A3			8UC7222-3BB20		1	1 unit	1CL	0.420
	125	Form A4			8UC7222-3BB20		1	1 unit	1CL	0.420
	160	Form A4			8UC7222-3BB20		1	1 unit	1CL	0.420
	250	Form B1-B3			8UC7323-3BB30		1	1 unit	1CL	1.002
	400	Form B1-B3			8UC7323-3BB30		1	1 unit	1CL	1.002
	630	Form C1-C3			8UC7424-3BB44 +		1	1 unit	1CL	1.134
				►	8UC9253		1	1 unit	1CL	0.113
	800	Form C1-C3			8UC7424-3BB44 +		1	1 unit	1CL	1.134
				►	8UC9253		1	1 unit	1CL	0.113
	4-pole for fuses acc. to BS 88									
	63	Form A2/A3			8UC7222-3BB20		1	1 unit	1CL	0.420
	125	Form A2/A3			8UC7222-3BB20		1	1 unit	1CL	0.420
	125	Form A4			8UC7222-3BB20		1	1 unit	1CL	0.420
	160	Form A4			8UC7222-3BB20		1	1 unit	1CL	0.420
	250	Form B1-B3			8UC7323-3BB30		1	1 unit	1CL	1.002
	400	Form B1-B3			8UC7323-3BB30		1	1 unit	1CL	1.002
	630	Form C1-C3			8UC7424-3BB44 +		1	1 unit	1CL	1.134
				►	8UC9253		1	1 unit	1CL	0.113

Fuse monitoring through 5TT3170 safety monitor with a floating signaling contact 1 NO, see chapter "Fuse Systems".

Footnotes for page 7/105 and page 7/106:

1) Silver-plated fuse blades. Silver-plated isolating blades can be used if desired.

2) For the assignment of semiconductor fuses, see page 7/111

3) With SITOR 3NE fuse links cULus-approved.

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Selection and ordering data

All switch disconnectors with degree of protection IP00
Conductor connecting screws and fuse partitions are generally included in the scope of supply.

Rated uninterrupted current I_u	LV HRC fuse links[1] acc. to DIN 43620[2] Size	Operational class	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
A									kg
Assembly kits (IP40) comprising: Lockable handle, cover for NH fuse systems (locked in ON state) and three terminal covers for infeed side for basic switch versions without handle									
3-pole, assembly kits for mounting in control cabinet side panels									
• Black handle									
63	00	gG, aM		**3KX3516-3AA**		1	1 unit	1CL	0.667
125	00	gG, aM		**3KX3526-3AA**		1	1 unit	1CL	0.840
160	00	gG, aM		**3KX3536-3AA**		1	1 unit	1CL	0.850
250	1 and 2	gG, aM		**3KX3556-3AA**		1	1 unit	1CL	1.700
400	2 and 1	gG, aM		**3KX3556-3AA**		1	1 unit	1CL	1.700
• EMERGENCY-STOP red handle									
63	00	gG, aM		**3KX3516-3BA**		1	1 unit	1CL	0.620
125	00	gG, aM		**3KX3526-3BA**		1	1 unit	1CL	0.860
160	00	gG, aM		**3KX3536-3BA**		1	1 unit	1CL	0.870
250	1 and 2	gG, aM		**3KX3556-3BA**		1	1 unit	1CL	1.700
400	2 and 1	gG, aM		**3KX3556-3BA**		1	1 unit	1CL	1.700

Fuse monitoring through 5TT3170 safety monitor with a floating signaling contact 1 NO, see chapter "Fuse Systems"

1) Silver-plated fuse blades. Silver-plated isolating blades can be used if desired.

2) For the assignment of semiconductor fuses, see page 7/111

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Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
3KL50 30								
3KX3552-3DA01	**Terminal covers** For 3-pole devices (1 set = 6 units)	►	**3KX3552-3DA01**		1	1 unit	1CL	0.080
3KX35.7-3AA	**Fuse covers** (interlock only detachable in the OFF position)	►	**3KX3517-3AA**		1	1 unit	1CL	0.042
	Cover IP20 For 3-pole devices	►	**3KX3507-0CA02**		1	1 unit	1CL	0.393
	Fuse partitions (1 set = 5 units)	►	**3KX3507-0AA01**		1	1 unit	1CL	0.045
3KX3507-0BA01	**Lyre-shaped fuse covers** (1 set = 6 units)		**3KX3507-0BA01**		1	1 unit	1CL	0.033
	Door-coupling rotary operating mechanisms IP65							
	Black handle, shaft 300 mm		**8UC7111-1BB10**		1	1 unit	1CL	0.356
	EMERGENCY-STOP (yellow/red), shaft 300 mm		**8UC7121-3BB10**		1	1 unit	1CL	0.358
	Operating mechanisms for fixed mounting Black handle, shaft 250 mm	►	**3KX3516-1AA**		1	1 unit	1CL	0.080
	Extension shaft 300 mm long		**8UC6031**		1	1 unit	1CL	0.068
	Extension shaft 600 mm long		**8UC6081**		1	1 unit	1CL	0.136
	Shaft connecting pieces		**8UC6021**		1	1 unit	1CL	0.027
3SB1400-0A	**Auxiliary switches**							
	1 NO + 1 NC		**3SB1400-0A**		1	1 unit	41J	0.019
	2 NO		**3SB1400-0G**		1	1 unit	41J	0.019
	2 NC		**3SB1400-0H**		1	1 unit	41J	0.020
	Fuse monitor connections (1 set = 6 units)		**3KX3505-0AA**		1	1 unit	1CL	0.021

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	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
3KL5040/3KL52/3KL53								
3KX3552-3DA01	**Terminal covers** For 3-pole devices (1 set = 6 units)							
	• 3KL52	►	**3KX3552-3DA01**		1	1 unit	1CL	0.080
	• 3KL53	►	**3KX3553-3DA01**		1	1 unit	1CL	0.151
	For 4-pole devices (1 set = 8 units)							
	• 3KL5040, 3KL52		**3KX3552-3DB01**		1	1 unit	1CL	0.107
	• 3KL53		**3KX3553-3DB01**		1	1 unit	1CL	0.190
3KX35.7-3AA	**Fuse covers**[1] (interlock only detachable in the OFF position)	►	**3KX3527-3AA**		1	1 unit	1CL	0.080
	Cover IP20 For 3KL52 3-pole devices	►	**3KX3527-0CA02**		1	1 unit	1CL	0.699
	Cover IP20 For 3KL53 3-pole devices	►	**3KX3537-0CA02**		1	1 unit	1CL	0.755
	Fuse partitions (1 set = 5 units)	►	**3KX3507-0AA01**		1	1 unit	1CL	0.045
3KX3507-0BA01	**Lyre-shaped fuse covers** (1 set = 6 units)		**3KX3507-0BA01**		1	1 unit	1CL	0.033
	Door-coupling rotary operating mechanisms IP65							
	Black handle, shaft 300 mm		**8UC7212-1BB20**		1	1 unit	1CL	0.420
	EMERGENCY-STOP (yellow/red), shaft 300 mm		**8UC7222-3BB20**		1	1 unit	1CL	0.420
	Operating mechanisms for fixed mounting Black handle, shaft 250 mm	►	**3KX3536-1AA**		1	1 unit	1CL	0.170
	Extension shaft 300 mm long		**8UC6032**		1	1 unit	1CL	0.135
	Extension shaft 600 mm long		**8UC6082**		1	1 unit	1CL	0.265
	Shaft connecting pieces		**8UC6022**		1	1 unit	1CL	0.022
3SB1400-0A	**Auxiliary switches**							
	1 NO + 1 NC		**3SB1400-0A**		1	1 unit	41J	0.019
	2 NO		**3SB1400-0G**		1	1 unit	41J	0.019
	2 NC		**3SB1400-0H**		1	1 unit	41J	0.020
	1 NO + 1 NC, 20 ms leading		**3KX3552-3EA01**		1	1 unit	1CL	0.022
	Fuse monitor connections (1 set = 6 units)		**3KX3505-0AA**		1	1 unit	1CL	0.021

[1] For 3KX3527-3AA: Not suitable for use with type A4 BS fuses.

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Accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
3KL55/3KL57								
	Terminal covers							
	For 3-pole devices (1 set = 6 units)	►	3KX3557-3DA01		1	1 unit	1CL	0.293
	For 4-pole devices (1 set = 8 units)		3KX3557-3DB01		1	1 unit	1CL	0.385
3KX35.7-3AA	**Fuse covers** (interlock only detachable in the OFF position)	►	3KX3557-3AA		1	1 unit	1CL	0.220
	Cover IP20 For 3-pole devices	►	3KX3557-0CA02		1	1 unit	1CL	1.435
	Fuse partitions (1 set = 5 units)	►	3KX3557-0AA01		1	1 unit	1CL	0.163
	Door-coupling rotary operating mechanisms IP65							
	Black handle, shaft 300 mm		8UC7313-1BB30		1	1 unit	1CL	0.941
	EMERGENCY-STOP (yellow/red), shaft 300 mm		8UC7323-3BB30		1	1 unit	1CL	1.002
3KX3176-1E	**Operating mechanisms for fixed mounting, size 3** Black handle, shaft 250 mm	►	3KX3176-1E		1	1 unit	1CL	0.287
	Extension shaft 300 mm long		8UC6033		1	1 unit	1CL	0.215
	Extension shaft 600 mm long		8UC6083		1	1 unit	1CL	0.424
	Shaft connecting pieces		8UC6023		1	1 unit	1CL	0.084
	Auxiliary switches							
3SB1400-0A	1 NO + 1 NC		3SB1400-0A		1	1 unit	41J	0.019
	2 NO		3SB1400-0G		1	1 unit	41J	0.019
	2 NC		3SB1400-0H		1	1 unit	41J	0.020
	1 NO + 1 NC, 20 ms leading		3KX3552-3EA01		1	1 unit	1CL	0.022
	Fuse monitor connections (1 set = 6 units)		3KX3505-0AA		1	1 unit	1CL	0.021
3KL61/3KL62								
	Terminal covers							
	For 3-pole devices (1 set = 6 units)	►	3KX3561-3DA01		1	1 unit	1CL	0.281
	For 4-pole devices (1 set = 8 units)		3KX3561-3DB01		1	1 unit	1CL	0.380
	Fuse covers							
	Cover plate		3KX3561-0AA00		1	1 unit	1CL	0.376
	Complete covers[1]		3KX3561-1AA00		1	1 unit	1CL	0.360
	Door-coupling rotary operating mechanisms IP65							
	Black handle, shaft 300 mm		8UC7414-1BB44 +		1	1 unit	1CL	1.204
		►	8UC9253		1	1 unit	1CL	0.113
	EMERGENCY-STOP (yellow/red), shaft 300 mm		8UC7424-3BB44 +		1	1 unit	1CL	1.134
8UC9253		►	8UC9253		1	1 unit	1CL	0.113
	Operating mechanisms for fixed mounting, size 5 Black handle, shaft 250 mm	►	3KX3616-1A		1	1 unit	1CL	0.500
	Extension shaft 300 mm long		8UC6034		1	1 unit	1CL	0.316
	Extension shaft 600 mm long		8UC6084		1	1 unit	1CL	0.628
	Shaft connecting pieces		8UC6024		1	1 unit	1CL	0.078
	Auxiliary switches [2]							
	1 NO + 1 NC		3KX3612-1B		1	1 unit	1CL	0.138

[1] Only for NH fuse systems.

[2] For more 3SB3400-0 contact blocks with other contact types, see Catalog IC 10, chapter "Commanding and Signaling Devices".

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Overview

The 3KL switch disconnectors with fuses are suitable for all fuses in LV HRC design, see chapter "Fuse Systems".
SITOR semiconductor fuses in LV HRC design can also be used, although it must be noted that, compared to cable and line protection fuses, these get much hotter during operation. For this reason, the fuse must be operated below the rated current I_n of the device (derating) when installed in a closed switching device.

The following table shows the permissible load currents of the SITOR semiconductor fuses for installation in 3KL. The values were determined using the conductor cross-sections specified in the table.

SITOR semiconductor fuses for 3KL fuse switch disconnectors: Assignment table

SITOR semiconductor fuse data						**Permissible load currents of fuse when installed in 3KL for floor mounting**					
						Type 3KL			**Alternative type – 3KL**		
Type [1) 2)]	Rated current I_n	Rated voltage [3)]	Operational class	Size	Required conductor cross-section Cu	Type	Size	Permissible load current [4)]	Type	Size	Permissible load current [4)]
	A	V AC			mm²			A			A
3NC423..	150	500	gR	3	70	3KL61	3	145	3KL62	3	150
3NC425..	200	500	gR	3	95	3KL61	3	180	3KL62	3	190
3NC427..	250	500	gR	3	120	3KL61	3	225	3KL62	3	240
3NC428..	300	500	gR	3	185	3KL61	3	255	3KL62	3	270
3NC431..	350	500	gR	3	240	3KL61	3	330	3KL62	3	345
3NC432..	400	500	aR	3	240	3KL61	3	400	3KL62	3	400
3NC3336-1	630	1000	aR	3	2x (40x5)	3KL62	3	500	3KL61	3	480
3NC3337-1	710	1000	aR	3	2x (50x5)	3KL62	3	540	--	--	--
3NC3338-1	800	1000	aR	3	2x (40x8)	3KL62	3	600	--	--	--
3NC3340-1	900	1000	aR	3	2x (40x8)	3KL62	3	650	--	--	--
3NC3341-1	1000	1000	aR	3	2x (50x8)	3KL62	3	720	--	--	--
3NC3342-1	1100	800	aR	3	2x (50x8)	3KL62	3	800	--	--	--
3NC3343-1	1250	800	aR	3	2x (50x8)	3KL62	3	800	--	--	--
3NC3430-1	315	1250	aR	3	2x95	3KL61	3	285	3KL62	3	300
3NC3432-1	400	1250	aR	3	2x120	3KL61	3	365	3KL62	3	380
3NC3434-1	500	1250	aR	3	2x150	3KL61	3	425	3KL62	3	450
3NC3436-1	630	1250	aR	3	2x (40x5)	3KL61	3	500	3KL62	3	540
3NC3438-1	800	1100	aR	3	2x (40x8)	3KL62	3	650	--	--	--
3NC8423..	150	660	gR	3	70	3KL61	3	135	3KL62	3	140
3NC8425..	200	660	gR	3	95	3KL61	3	180	3KL62	3	190
3NC8427..	250	660	gR	3	120	3KL61	3	225	3KL62	3	240
3NC8431..	350	660	gR	3	240	3KL61	3	300	3KL62	3	315
3NC8434..	500	660	gR	3	2x 150	3KL61	3	425	3KL62	3	450
3NC8444..	1000	600	aR	3	2x (60x6)	3KL62	3	800	3KL61	3	630
3NE1020-2	80	690	gR	00	25	3KL52	00	80	3KL53	00	80
3NE1021-0	100	690	gS	00	35	3KL52	00	100	3KL53	00	100
3NE1021-2	100	690	gR	00	35	3KL52	00	100	3KL53	00	100
3NE1022-0	125	690	gS	00	50	3KL52	00	125	3KL53	00	125
3NE1022-2	125	690	gR	00	50	3KL52	00	125	3KL53	00	125
3NE1224-0	160	690	gS	1	70	3KL55	1	160	3KL57	2	160
3NE1224-2/-3	160	690	gR	1	70	3KL55	1	160	3KL57	2	160
3NE1225-0	200	690	gS	1	95	3KL55	1	200	3KL57	2	200
3NE1225-2/-3	200	690	gR	1	95	3KL55	1	200	3KL57	2	200
3NE1227-0	250	690	gS	1	120	3KL55	1	250	3KL57	2	250
3NE1227-2/-3	250	690	gR	1	120	3KL55	1	245	3KL57	2	250
3NE1230-0	315	690	gS	1	2x 70	3KL57	2	315	--	--	--
3NE1230-2/-3	315	690	gR	1	2x 70	3KL57	2	280	--	--	--
3NE1331-0	350	690	gS	2	2x 95	3KL57	2	330	3KL61	3	350
3NE1331-2/-3	350	690	gR	2	2x 95	3KL57	2	300	3KL61	3	350
3NE1332-0	400	690	gS	2	2x 95	3KL57	2	375	3KL61	3	400
3NE1332-2/-3	400	690	gR	2	2x 95	3KL57	2	340	3KL61	3	400
3NE1333-0	450	690	gS	2	2x 120	3KL61	3	450	3KL62	3	450
3NE1333-2/-3	450	690	gR	2	2x 120	3KL61	3	450	3KL62	3	450
3NE1334-0	500	690	gS	2	2x 120	3KL61	3	500	3KL62	3	500
3NE1334-2/-3	500	690	gR	2	2x 120	3KL61	3	500	3KL62	3	500
3NE1435-0	560	690	gS	3	2x 150	3KL61	3	560	3KL62	3	560
3NE1435-2/-3	560	690	gR	3	2x 150	3KL61	3	560	3KL62	3	560
3NE1436-0	630	690	gS	3	2x 185	3KL61	3	630	3KL62	3	630

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Fuses

SITOR semiconductor fuse data						Permissible load currents of fuse when installed in 3KL for floor mounting					
						Type 3KL			Alternative type – 3KL		
Type [1) 2)]	Rated current I_n	Rated voltage [3)]	Operational class	Size	Required conductor cross-section Cu	Type	Size	Permissible load current [4)]	Type	Size	Permissible load current [4)]
	A	V AC			mm²			A			A
3NE1436-2/-3	630	690	gR	3	2x 185	3KL61	3	615	3KL62	3	630
3NE1437-0	710	690	gS	3	2x (40x5)	3KL61	3	630	3KL62	3	710
3NE1437-1	710	600	gR	3	2x (40x5)	3KL61	3	630	3KL62	3	710
3NE1437-2/-3	710	690	gR	3	2x (40x5)	3KL61	3	630	3KL62	3	700
3NE1438-0	800	690	gS	3	2x (50x5)	3KL61	3	630	3KL62	3	800
3NE1438-1	800	600	gR	3	2x (50x5)	3KL61	3	630	3KL62	3	800
3NE1438-2/-3	800	690	gR	3	2x (50x5)	3KL61	3	630	3KL62	3	760
3NE1447-2/-3	670	690	gR	3	2x (40x5)	3KL61	3	630	3KL62	3	670
3NE1448-2/-3	850	690	gR	3	2x (40x8)	3KL61	3	630	3KL62	3	790
3NE1802-0	40	690	gS	000	10	3KL50	00	40	3KL52	00	40
3NE1803-0	35	690	gS	000	6	3KL50	00	35	3KL52	00	35
3NE1813-0	16	690	gS	000	1.5	3KL50	00	16	3KL52	00	16
3NE1814-0	20	690	gS	000	2.5	3KL50	00	20	3KL52	00	20
3NE1815-0	25	690	gS	000	4	3KL50	00	25	3KL52	00	25
3NE1817-0	50	690	gS	000	10	3KL50	00	50	3KL52	00	50
3NE1818-0	63	690	gS	000	16	3KL50	00	63	3KL52	00	63
3NE1820-0	80	690	gS	000	25	3KL52	00	80	--	--	--
3NE3221	100	1000	aR	1	35	3KL55	1	90	3KL57	2	95
3NE3222	125	1000	aR	1	50	3KL55	1	110	3KL57	2	115
3NE3224	160	1000	aR	1	70	3KL55	1	140	3KL57	2	150
3NE3225	200	1000	aR	1	95	3KL55	1	175	3KL57	2	180
3NE3227	250	1000	aR	1	120	3KL55	1	210	3KL57	2	220
3NE3230-0B	315	1000	aR	1	185	3KL57	2	240	--	--	--
3NE3231	350	1000	aR	1	240	3KL57	2	265	--	--	--
3NE3232-0B	400	1000	aR	1	240	3KL57	2	290	--	--	--
3NE3233	450	1000	aR	1	2x 150	3KL57	2	320	--	--	--
3NE3332-0B	400	1000	aR	2	240	3KL61	3	340	3KL62	3	360
3NE3333	450	1000	aR	2	2x 150	3KL61	3	380	3KL62	3	400
3NE3334-0B	500	1000	aR	2	2x 150	3KL61	3	440	3KL62	3	470
3NE3335	560	1000	aR	2	2x 185	3KL61	3	500	3KL62	3	530
3NE3336	630	1000	aR	2	2x 185	3KL61	3	540	3KL62	3	580
3NE3337-8	710	900	aR	2	2x (40x5)	3KL61	3	600	3KL62	3	640
3NE3338-8	800	800	aR	2	2x 240	3KL61	3	630	3KL62	3	720
3NE3340-8	900	690	aR	2	2x (40x8)	3KL61	3	630	3KL62	3	800
3NE4101	32	1000	gR	0	6	3KL55	1	32	--	--	--
3NE4102	40	1000	gR	0	10	3KL55	1	40	--	--	--
3NE4117	50	1000	gR	0	10	3KL55	1	50	--	--	--
3NE4118	63	1000	aR	0	16	3KL55	1	63	--	--	--
3NE4120	80	1000	aR	0	25	3KL55	1	80	--	--	--
3NE4121	100	1000	aR	0	35	3KL55	1	95	--	--	--
3NE4122	125	1000	aR	0	50	3KL55	1	120	--	--	--
3NE4124	160	1000	aR	0	70	3KL55	1	150	--	--	--
3NE4327-0B	250	800	aR	2	150	3KL57	2	175	3KL61	3	200
3NE4330-0B	315	800	aR	2	240	3KL57	2	230	3KL61	3	260
3NE4333-0B	450	800	aR	2	2x (30x5)	3KL57	2	340	3KL61	3	370
3NE4334-0B	500	800	aR	2	2x (30x5)	3KL61	3	425	3KL62	3	450
3NE4337	710	800	aR	2	2x (50x5)	3KL61	3	600	3KL62	3	630
3NE8015-1	25	690	gR	00	4	3KL50	00	25	3KL52	00	25
3NE8003-1	35	690	gR	00	6	3KL50	00	33	3KL52	00	35
3NE8017-1	50	690	gR	00	10	3KL50	00	45	3KL52	00	50
3NE8018-1	63	690	gR	00	16	3KL50	00	54	3KL52	00	60
3NE8020-1	80	690	aR	00	25	3KL52	00	68	--	--	--
3NE8021-1	100	690	aR	00	35	3KL52	00	89	--	--	--
3NE8022-1	125	690	aR	00	50	3KL52	00	106	--	--	--
3NE8024-1	160	690	aR	00	70	3KL52	00	130[5)]	--	--	--

1) Due to the mechanical stress on the relatively long fuse blades, SITOR 3NE41 semiconductor fuses should only be switched occasionally and only at zero current.

2) Permissible load currents for 3NE8…-0MK see Configuration Manual "Fuse Systems", or on request

3) Fuses with a rated voltage of > 690 V may only be operated at max. 690 V (rated voltage of the 3KL) when installed in 3KL.

4) In the case of cyclic loads, the currents may have to be further reduced (precise values on request).

5) The fuse can also be operated at a higher rated uninterrupted current than the 125 A current of the 3KL52. However, in this case, the 3KL52 must not be switched under load (utilization category AC-20)

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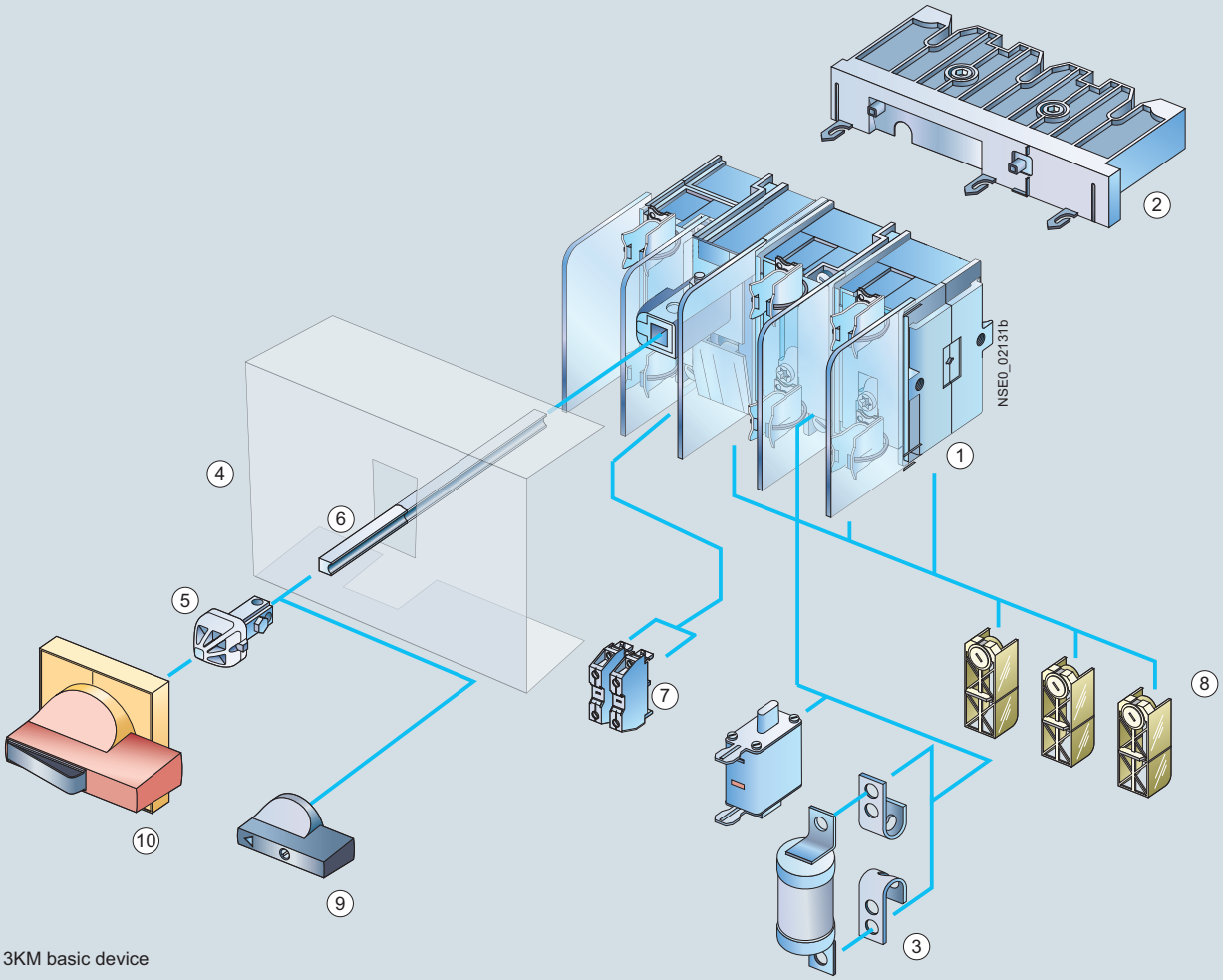
Overview



1. 3KM basic device
2. Plug-in contact strip for 3KM (part of basic device)
3. Fuses, optionally BS 88 or LV HRC fuses
4. Terminal cover, IP20 (vertical to operator side)
5. Coupling driver
6. Extension shaft
7. Standard products from the Siemens 3SB1 range are used as auxiliary switches.

All components from the switch to the actuator are provided with non-interchangeability features.

Optional

8. Single-pole terminal cover from 63 A to 630 A, IP20 (vertical to operator side)
9. 8UC9 knob for fixed mounting in standard version (black) or EMERGENCY-STOP version (red), or
10. 8UC7 door-coupling rotary operating mechanism in standard version (ti-grey) or EMERGENCY-STOP version (red/yellow)

All switch disconnectors feature double contact interruption and an isolating distance. As a result, the fuses are de-energized when the switch disconnectors are in the disconnected position.

The 3KM switch disconnectors with fuses also feature an isolating plug connector. This facilitates mounting and contact establishment in motor control centers (MCCs) in conjunction with vertical busbars. Generally all 3K.5 switch disconnectors can be secured to the shaft with padlock against unauthorized reclosing.

Identical accessories for 3KA switch disconnectors and for 3KL and 3KM switch disconnectors with fuses simplify stock keeping. Please inquire about a special variant with reduced values that is particularly resistant to atmospheres high in sulfur, e.g. in the paper and cellulose processing industries.

Application

3KM switch disconnectors with fuses protect against overload and short-circuits as main control and EMERGENCY-STOP switches of switchboard assemblies, distribution boards, power supply and motor outgoing feeders.
In conjunction with SITOR semiconductor fuses, they are also used in UPS systems, frequency converters and capacitor control systems.

All 3K switch disconnectors are climate-proof and meet the requirements of IEC 60947-1, IEC 60947-3 and VDE 0660 Part 107.

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Technical specifications

Standards		IEC 60947-1, IEC 60947-3, VDE 0660 Part 107				
Type		**3KM50**	**3KM52**	**3KM53**	**3KM55**	**3KM57**
Rated uninterrupted current I_u For fuse links according to DIN 43620, (when SITOR semiconductor fuses are used, a reduction of rated current is necessary, see reference to technical information at start of chapter)	A Size	63 00 and 000	125 00 and 000	160 00 and 000	250 1 and 2	400 1 and 2
Conventional free-air thermal current I_{th} [1]	A	63	125	160	250	400
Rated insulation voltage U_i	V	690	1000	1000	1000	1000
Rated impulse withstand voltage U_{imp}	kV	6	8	8	8	8
Rated operational voltage U_e						
50/60 Hz AC	V	690				
DC	V V	440 (3 conducting paths series-connected) 220 (2 conducting paths series-connected) [2]				
Rated short-circuit making capacity with fuses (peak value, at 50/60 Hz 690 V AC)	kA	220	220	220	176	176
Rated conditional short-circuit current with fuses At 50/60 Hz 690 V AC (rms value)	kA	100	100	100	80	80
Max. rated current I_n of the fuses	A	80	160	160	400	400
Max. permissible power loss of the installed fuse						
• NH	W	6	9	11.5	32	45
• BS	W	8 (A2/A3)	11.5 (A4)	11.5	32	45
Permissible let-through current of the fuses	kA	8	17	17	30 [3]	30 [3]
Maximum permissible let-through I^2t value	kA^2s	55	223	223	1000	1000
Breaking capacity (infeed from the top or bottom)						
At 400 V AC						
• Breaking current I_c (at p.f. = 0.35, rms value)	A	500	1000	1280	2000	3200
• Rated operational current I_e with AC-21A, AC-22A, AC-23A	A	63	125	160	250	400
• Motor switching capacity AC-23A	kW	30	65	80	132	200
At 500 V AC						
• Breaking current I_c (at p.f. = 0.35, rms value)	A	500	1000	1280	2000	3200
• Rated operational current I_e with AC-21A, AC-22A, AC-23A	A	63	125	160	250	400
• Motor switching capacity AC-23A	kW	40	90	110	185	280
At 690 V AC						
• Breaking current I_c (at p.f. = 0.35, rms value)	A	500	1000	1280	2000	3200
• Rated operational current I_e with AC-21A, AC-22A, AC-23A	A	63	125	160	250	400
• Motor switching capacity AC-23A	kW	50	110	150	220	375
At 440 V DC (3 conducting paths series-connected) [4]						
• Breaking current I_c (L/R = 15 ms)	A	250	500	640	1000 [4]	1600
• Rated operational current I_e for DC-23A	A	63	125	160	250 [5]	400
Rated short-time current (1 s current), rms value	kA	2.5	3.2	3.2	8	11
Permissible ambient temperature	°C °C	-25 ... +55 for operation [6] -50 ... +80 when stored				
Mechanical endurance, operating cycles		15000	15000	15000	12000	12000
Degree of protection		IP00/IP20 (from the operator side, with fuse and terminal covers)				
Power loss of the switch disconnector at I_{th} (plus power loss of the fuses)	W	8.5	22	36	33	86
Main conductor connections						
Busbar systems, max. dimensions (W × T)	mm	25 × 9	45 × 10	45 × 10	40 × 12	40 × 15
Cable lug, max. conductor cross-section (stranded)	mm^2	35	70	120	150	2 × 150 or 1 × 240
Busbar systems, max. dimensions (W × T)	mm	25 × 9	45 × 10	45 × 10	40 × 12	40 × 15
Tightening torque	Nm	6 ... 7.5	7 ... 10	18 ... 22	35 ... 45	35 ... 45
Terminal screws		M6	M6	M8	M10	M10
Protective conductor connections						
Flat bars	mm	--	--	--	20 × 2.5	20 × 2.5
Cable lug, max. conductor cross-section (stranded)	mm^2	--	--	--	70	120

1) Configuring note: Max. permissible operating temperature for fuse blades 135 °C, for connections 100 °C.

2) 110 V (one conducting path).

3) 220 V DC (L1 and L3 series-connected) or 110 V DC (one conducting path) at DC-23A.

4) At 440 V L/R = 4 ms, at 220 V L/R = 1 ms.

5) At 440 V DC-22A, at 220 V DC-23A.

6) 3ND1 switching device protection fuse.

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Selection and ordering data

All switch disconnectors with degree of protection IP00:

- Mounting on vertical busbars with busbar center-to-center spacing of 60 mm and bar thickness from 5 mm to 6.35 mm
- Conductor connecting screws and fuse partitions are generally included in the scope of supply.

	Rated uninterrupted current I_u	LV HRC fuse links[1] acc. to DIN 43620[2]		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		Size	Operational class							
	A									kg
Complete versions with 8UC7 door-coupling rotary operating mechanisms										
	3-pole for NH fuse systems									
	• (black handle)									
	63	00 and 000	gG, aM		3KM5030-1GB01		1	1 unit	1CL	1.855
	125	00 and 000	gG, aM		3KM5230-1GB01		1	1 unit	1CL	2.796
	160	00 and 000	gG, aM		3KM5330-1GB01		1	1 unit	1CL	2.857
	250	1 and 2	gG, aM		3KM5530-1GB01		1	1 unit	1CL	6.528
	400	2 and 1	gG, aM		3KM5730-1GB01		1	1 unit	1CL	5.921
	3-pole for fuses acc. to BS 88									
	• Complete versions with 8UC7 door-coupling rotary operating mechanism (black handle)									
	125	Form A2/A3			3KM5230-1GG01		1	1 unit	1CL	2.747
	125	Form A4			3KM5230-1GJ01		1	1 unit	1CL	2.821
	160	Form A4			3KM5330-1GJ01		1	1 unit	1CL	2.933
	250	Form B1-B3			3KM5530-1GG01		1	1 unit	1CL	6.571
	400	Form B1-B3			3KM5730-1GG01		1	1 unit	1CL	7.110
Basic switch versions without handle										
3KM5330-1AB01 with fuses	**3-pole for NH fuse systems**									
	63	00 and 000	gG, aM		3KM5030-1AB01		1	1 unit	1CL	1.507
	125	00 and 000	gG, aM		3KM5230-1AB01		1	1 unit	1CL	2.415
	160	00 and 000	gG, aM		3KM5330-1AB01		1	1 unit	1CL	2.467
	250	1 and 2	gG, aM		3KM5530-1AB01		1	1 unit	1CL	5.598
	400	2 and 1	gG, aM		3KM5730-1AB01		1	1 unit	1CL	5.894
	3-pole for fuses acc. to BS 88									
3KM5530-1AG01 with fuses	63	Form A2/A3			3KM5030-1AG01		1	1 unit	1CL	1.450
	125	Form A2/A3			3KM5230-1AG01		1	1 unit	1CL	2.070
	125	Form A4			3KM5230-1AJ01		1	1 unit	1CL	2.400
	160	Form A4			3KM5330-1AJ01		1	1 unit	1CL	2.507
	250	Form B1-B3			3KM5530-1AG01		1	1 unit	1CL	5.689
	400	Form B1-B3			3KM5730-1AG01		1	1 unit	1CL	6.250
8UC7 EMERGENCY-STOP door-coupling rotary operating mechanisms (red handle, yellow indicator plate) for basic switch versions without handle										
8UC7121-3BB10	63	00 and 000	gG, aM		8UC7121-3BB10		1	1 unit	1CL	0.358
	125	00 and 000	gG, aM		8UC7222-3BB20		1	1 unit	1CL	0.420
	160	00 and 000	gG, aM		8UC7222-3BB20		1	1 unit	1CL	0.420
	250	1 and 2	gG, aM		8UC7323-3BB30		1	1 unit	1CL	1.002
	400	2 and 1	gG, aM		8UC7323-3BB30		1	1 unit	1CL	1.002
	• 8UC7 EMERGENCY-STOP door-coupling rotary operating mechanisms (red handle, yellow indicator plate)									
	63	Form A2/A3			8UC7121-3BB10		1	1 unit	1CL	0.358
	125	Form A2/A3			8UC7222-3BB20		1	1 unit	1CL	0.420
	125	Form A4			8UC7222-3BB20		1	1 unit	1CL	0.420
	160	Form A4			8UC7222-3BB20		1	1 unit	1CL	0.420
	250	Form B1-B3			8UC7323-3BB30		1	1 unit	1CL	1.002
	400	Form B1-B3			8UC7323-3BB30		1	1 unit	1CL	1.002

Fuse monitoring through 5TT3 170 safety monitor with a floating signaling contact 1 NO, See chapter "Fuse Systems"

[1] Silver-plated fuse blades. Silver-plated isolating blades can be used if desired.

[2] For assignment of semiconductor fuses, see page 7/118

*** You can order this quantity or a multiple thereof.**

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Selection and ordering data

	Version		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
3KM50									
	Terminal covers For 3-pole devices (1 set = 6 units)		►	3KX3552-3DA01		1	1 unit	1CL	0.080
 3KX35.7-3AA	**Fuse covers** (interlock only detachable in the OFF position)		►	3KX3517-3AA		1	1 unit	1CL	0.042
	Fuse partitions (1 set = 5 units)		►	3KX3507-0AA01		1	1 unit	1CL	0.045
 3KX3507-0BA01	**Lyre-shaped fuse covers** (1 set = 6 units)			3KX3507-0BA01		1	1 unit	1CL	0.033
	Door-coupling rotary operating mechanisms IP65								
	Black handle, shaft 300 mm			8UC7111-1BB10		1	1 unit	1CL	0.356
	EMERGENCY-STOP (yellow/red), shaft 300 mm			8UC7121-3BB10		1	1 unit	1CL	0.358
	Operating mechanisms for fixed mounting Black handle, shaft 250 mm		►	3KX3516-1AA		1	1 unit	1CL	0.080
	Extension shaft 300 mm long			8UC6031		1	1 unit	1CL	0.068
	Extension shaft 600 mm long			8UC6081		1	1 unit	1CL	0.136
	Shaft connecting pieces			8UC6021		1	1 unit	1CL	0.027
 3SB1400-0A	**Auxiliary switches**								
	1 NO + 1 NC			3SB1400-0A		1	1 unit	41J	0.019
	2 NO			3SB1400-0G		1	1 unit	41J	0.019
	2 NC			3SB1400-0H		1	1 unit	41J	0.020
	Fuse monitor connections (1 set = 6 units)			3KX3505-0AA		1	1 unit	1CL	0.021
3KM52/3KM53									
	Terminal covers For 3-pole devices (1 set = 6 units)	3KM52	►	3KX3552-3DA01		1	1 unit	1CL	0.080
		3KM53	►	3KX3553-3DA01		1	1 unit	1CL	0.151
 3KX35.7-3AA	**Fuse covers**[1] (interlock only detachable in the OFF position)		►	3KX3527-3AA		1	1 unit	1CL	0.080
	Fuse partitions (1 set = 5 units)		►	3KX3507-0AA01		1	1 unit	1CL	0.045
 3KX3507-0BA01	**Lyre-shaped fuse covers** (1 set = 6 units)			3KX3507-0BA01		1	1 unit	1CL	0.033
	Door-coupling rotary operating mechanisms IP65								
	Black handle, shaft 300 mm			8UC7212-1BB20		1	1 unit	1CL	0.420
	EMERGENCY-STOP (yellow/red), shaft 300 mm			8UC7222-3BB20		1	1 unit	1CL	0.420
	Operating mechanisms for fixed mounting Black handle, shaft 250 mm		►	3KX3536-1AA		1	1 unit	1CL	0.170

[1] For 3KX3527-3AA: Not suitable for use with type A4 BS fuses.

* You can order this quantity or a multiple thereof.

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	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
								kg
	Extension shaft 300 mm long		**8UC6032**		1	1 unit	1CL	0.135
	Extension shaft 600 mm long		**8UC6082**		1	1 unit	1CL	0.265
	Shaft connecting pieces		**8UC6022**		1	1 unit	1CL	0.022
3SB1400-0A	**Auxiliary switches**							
	1 NO + 1 NC		**3SB1400-0A**		1	1 unit	41J	0.019
	2 NO		**3SB1400-0G**		1	1 unit	41J	0.019
	2 NC		**3SB1400-0H**		1	1 unit	41J	0.020
	20 ms leading, 1 NO + 1 NC		**3KX3552-3EA01**		1	1 unit	1CL	0.022
	Fuse monitor connections (1 set = 6 units)		**3KX3505-0AA**		1	1 unit	1CL	0.021
3KM55/3KM57								
	Terminal covers							
	For 3-pole devices (1 set = 6 units)	►	**3KX3557-3DA01**		1	1 unit	1CL	0.293
	For 4-pole devices (1 set = 8 units)		**3KX3557-3DB01**		1	1 unit	1CL	0.385
3KX35.7-3AA	**Fuse covers** (interlock only detachable in the OFF position)	►	**3KX3557-3AA**		1	1 unit	1CL	0.220
3KX3557-0AA01	**Fuse partitions** (1 set = 5 units)	►	**3KX3557-0AA01**		1	1 unit	1CL	0.163
	Door-coupling rotary operating mechanisms IP65							
	Black handle, shaft 300 mm		**8UC7313-1BB30**		1	1 unit	1CL	0.941
	EMERGENCY-STOP (yellow/red), shaft 300 mm		**8UC7323-3BB30**		1	1 unit	1CL	1.002
3KX3176-1E	**Operating mechanisms for fixed mounting, size 3** Black handle, shaft 250 mm	►	**3KX3176-1E**		1	1 unit	1CL	0.287
	Extension shaft 300 mm long		**8UC6033**		1	1 unit	1CL	0.215
	Extension shaft 600 mm long		**8UC6083**		1	1 unit	1CL	0.424
	Shaft connecting pieces		**8UC6023**		1	1 unit	1CL	0.084
3SB1400-0A	**Auxiliary switches**							
	1 NO + 1 NC		**3SB1400-0A**		1	1 unit	41J	0.019
	2 NO		**3SB1400-0G**		1	1 unit	41J	0.019
	2 NC		**3SB1400-0H**		1	1 unit	41J	0.020
	20 ms leading, 1 NO + 2 NC		**3KX3552-3EA01**		1	1 unit	1CL	0.022
	Fuse monitor connections (1 set = 6 units)		**3KX3505-0AA**		1	1 unit	1CL	0.021

* You can order this quantity or a multiple thereof.

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Overview

The 3KM switch disconnectors with fuses are suitable for all fuses in LV HRC design, See chapter "Fuse Systems".

SITOR semiconductor fuses in LV HRC design can also be used, although it must be noted that, compared to cable and line protection fuses, these get much hotter during operation. For this reason, the fuse must be operated below the rated current I_n of the device (derating) when installed in a closed switching device.

The following table shows the permissible load currents of the SITOR semiconductor fuses for installation in 3KM. The values were determined using the conductor cross-sections specified in the table.

Note

If using smaller cross-sections, a considerably higher derating is required due to the lower heat dissipation.

SITOR semiconductor fuses for 3KM fuse switch disconnectors: Assignment table

SITOR semiconductor fuse data						Permissible rated currents of fuse when installed in 3KM for busbar mounting					
						Type 3KM			Alternative type 3KM		
Type [1)2)]	Rated current I_n	Rated voltage [3)]	Operational class	Size	Required conductor cross-section Cu	Type	Size	Permissible load current [4)]	Type	Size	Permissible load current [4)]
	A	V AC			mm²			A			A
3NE1020-2	80	690	gR	00	25	3KM52	00	80	3KM53	00	80
3NE1021-0	100	690	gS	00	35	3KM52	00	100	3KM53	00	100
3NE1021-2	100	690	gR	00	35	3KM52	00	100	3KM53	00	100
3NE1022-0	125	690	gS	00	50	3KM52	00	125	3KM53	00	125
3NE1022-2	125	690	gR	00	50	3KM52	00	125	3KM53	00	125
3NE1224-0	160	690	gS	1	70	3KM55	1	160	3KM57	2	160
3NE1224-2/-3	160	690	gR	1	70	3KM55	1	160	3KM57	2	160
3NE1225-0	200	690	gS	1	95	3KM55	1	200	3KM57	2	200
3NE1225-2/-3	200	690	gR	1	95	3KM55	1	200	3KM57	2	200
3NE1227-0	250	690	gS	1	120	3KM55	1	250	3KM57	2	250
3NE1227-2/-3	250	690	gR	1	120	3KM55	1	245	3KM57	2	250
3NE1230-0	315	690	gS	1	2x 70	3KM57	2	315	--	--	--
3NE1230-2/-3	315	690	gR	1	2x 70	3KM57	2	280	--	--	--
3NE1331-0	350	690	gS	2	2x 95	3KM57	2	330	--	--	--
3NE1331-2/-3	350	690	gR	2	2x 95	3KM57	2	300	--	--	--
3NE1332-0	400	690	gS	2	2x 95	3KM57	2	375	--	--	--
3NE1332-2/-3	400	690	gR	2	2x 95	3KM57	2	315	--	--	--
3NE1333-0	450	690	gS	2	2x 120	3KM57	2	400	--	--	--
3NE1333-2/-3	450	690	gR	2	2x 120	3KM57	2	325	--	--	--
3NE1334-0	500	690	gS	2	2x 120	3KM57	2	400	--	--	--
3NE1334-2/-3	500	690	gR	2	2x 120	3KM57	2	350	--	--	--
3NE1802-0	40	690	gS	000	10	3KM50	00	40	3KM52	00	40
3NE1803-0	35	690	gS	000	6	3KM50	00	35	3KM52	00	35
3NE1813-0	16	690	gS	000	1.5	3KM50	00	16	3KM52	00	16
3NE1814-0	20	690	gS	000	2.5	3KM50	00	20	3KM52	00	20
3NE1815-0	25	690	gS	000	4	3KM50	00	25	3KM52	00	25
3NE1817-0	50	690	gS	000	10	3KM50	00	50	3KM52	00	50
3NE1818-0	63	690	gS	000	16	3KM50	00	63	3KM52	00	63
3NE1820-0	80	690	gS	000	25	3KM52	00	80	--	--	--
3NE3221	100	1000	aR	1	35	3KM55	1	90	3KM57	2	95
3NE3222	125	1000	aR	1	50	3KM55	1	110	3KM57	2	115
3NE3224	160	1000	aR	1	70	3KM55	1	140	3KM57	2	150
3NE3225	200	1000	aR	1	95	3KM55	1	175	3KM57	2	180
3NE3227	250	1000	aR	1	120	3KM55	1	210	3KM57	2	220
3NE3230-0B	315	1000	aR	1	185	3KM57	2	240	--	--	--
3NE3231	350	1000	aR	1	240	3KM57	2	265	--	--	--
3NE3232-0B	400	1000	aR	1	240	3KM57	2	290	--	--	--
3NE3233	450	1000	aR	1	2x 150	3KM57	2	320	--	--	--
3NE3332-0B	400	1000	aR	2	240	3KM57	2	290	--	--	--
3NE3333	450	1000	aR	2	2x 150	3KM57	2	320	--	--	--
3NE3334-0B	500	1000	aR	2	2x 150	3KM57	2	360	--	--	--
3NE3335	560	1000	aR	2	2x 185	3KM57	2	400	--	--	--

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SITOR semiconductor fuse data						Permissible rated currents of fuse when installed in 3KM for busbar mounting					
						Type 3KM			Alternative type 3KM		
Type [1)2)]	Rated current I_n	Rated voltage [3)]	Operational class	Size	Required conductor cross-section Cu	Type	Size	Permissible load current [4)]	Type	Size	Permissible load current [4)]
	A	V AC			mm^2			A			A
3NE3336	630	1000	aR	2	2x 185	3KM57	2	400	--	--	--
3NE3337-8	710	900	aR	2	2x (40x5)	3KM57	2	400	--	--	--
3NE3338-8	800	800	aR	2	2x 240	3KM57	2	400	--	--	--
3NE3340-8	900	690	aR	2	2x (40x8)	3KM57	2	400	--	--	--
3NE4101	32	1000	gR	0	6	3KM55	1	32	--	--	--
3NE4102	40	1000	gR	0	10	3KM55	1	40	--	--	--
3NE4117	50	1000	gR	0	10	3KM55	1	50	--	--	--
3NE4118	63	1000	aR	0	16	3KM55	1	63	--	--	--
3NE4120	80	1000	aR	0	25	3KM55	1	80	--	--	--
3NE4121	100	1000	aR	0	35	3KM55	1	95	--	--	--
3NE4122	125	1000	aR	0	50	3KM55	1	120	--	--	--
3NE4124	160	1000	aR	0	70	3KM55	1	150	--	--	--
3NE4327-0B	250	800	aR	2	150	3KM57	2	175	--	--	--
3NE4330-0B	315	800	aR	2	240	3KM57	2	230	--	--	--
3NE4333-0B	450	800	aR	2	2x (30x5)	3KM57	2	340	--	--	--
3NE4334-0B	500	800	aR	2	2x (30x5)	3KM57	2	380	--	--	--
3NE4337	710	800	aR	2	2x (50x5)	3KM57	2	400	--	--	--
3NE8015-1	25	690	gR	00	4	3KM50	00	25	3KM52	00	25
3NE8003-1	35	690	gR	00	6	3KM50	00	33	3KM52	00	35
3NE8017-1	50	690	gR	00	10	3KM50	00	45	3KM52	00	50
3NE8018-1	63	690	gR	00	16	3KM50	00	54	3KM52	00	60
3NE8020-1	80	690	aR	00	25	3KM52	00	68	--	--	--
3NE8021-1	100	690	aR	00	35	3KM52	00	89	--	--	--
3NE8022-1	125	690	aR	00	50	3KM52	00	106	--	--	--
3NE8024-1	160	690	aR	00	70	3KM52	00	130[5)]	--	--	--

1) Due to the mechanical stress on the relatively long fuse blades, SITOR 3NE41 semiconductor fuses should only be switched occasionally and only at zero current.

2) Permissible load currents for 3NE8…-0MK, see Configuration Manual "Fuse Systems", or on request

3) Fuses with a rated voltage > 690 V may only be operated at max. 690 V when installed in 3KM (rated voltage of the 3KM).

4) In the case of cyclic loads, the currents may have to be further reduced (precise values on request).

5) The fuse can also be operated at a higher rated uninterrupted current than the 125 A current of the 3KM52. However, in this case, the 3KM52 must not be switched under load (utilization category AC-20).

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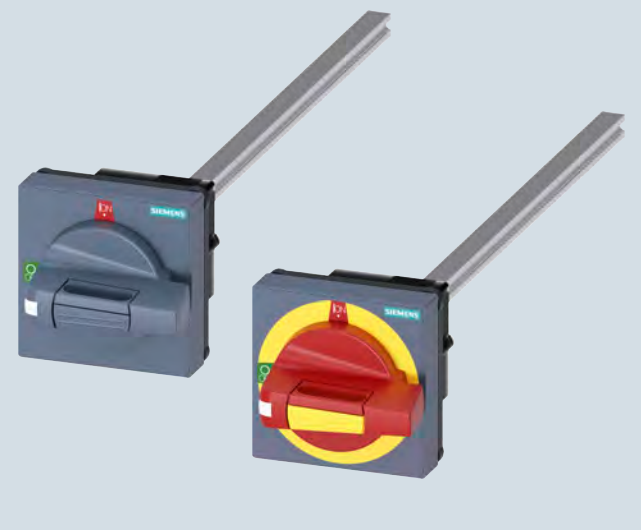
Overview



8UD1 rotary operating mechanisms in STANDARD version in gray (ti-gray, left) and EMERGENCY-STOP version in red/yellow (right)

With door-coupling rotary operating mechanisms it is also possible to operate switch disconnectors from the outside with the control cabinet doors closed.

The rotary operating mechanisms are available in "STANDARD" and "EMERGENCY-STOP" versions with the following differences:

- STANDARD version: Masking plates in light-gray with black inscription, handles in ti-grey
- EMERGENCY-STOP version: Masking plates in yellow with black inscription, handles in red

Degree of protection

Degree of protection when installed is IP65.

Standards

8UD1 door-coupling rotary operating mechanisms are in line with the following standards, for example:

Standard	Title
IEC 60204-1, EN 60204-1 (VDE 0113 Part 1)	Safety of machinery; electrical equipment of machines
IEC 60439-1, EN 60439-1 (VDE 0660 Part 500)	Low-voltage switchgear and controlgear assemblies
IEC 60947-3, EN 60947-3 (VDE 0660 Part 107)	Low-voltage switchgear and controlgear; Switches, disconnectors, switch disconnectors and fuse-combination units

Benefits

Can be locked

The retractable locking device integrated in the handles is suitable for padlocks with shackle diameters of 4.5 mm to 9.5 mm (locks according to DIN 7465).

Up to three padlocks with a shackle diameter of 9.5 mm can be fitted simultaneously.

Non-interchangeability

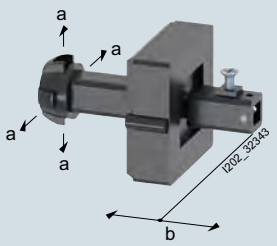
In order to ensure that, when installing switches and door-coupling operating mechanisms, all components are assembled in the correct position with respect to one another, the components are provided with non-interchangeability features (rivel and lug).

Stops

Stops are used to prevent damage occurring as the result of excessive torque. These stops are supplied loose with the rotary operating mechanisms and can be fitted as required. Stops are fitted at the factory to size 1 and 2 rotary operating mechanisms with a 90° operating angle (exception: 3RV motor starter protectors/circuit breakers).

Tolerance compensation

8UD1 rotary operating mechanisms are capable of taking up a radial eccentricity of max. 8 mm between the actuating shaft of the switching device and the door-coupling rotary operating mechanism. Supporting the extension shaft is recommended with greater tolerances.



Coupling drivers	a	b	Shaft length
With tolerance compensation	± 8	± 5	x
Without tolerance compensation	+ 1,5	± 2,5	x + 23,5

Permissible radial eccentricity and axial tolerance compensation in mm

Pull-out strength

The pull-out strength of interlocked operating mechanisms, e.g. pulling off the shaft or destruction of the operating mechanism, amounts to 800 N when the pulling force acts directly onto the operating mechanism in the direction of the shaft.

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Application

8UD1 door-coupling rotary operating mechanisms can be used in electrical controls, distribution boards and switchboards in cases where switches have to be mounted behind covers, end plates and doors that must be opened and where they are to be operated manually from outside.

Interlocking conditions

The basic versions of the rotary operating mechanisms comply with the following interlocking conditions:

- Operating mechanism and switch in "0" (OFF) position: The control cabinet door can be opened. With padlocks fitted, the control cabinet door remains locked however.
- Operating mechanism and switch in "I" (ON) position: The control cabinet door cannot be opened in this position. However, the lock can be overridden and the control cabinet door opened by trained personnel for performing checks. No padlocks can be fitted in "I" position.

Other interlocking conditions:

- If no door interlock is desired, it can be deactivated.

Operating conditions and ambient conditions

The temperature range for operation of the rotary operating mechanisms is between -25 °C and +60 °C.

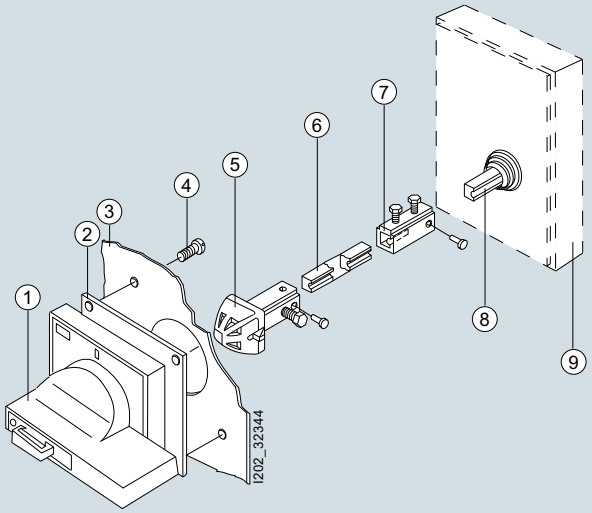
Thanks to the use of glass fiber-reinforced molded plastic for handles and masking plates as well as metal components with surface protection, the rotary operating mechanisms are suitable for rough conditions, high air humidity and aggressive atmospheres.

Design

Components

The rotary operating mechanisms consist of a masking plate with handle, including seal and fixing screws for door installation, an extension shaft (300 mm) and a coupling driver to be mounted onto the switch shaft.

Operating mechanisms for 3KD switch disconnectors do not have a shaft coupling since the extension shaft is fitted directly into the switch. Extension shafts with a length of 600 mm are also available.

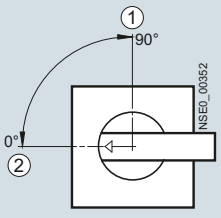


1 Handle with masking frame
2 Seal
3 Door
4 Fixing screws
5 Coupling driver
6 Extension shaft
7 Adapter
8 Operating shaft of switching device
9 Switching device

Design, schematic representation

Switch position

In order to ensure compliance with locking and interlocking conditions, the controls and operating mechanisms must be installed such that, with two-position switches the "0" position lies at 9 o'clock and the "I" position at 12 o'clock.



1 12 o'clock position
2 9 o'clock position

Positions for two-position switches with 90° operating angle

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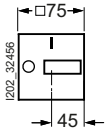
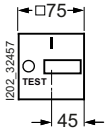
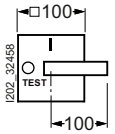
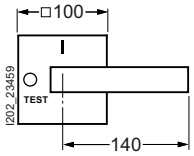
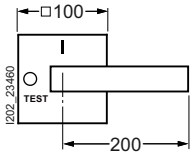
For 3KD switch disconnectors

Selection and ordering data

Door-coupling rotary operating mechanisms, fully lockable with padlocks, with door interlock, supplied with seal and fixing screws

	Switching device	Rated current	Cross-section of the actuating shaft	Torque	Illustrated: Handle, masking plate
	Type	A	mm	Nm	
8UD1 for 3KD switch disconnectors sizes 1 and 2					
	Labeling 0-1 3KD....-.M/N	16 ... 200	8 x 8	3	
	Labeling TEST-0-1 3KD....-.M/N	16 ... 200	8 x 8	3	
8UD1 for 3KD switch disconnectors sizes 3					
	Labeling TEST-0-1 3KD....-.P	250 ... 400	8 x 8	7.5	
8UD1 for 3KD switch disconnectors size 4					
	Labeling TEST-0-1 3KD....-.Q	400 ... 800	10 x 10	16	
8UD1 for 3KD switch disconnectors size 5					
	Labeling TEST-0-1 3KD....-.R	800 ... 1600	12 x 12	30	

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Version	DT	Rotary operating mechanisms, complete Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	Individual parts Handles illuminated/ without illumination Other handles see page 7/61 Article No.	Coupling drivers with tolerance compensation/ without tolerance compensation Article No.	Extension shaft length 300 mm/ length 600 mm Article No.	Adapter Article No.
									□ 8 mm	**□ 8 mm**	**□ 8 mm by 8 mm**
Standard		**8UD1171-2AD11**		1	1 unit	1CL	0.526	8UD1771-2CD01/ 8UD1771-2AD01	8UD1900-2GA00 8UD1900-2HA00	8UC6032/ 8UC6082	8UC6022
EMER-GENCY-STOP		**8UD1171-2AD15**		1	1 unit	1CL	0.525	8UD1771-2CD05 8UD1771-2AD05	8UD1900-2GA00 8UD1900-2HA00	8UC6032/ 8UC6082	8UC6022
									□ 8 mm	**□ 8 mm**	**□ 8 mm by 8 mm**
Standard		**8UD1171-2AF21**		1	1 unit	1CL	0.571	8UD1771-2CF01/ 8UD1771-2AF01	8UD1900-2GA00/ 8UD1900-2HA00	8UC6032/ 8UC6082	8UC6022
EMER-GENCY-STOP		**8UD1171-2AF25**		1	1 unit	1CL	0.571	8UD1771-2CF05/ 8UD1771-2AF05	8UD1900-2GA00 8UD1900-2HA00	8UC6032/ 8UC6082	8UC6022
									□ 8 mm	**□ 8 mm**	**□ 8 mm by 8 mm**
Standard		**8UD1141-2AF21**		1	1 unit	1CL	0.848	8UD1841-2CF01/ 8UD1841-2AF01	8UD1900-6GA00/ 8UD1900-6HA00	8UC6032/ 8UC6082	8UC6022
EMER-GENCY-STOP		**8UD1141-2AF25**		1	1 unit	1CL	0.848	8UD1841-2CF05/ 8UD1841-2AF05	8UD1900-6GA00/ 8UD1900-6HA00	8UC6032/ 8UC6082	8UC6022
									□ 10 mm	**□ 10 mm**	**□ 10 mm by 10 mm**
Standard		**8UD1151-3AF21**		1	1 unit	1CL	0.651	8UD1851-3CF01/ 8UD1851-3AF01	8UD1900-3GA00/ 8UD1900-3HA00	8UC6033/ 8UC6083	8UC6023
EMER-GENCY-STOP		**8UD1151-3AF25**		1	1 unit	1CL	0.651	8UD1851-3CF05/ 8UD1851-3AF05	8UD1900-3GA00/ 8UD1900-3HA00	8UC6033/ 8UC6083	8UC6023
									□ 12 mm	**□ 12 mm**	**□ 12 mm by 12 mm**
Standard		**8UD1161-4AF21**		1	1 unit	1CL	0.793	8UD1861-4CF01/ 8UD1861-4AF01	8UD1900-4GA00/ 8UD1900-4HA00	8UC6034/ 8UC6084	8UC6024
EMER-GENCY-STOP		**8UD1161-4AF25**		1	1 unit	1CL	0.793	8UD1861-4CF05/ 8UD1861-4AF05	8UD1900-4GA00/ 8UD1900-4HA00	8UC6034/ 8UC6084	8UC6024

*** You can order this quantity or a multiple thereof.**

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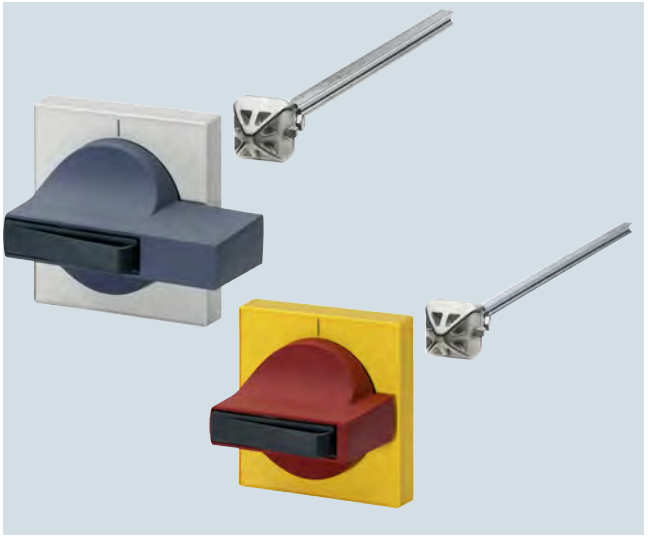
Overview



8UC7 rotary operating mechanism in STANDARD version (left) and EMERGENCY-STOP version (right)

With door-coupling rotary operating mechanisms it is also possible to operate switch disconnectors from the outside with the control cabinet doors closed.

The rotary operating mechanisms are available in "STANDARD" and "EMERGENCY-STOP" versions with the following differences:

- STANDARD version: Masking plates in light-gray with black inscription, handles in ti-grey
- EMERGENCY-STOP version: Masking plates in yellow with black inscription, handles in red

Available sizes

Rotary operating mechanisms	Size	Rated torque[1] Nm	Shaft profile mm x mm	Masking plate mm x mm
8UC71	1	4	6 x 6	75 x 75
8UC72	2	9	8 x 8	75 x 75
8UC73	3	25	10 x 10 or 12 x 12	100 x 100
8UC74	4	40/55[2]	12 x 12	100 x 100

[1] Operating mechanisms tested with triple torque (according to EN 60947-3). They are therefore also suitable for applications in this area.

[2] Operation with two hands.

Degree of protection

Degree of protection when installed is IP65.

Standards

8UC7 door-coupling rotary operating mechanisms are in line with the following standards, for example:

Standard	Title
IEC 60204-1, EN 60204-1 (VDE 0113 Part 1)	Safety of machinery; electrical equipment of machines
IEC 60439-1, EN 60439-1 (VDE 0660 Part 500)	Low-voltage switchgear and controlgear assemblies
IEC 60947-3, EN 60947-3 (VDE 0660 Part 107)	Low-voltage switchgear and controlgear; Switches, disconnectors, switch disconnectors and fuse-combination units

Benefits

Can be locked

The retractable locking device integrated in the handles is suitable for padlocks with shackle diameters of 4.5 mm to 8.5 mm (locks according to DIN 7465).

Up to three padlocks with a shackle diameter of 8.5 mm and up to five padlocks with a shackle diameter of 6 mm can be fitted simultaneously.

Non-interchangeability

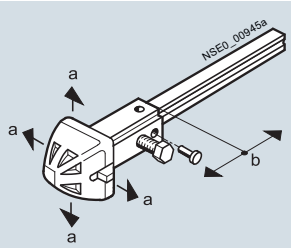
In order to ensure that, when installing switches and door-coupling operating mechanisms, all components are assembled in the correct position with respect to one another, the components are provided with non-interchangeability features (rivel and lug).

Stops

Stops are used to prevent damage occurring as the result of excessive torque. These stops are supplied loose with the rotary operating mechanisms and can be fitted as required. Stops are fitted at the factory to size 1 and 2 rotary operating mechanisms with a 90° operating angle (exception: 3RV motor starter protectors/circuit breakers).

Tolerance compensation

8UC7 rotary operating mechanisms are capable of taking up a radial eccentricity of max. 3 mm between the actuating shaft of the switching device and the door-coupling rotary operating mechanism. Supporting the extension shaft is recommended with greater tolerances.



Coupling drivers	a	b	Shaft length
With tolerance compensation	+3	±5	x
Without tolerance compensation	+1.5	±2.5	x+23.5

Permissible radial eccentricity and axial tolerance compensation in mm

Pull-out strength

The pull-out strength of interlocked operating mechanisms, e.g. pulling off the shaft or destruction of the operating mechanism, amounts to 800 N when the pulling force acts directly onto the operating mechanism in the direction of the shaft.

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Application

8UC7 door-coupling rotary operating mechanisms can be used in electrical controls, distribution boards and switchboards in cases where switches have to be mounted behind covers, end plates and doors that must be opened and where they are to be operated manually from outside.

Interlocking conditions

The basic versions of the rotary operating mechanisms comply with the following interlocking conditions:

- Operating mechanism and switch in "0" (OFF) position: The control cabinet door can be opened. With padlocks fitted, the control cabinet door remains locked however.
- Operating mechanism and switch in "I" (ON) position: The control cabinet door cannot be opened in this position. However, the lock can be overridden and the control cabinet door opened by trained personnel for performing checks. No padlocks can be fitted in "I" position.

Other interlocking conditions:

- If no door interlock is required, the user can remove the door interlocking plate of the rotary operating mechanism.
- It is easy for the user to fit padlocks to the rotary operating mechanisms in the "I" position as well. In this case the door cannot be opened, the operating mechanism cannot be actuated and the door interlock cannot be overridden.

Operating conditions and ambient conditions

The temperature range for operation of the rotary operating mechanisms is between -25 °C and +60 °C.

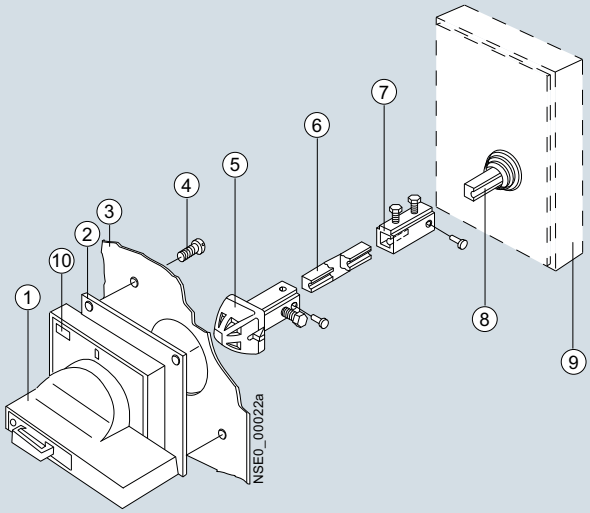
Thanks to the use of glass fiber-reinforced molded plastic for handles and masking plates as well as metal components with surface protection, the rotary operating mechanisms are suitable for rough conditions, high air humidity and aggressive atmospheres.

Design

Components

The rotary operating mechanisms consist of a masking plate with handle, including seal and fixing screws for door installation, an extension shaft (300 mm) and a coupling driver to be mounted onto the switch shaft.

Operating mechanisms for 3KA / 3KL / 3KM switch disconnectors do not have a shaft coupling since the extension shaft is fitted directly into the switch. Extension shafts with a length of 600 mm are also available.

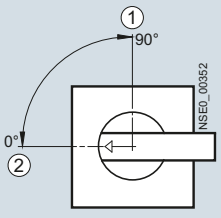


1 Handle with masking frame
2 Seal
3 Door
4 Fixing screws
5 Coupling driver
6 Extension shaft
7 Adapter
8 Operating shaft of switching device
9 Switching device
10 Tripped plate (can be glued on if required)

Design, schematic representation

Switch position

In order to ensure compliance with locking and interlocking conditions, the controls and operating mechanisms must be installed such that, with two-position switches the "0" position lies at 9 o'clock and the "I" position at 12 o'clock.



1 12 o'clock position
2 9 o'clock position

Positions for two-position switches with 90° operating angle

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For 3KA/3KE, 3KL/3KM switch disconnectors

Selection and ordering data

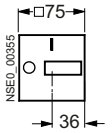
Door-coupling rotary operating mechanisms, fully lockable with padlocks, with door interlock, supplied with seal and fixing screws

Switching device	Rated current	Cross-section of the actuating shaft	Torque	Rotary operating mechanisms	Illustrated: Handle, masking plate
Type	A	mm	Nm	Size	

8UC71

For switch disconnectors with or without fuses

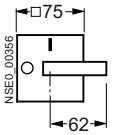
3KL50[1], 3KM50[1]	63	6 x 6	3	1
3KA50[1]	63	6 x 6	3	
3KA51[1]	80	6 x 6	3	



8UC72

For switch disconnectors with or without fuses

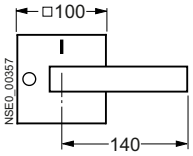
3KL52, 3KM52	125	8 x 8	7.5	2
3KL53, 3KM53	160	8 x 8	7.5	
3KA52	125	8 x 8	7.5	
3KA53	160	8 x 8	7.5	



8UC73

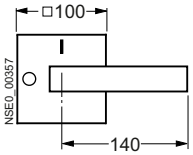
For switch disconnectors with or without fuses

3KL55, 3KM55	250	10 x 10	16	3
3KL57, 3KM57	400	10 x 10	16	
3KA55	250	10 x 10	16	
3KA57	400	10 x 10	16	
3KA58	630	10 x 10	16	

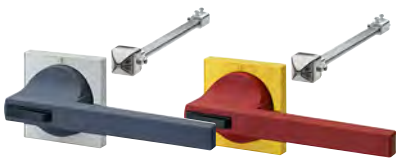


For switch disconnectors without fuses

3KE42	250	12 x 12	15	3
3KE43	400	12 x 12	15	
3KE44	630	12 x 12	24	
3KE45	1000	12 x 12	24	

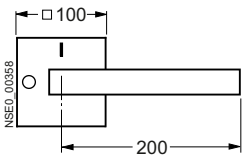


8UC74



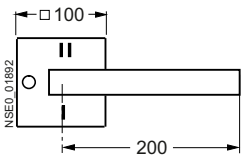
For switch disconnectors with fuses

3KL61[2]	630	12 x 12	30	4
3KL62[2]	800	12 x 12	30	



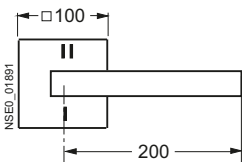
For switch disconnectors as changeover switches with break-before-make feature

3KE42 (2 units)	250	12 x 12	20	4
3KE43 (2 units)	400	12 x 12	20	
3KE44 (2 units)	630	12 x 12	30	
3KE45 (2 units)	1000	12 x 12	30	



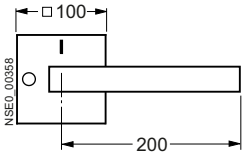
For switch disconnectors as changeover switches without break-before-make feature[3]

3KE42 (2 units)	250	12 x 12	40	4
3KE43 (2 units)	400	12 x 12	40	
3KE44 (2 units)	630	12 x 12	55	
3KE45 (2 units)	1000	12 x 12	55	



For switch disconnectors as parallel switches

3KE42 (2 units)	250	12 x 12	40	4
3KE43 (2 units)	400	12 x 12	40	
3KE44 (2 units)	630	12 x 12	55	
3KE45 (2 units)	1000	12 x 12	55	



[1] Valid only for 3-pole switching devices. For 4-pole switching devices, an operating mechanism with 8 x 8 mm actuating shaft must be used, see row below for 3KA52, 3KL52 or 3KM52.

[2] Additionally required for 3KL61: 1 shaft coupling, Article No. 8UC9253, see page 7/128.

[3] The door interlocking plate must be removed.

[4] With shortened 8UC6016/8UC6017 coupling driver and reduced tolerance compensation

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Version	DT	Rotary operating mechanisms, complete		PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.	Individual parts			
		Article No. www.siemens.com/product?Article No.	Price per PU				kg	Handle with masking plate Article No.	Coupling drivers Article No.	Extension shaft length 300 mm Article No.	Adapter Article No.
									☐ **6 mm**	☐ **6 mm**	☐ **6 mm by 6 mm**
Standard		**8UC7111-1BB10**		1	1 unit	1CL	0.356	8UC7110-1BB	8UC6011	8UC6031	Not required
Standard[4)]		**8UC7161-1BB10**		1	1 unit	1CL	0.298	8UC7110-1BB	8UC6016	8UC6031	Not required
EMER-GENCY-STOP		**8UC7121-3BB10**		1	1 unit	1CL	0.358	8UC7120-3BB	8UC6011	8UC6031	Not required
									☐ **8 mm**	☐ **8 mm**	☐ **8 mm by 8 mm**
Standard		**8UC7212-1BB20**		1	1 unit	1CL	0.420	8UC7210-1BB	8UC6012	8UC6032	Not required
Standard[4)]		**8UC7262-1BB20**		1	1 unit	1CL	0.392	8UC7210-1BB	8UC6017	8UC6032	Not required
EMER-GENCY-STOP		**8UC7222-3BB20**		1	1 unit	1CL	0.420	8UC7220-3BB	8UC6012	8UC6032	Not required
									☐ **10 mm**	☐ **10 mm**	☐ **10 mm by 10 mm**
Standard		**8UC7313-1BB30**		1	1 unit	1CL	0.941	8UC7310-1BB	8UC6013	8UC6033	Not required
EMER-GENCY-STOP		**8UC7323-3BB30**		1	1 unit	1CL	1.002	8UC7320-3BB	8UC6013	8UC6033	Not required
									☐ **12 mm**	☐ **12 mm**	☐ **12 mm by 12 mm**
Standard		**8UC7314-1BB44**		1	1 unit	1CL	1.174	8UC7310-1BB	8UC6014	8UC6034	8UC6024
EMER-GENCY-STOP		**8UC7324-3BB44**		1	1 unit	1CL	1.186	8UC7320-3BB	8UC6014	8UC6034	8UC6024
									☐ **12 mm**	☐ **12 mm**	☐ **12 mm by 12 mm**
Standard		**8UC7414-1BB44**		1	1 unit	1CL	1.204	8UC7410-1BB	8UC6014	8UC6034	8UC6024
EMER-GENCY-STOP		**8UC7424-3BB44**		1	1 unit	1CL	1.134	8UC7420-3BB	8UC6014	8UC6034	8UC6024
									☐ **12 mm**	☐ **12 mm**	☐ **12 mm by 12 mm**
Standard		**8UC7414-1BF44**		1	1 unit	1CL	1.196	8UC7410-1BF	8UC6014	8UC6034	8UC6024
									☐ **12 mm**	☐ **12 mm**	☐ **12 mm by 12 mm**
Standard		**8UC7414-1FG44**		1	1 unit	1CL	1.113	8UC7410-1FG	8UC6014	8UC6034	8UC6024
									☐ **12 mm**	☐ **12 mm**	☐ **12 mm by 12 mm**
Standard		**8UC7414-1BB44**		1	1 unit	1CL	1.204	8UC7410-1BB	8UC6014	8UC6034	8UC6024

*** You can order this quantity or a multiple thereof.**

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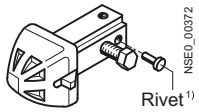
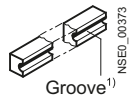
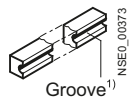
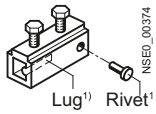
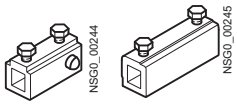
Individual parts

Selection and ordering data

	Switching device	Rotary operating mechanisms	Size	Cross-section of the actuating shaft	Version[4]	DT	Individual parts for 8UC7 door-coupling rotary operating mechanisms Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	Type	Type		mm × mm								kg
Handles with masking plate (including flat gasket and fixing screws)												
8UC71	3KL50, 3KM50, 3KA50, 3KA51	8UC71	1	6 × 6	Standard		**8UC7110-1BB**		1	1 unit	1CL	0.175
					EMER-GENCY-STOP		**8UC7120-3BB**		1	1 unit	1CL	0.178
8UC74	3KL52, 3KM52, 3KL53, 3KM53, 3KA52, 3KA53	8UC72	2	8 × 8	Standard		**8UC7210-1BB**		1	1 unit	1CL	0.190
					EMER-GENCY-STOP		**8UC7220-3BB**		1	1 unit	1CL	0.186
8UC74	3KL55, 3KM55, 3KL57, 3KM57, 3KA55, 3KA57, 3KE42, 3KE43, 3KE44, 3KE45	8UC73	3	10 × 10 or 12 × 12	Standard		**8UC7310-1BB**		1	1 unit	1CL	0.493
					EMER-GENCY-STOP		**8UC7320-3BB**		1	1 unit	1CL	0.472
8UC74	3KL61, 3KL62	8UC74	4	12 × 12	Standard		**8UC7410-1BB**		1	1 unit	1CL	0.522
					EMER-GENCY-STOP		**8UC7420-3BB**		1	1 unit	1CL	0.488
	3KE42, 3KE43, 3KE44, 3KE45	8UC74[3]	4	12 × 12	Standard		**8UC7410-1BF**		1	1 unit	1CL	0.496
					Standard		**8UC7410-1FG**		1	1 unit	1CL	0.435
					Standard		**8UC7410-1BB**		1	1 unit	1CL	0.522

	Rotary operating mechanisms	Cross-section of the actuating shaft	DT	Individual parts for 8UC6 door-coupling rotary operating mechanisms Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	Type	mm × mm							kg
Coupling drivers, extension shafts, shaft couplings and reducers									
 8UC6011	**Coupling drivers for 3K**								
	8UC71	6 × 6		**8UC6011**		1	1 unit	1CL	0.077
	8UC71[2]	6 × 6		**8UC6016**		1	1 unit	1CL	0.045
	8UC72	8 × 8		**8UC6012**		1	1 unit	1CL	0.073
	8UC72[2]	8 × 8		**8UC6017**		1	1 unit	1CL	0.041
	8UC73	10 × 10		**8UC6013**		1	1 unit	1CL	0.236
	8UC73/74	12 × 12		**8UC6014**		1	1 unit	1CL	0.234
 8UC6031 ... 34	**Extension shafts 300 mm long**								
	8UC71	6 × 6		**8UC6031**		1	1 unit	1CL	0.068
	8UC72	8 × 8		**8UC6032**		1	1 unit	1CL	0.135
	8UC73	10 × 10		**8UC6033**		1	1 unit	1CL	0.215
	8UC73/74	12 × 12		**8UC6034**		1	1 unit	1CL	0.316
 8UC6081 ... 84	**Extension shafts 600 mm long**								
	8UC71	6 × 6		**8UC6081**		1	1 unit	1CL	0.136
	8UC72	8 × 8		**8UC6082**		1	1 unit	1CL	0.265
	8UC73	10 × 10		**8UC6083**		1	1 unit	1CL	0.424
	8UC73/74	12 × 12		**8UC6084**		1	1 unit	1CL	0.628
 8UC6021 to 8UC6024	**Shaft couplings**								
	8UC71	6 × 6		**8UC6021**		1	1 unit	1CL	0.027
	8UC72	8 × 8		**8UC6022**		1	1 unit	1CL	0.022
	8UC73	10 × 10		**8UC6023**		1	1 unit	1CL	0.084
	8UC73/74	12 × 12		**8UC6024**		1	1 unit	1CL	0.078
	8UC74 (3KL61)	12 × 12	►	**8UC9253**		1	1 unit	1CL	0.113
 8UC7058 8UC7050	**Reducers**								
	8UC71	8 × 8 to 6 × 6		**8UC7058**		1	1 unit	1CL	0.024
	8UC72	12 × 12 to 8 × 8		**8UC7050**		1	1 unit	1CL	0.081

1) Non-interchangeability features

2) Shortened coupling driver with reduced tolerance compensation

3) For switch disconnectors as changeover switches in various versions, see page 7/126

4) Standard: Ti-gray handle, light-gray masking plate; EMERGENCY-STOP: Red handle, yellow masking plate

* You can order this quantity or a multiple thereof.

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Selection and ordering data

	Switching device	Cross-section of the actuating shaft	Torque of the operating mechanism[1]	Operating mechanisms	Color of handle	DT	Operating mechanisms for fixed mounting		PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	Type	mm × mm	Nm	Size			Article No. www.siemens.com/product?Article No.	Price per PU				kg
8UC9354	3KA50, 3KA51, 3KL50, 3KM50	6 × 6	4	1	Black [2]		**8UC9354**		1	1 unit	1CL	0.033
8UC9360	3KA50, 3KA51, 3KL50, 3KM50	6 × 6	7.5	2	Black [2]		**8UC9360**		1	1 unit	1CL	0.046
8UC9362	3KA52; 3KA53, 3KL52, 3KM52, 3KL53, 3KM53	8 × 8	7.5	2	Black		**8UC9362**		1	1 unit	1CL	0.045
					Red		**8UC9363**		1	1 unit	1CL	0.046
8UC9365	3KA55, 3KA57, 3KA58, 3KL55, 3KM55, 3KL57, 3KM57	10 × 10	16	3	Black		**8UC9365**		1	1 unit	1CL	0.140
					Red		**8UC9366**		1	1 unit	1CL	0.150
	3KE42, 3KE43	12 × 12	16	3	Black [3]		**8UC9370**		1	1 unit	1CL	0.128
					Red [3]		**8UC9371**		1	1 unit	1CL	0.140
8UC9374	3KE44, 3KE45	12 × 12	30	4	Black [3]		**8UC9374**		1	1 unit	1CL	0.180
					Red [3]		**8UC9375**		1	1 unit	1CL	0.160
8UC9381	3KL61	12 × 12	55	5	Black		**8UC9381**		1	1 unit	1CL	0.265
					Red		**8UC9382**		1	1 unit	1CL	0.263

1) Operating mechanisms were tested with triple torque (DIN VDE 0660 Part 107). They are therefore qualified for use in all controls, especially for disconnectors.

2) Red handle available on request.

3) Also required: 3KX2210-0H coupling socket.

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Introduction

Overview

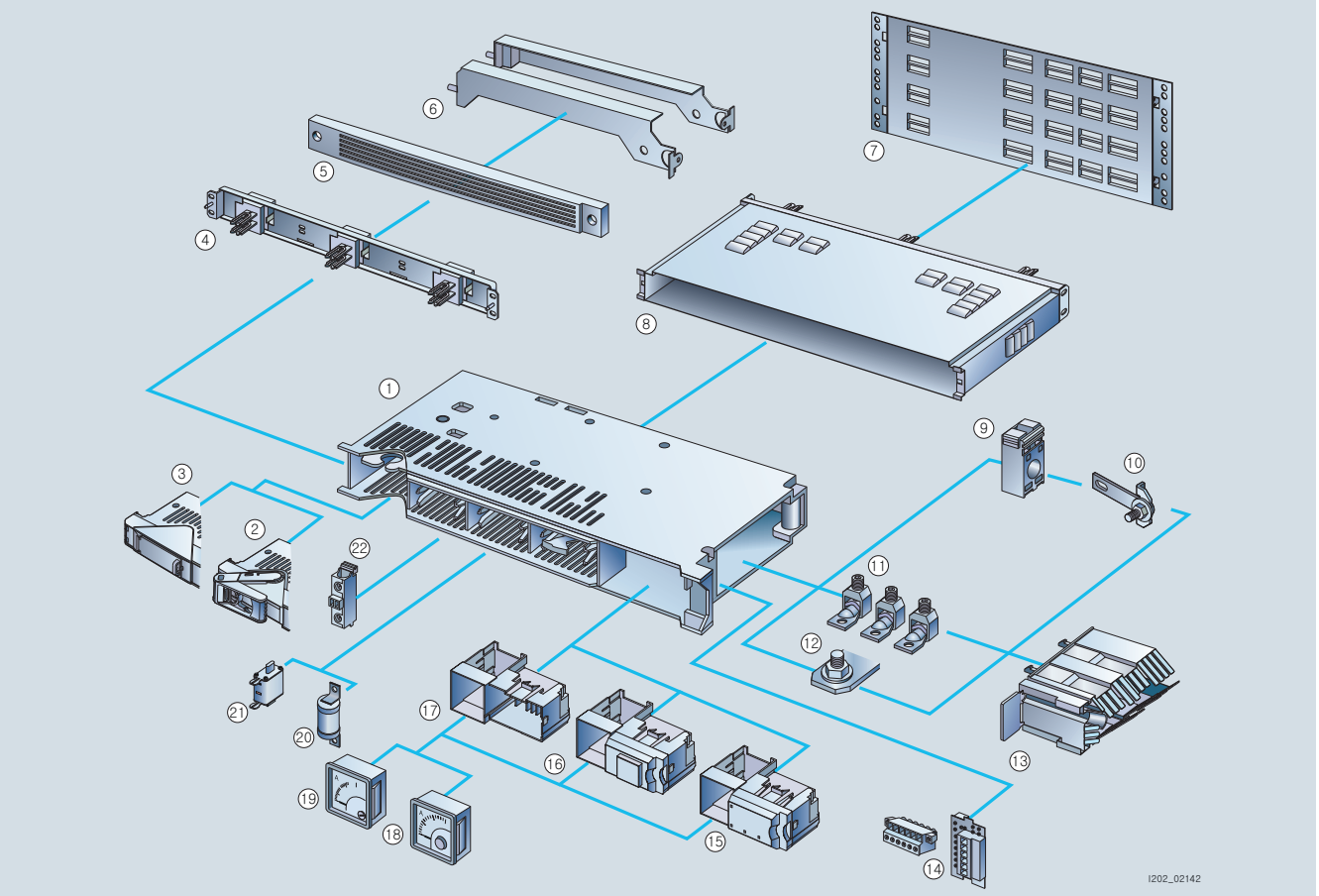
3NJ62 switch disconnectors with fuses

All key product features at a glance

- In-line design
- Type-tested according to IEC EN 60947-3
- Voltage levels up to 690 V AC/440 V DC
- 160 A to 630 A for LV HRC and BS 88 fuse links, according to IEC 60269-1/EN 60269-1
- 2-, 3- and 4-pole versions available
- 185 mm phase center distance of plug-in contacts
- Manually operated or with motorized operating mechanism
- Electronic fuse monitoring (EFM)
- Developed for switchboard in plug-in design
- Horizontal or vertical mounting position
- Front panel locked in ON position
- Degree of protection IP41

7

Overview of all components and accessory parts



1. 3NJ62 switch disconnector basic device here in size 00, open, without front cover
2. Manual operating mechanism
3. Motorized operating mechanism
4. Connection module
5. Blanking cover
6. Guide rails
7. Busbar cover
8. Contact extension
9. Current transformer
10. Current transformer bar
11. Connection terminals
12. Stud terminal
13. Terminal cover
14. Multifunction plug
15. Holder for measuring device with electronic fuse monotoring (EFM 10)
16. Holder for measuring device with electronic fuse monotoring (EFM 20/25)
17. Holder for measuring device without EFM
18. Bimetal current measuring device
19. Moving-iron current measuring device
20. BS fuse
21. LV MRC fuse
22. Auxiliary switch

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Benefits

Key advantages for switchboard manufacturers due to the following:

- Compact, modular design
- Simple and efficient mounting due to incoming plug-in contact
- High packing density in the field
- Cable connection with cable clamps or cable lugs
- Can be mounted in different control cabinet depths
- Comprehensive range of accessories.

The advantages for users are:

- Conversion, retrofitting and replacement without switching off the switchboard
- Dead-state fuse replacement
- Maintenance-free
- High personal safety
- Operating handle can be locked in OFF position
- Clear and unambiguous switch position indicator

Application

The plug-in 3NJ62 switch disconnectors with fuses are installed in low-voltage distribution boards where a minimum amount of space is available for a maximum number of cable ducts to the power distribution. They can be easily fitted in all common control cabinets (minimum depth: 400 mm).

The plug-in 3NJ62 switch disconnectors with fuses are available for rated uninterrupted currents from 160 A to 630 A.

LV HRC fuse links according to IEC 60269-1/EN 60269-1 (sizes NH 00 to NH 3) or BS fuse links according to BS 88 provide overload and short-circuit protection up to 690 V AC.

The switch disconnectors can be retrofitted at any time with auxiliary switches, an ammeter (48 mm x 48 mm) and current transformers, with no extra space required. For installation in control cabinets of > 400 mm depth, the mounting depth of the disconnectors can be increased by 200 mm using a contact extension. Further installation accessories, such as guide rails and blanking covers, complete the product range.

Function

Fuse monitoring

Fuse monitoring is used to detect, indicate and report faults. The electronic fuse monitoring devices are available in 2 versions.

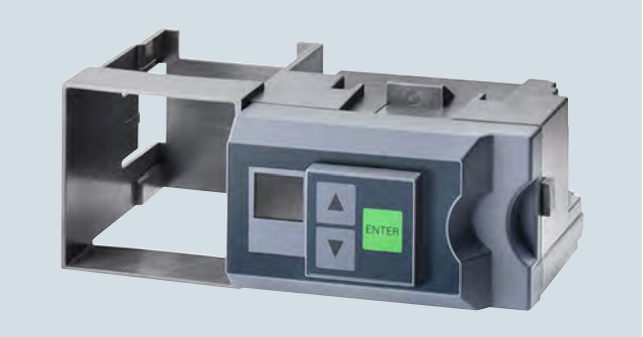
EFM10 electronic fuse monitoring devices:

- For use up to 690 V AC
- Operational voltage < 20 V
- Display: Ready-to-run
- Individual fault display per phase
- 1 CO contact as centralized fault signaling unit

EFM20/25 electronic fuse monitoring and line monitoring devices:

- EFM20 for use up to 690 V AC, EFM25 for use up to 440 V DC
- Operational voltage < 13 V (EFM20) < 20 V (EFM25)
- Test function
- Closed-circuit principle or open-circuit principle
- 2 CO contacts as centralized fault signaling unit incl. line monitoring functions with phase failure detection (EFM20), undervoltage/overvoltage detection

EFM10 electronic fuse monitoring device



EFM20/25 electronic fuse monitoring device

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Technical specifications

Main devices of sizes 00 and 1

Size		00								1			
Switch disconnectors with fuses type 3NJ62...	**NH**			**...02-3 ...02-4**		**...03-1 ...04-1 ...04-2**		**...03-3 ...03-4**		**...12-3 ...12-4**		**...13-1 ...14-1 ...14-2**	**...13-3 ...13-4**
	BS	**...43-3**	**...53-3**	**...62-3 ...62-4**				**...63-3 ...63-4**		**...72-3 ...72-4**		**...74-1 ...74-2**	**...73-3 ...73-4**
Breaking capacity		H	H	H		S		H		H		S	H
Rated insulation voltage U_i	V	1000											
Rated impulse withstand voltage U_{imp}	V	8000											
Rated operational current I_e	A	63	100	160	-	160	125	160	125	250			
For LV HRC fuse links acc. to IEC 60269		-	-	for 00 and 000						1			
For BS fuse links acc. to BS 88		A3	A3	00T[1)]						B2			
Rated operational voltage U_e													
• At 50/60Hz rated frequency	V	690		--	--	500	690	500	690	690			
• At DC	V	--	--	230	440	--	--	--	--	230	440	-	-
Utilization category		AC23B		DC23B	DC21B	AC22B		AC23B		DC23B	DC21B	AC22B	AC23B
Rated conditional short-circuit current													
• Short-circuit strength (rms value)	kA	100		60		100		100		60		100	
• Short-circuit making capacity (rms value)	kA	66		60		55		66		60		55	66
Rated making capacity													
• p.f. = 0.65	A	--	--	--	--	480	375	--	--	--	--	750	--
• p.f. = 0.45	A	630	1000	--	--	--	--	--	--	--	--	--	--
• p.f. = 0.35	A	--	--	--	--	--	--	1600	1250	--	--	--	2500
Rated breaking capacity													
• p.f. = 0.65	A	--	--	--	--	480	375	--	--	--	--	750	--
• p.f. = 0.45	A	504	800	--	--	--	--	--	--	--	--	--	--
• p.f. = 0.35	A	--	--	--	--	--	--	1280	1000	--	--	--	2000
Endurance													
Operating cycles total		2000		1600						1600			
• Electrical (690 V, p.f. = 0.65)		300		200						200			
Power loss (no fuse links)	W	7	17	43						78			
Permissible ambient temperature	°C	-5...+55											
Permissible mounting positions		Horizontal and vertical with bottom connection											
Degree of protection (in operating state)		IP41											
Connection type		Main conductor connections											
Cable lug connection													
• Conductor cross-section (Al/Cu, solid or stranded) according to DIN 46235 (Cu) and DIN 46239 (Al)	mm^2	1x 10-95 2x 16-70								1x 25-240 2x 25-70			
• Screw size		M8								M12			
• Torque	Nm	15								30			
Terminal connection													
• Conductor cross-section (Al/Cu), rm	mm^2	1x 10-50								1x 16-185			
• Conductor cross-section (Al/Cu), re	mm^2	1x 10-50								1x 16-150			
• Conductor cross-section (Al/Cu), sm	mm^2	1x 16-95								1x 35-240			
• Conductor cross-section (Al/Cu), se	mm^2	1x 16-95								1x 35-300			
• Required torque	Nm	15								25			

[1)] The fuse is available from Lawson Fuses (UK) and does not correspond to BS 88.

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Main devices of sizes 2 and 3

Size		**2**				**3**					
Switch disconnectors with fuses type 3NJ62...	**NH**	**...22-3 ...22-4**		**...23-1 ...24-1 ...24-2**	**...23-3 ...23-4**	**...32-3 ...32-4**		**...33-1 ...34-1 ...34-2**		**...33-3 ...33-4**	
	BS	**...82-3 ...82-4**			**...83-3 ...83-4**	**...92-3 ...92-4**		**...94-1 ...94-2**		**...93-3 ...93-4 ...33-3 ...33-4**	
Breaking capacity		H		S	H	H		S		H	
Rated insulation voltage U_i	V	1000									
Rated impulse withstand voltage U_{imp}	V	8000									
Rated operational current I_e											
• For fuse links according to IEC 60269/ BS88	A	400				630			500	630	500
For fuse links according to IEC 60269		2 and 1				3 and 2					
For BS fuse links acc. to BS 88		B4				3T[1)]					
Rated operational voltage U_e											
• At 50/60Hz rated frequency	V	--	--	690		230	440	500	690	500	690
• At DC	V	230	440	--		--	--	--	--	--	--
Utilization category		DC23B	DC21B	AC22B	AC23B	DC23B	DC21B	AC22B		AC23B	
Rated conditional short-circuit current											
• Short-circuit strength (rms value)	kA	60		100		60		100			
• Short-circuit making capacity (rms value)	kA	60		55	66	60		55		66	
Rated making capacity											
• p.f. = 0.65	A	--	--	1200	--	--	--	1890	1500	--	--
• p.f. = 0.45	A	--	--	--	--	--	--	--	--	--	--
• p.f. = 0.35	A	--	--	--	4000	--	--	--	--	6300	5000
Rated breaking capacity											
• p.f. = 0.65	A	--	--	1200	--	--	--	1890	1500	--	--
• p.f. = 0.45	A	--	--	--	--	--	--	--	--	--	--
• p.f. = 0.35	A	--	--	--	3200	--	--	--	--	5040	4000
Endurance											
Operating cycles total		1000				1000					
• Electrical (690 V, p.f. = 0.65)		200				200					
Power loss (no fuse links)	W	158				357					
Permissible ambient temperature	°C	-5...+55									
Permissible mounting positions		Horizontal and vertical with bottom connection									
Degree of protection (in operating state)		IP41									
Connection type		Main conductor connections									
Cable lug connection											
Conductor cross-section	mm^2	1x 25-300				1x 25-300					
• Conductor cross-section (Al/Cu, solid or stranded) according to DIN46235 (Cu) and DIN46239 (Al)		2x 25-240				2x 25-240					
• Screw size		2x M12				2x M12					
• Torque	Nm	30				30					
Terminal connection											
• Conductor cross-section (Al/Cu), rm	mm^2	2x 16-185				2x 16-185					
• Conductor cross-section (Al/Cu), re	mm^2	2x 16-150				2x 16-150					
• Conductor cross-section (Al/Cu), sm	mm^2	2x 35-240				2x 35-240					
• Conductor cross-section (Al/Cu), se	mm^2	2x 35-300				2x 35-300					
• Required torque	Nm	25				25					

1) The fuse is available from Lawson Fuses (UK) and does not correspond to BS 88.

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Introduction

Auxiliary switches

Acc. to IEC 60947-5-1		
Rated insulation voltage U_i	V	690
Rated impulse withstand voltage U_{imp}	V	8000
Rated operational current I_e		
• At AC 15, U_e = 120 V	A	8
• At AC 15, U_e = 230 V	A	6
• At AC 15, U_e = 400 V	A	4
• At AC 15, U_e = 690 V	A	2

Electronic fuse monitoring, AC version (EFM 10)

Size		00	1	2/3
Apparent power consumption *S*	VA	Approx. 2.5		
Internal resist. of measurement circuit	MΩ	R_{in} > 6		
Storage temperature **Operating temperature** **Operating temperature (500 V and/or 500 A)**	°C °C °C	- 20 ... + 80 - 5 ... + 55 - 5 ... + 35		
Prot. rating in closed in-line connector		IP40		
Rated operating voltage of the main control switching devices	V AC Hz	230 ... 690 50/60		
Voltage limits	%	±15		
Signaling relay acc. to IEC 60947-5-1	A kV V	I_{th} = 1.5 U_{imp} = 4 U_i = 250		
Load capacity of the signaling relay				
• U_e	V	24	125	240
• DC - 13; I_e	A	1	0.2	0.1
• AC - 15; I_e	A	1.5		
Short-circuit protection		Max. fuse protection DIAZED 2 A gLgG		

Electronic fuse monitoring, AC version (EFM 20)

Size		00	1	2/3
Apparent power consumption *S*	VA	Approx. 2.5		
Internal resist. of measurement circuit	MΩ	R_{in} > 6		
Storage temperature **Operating temperature** **Operating temperature (500 V and/or 500 A)**	°C °C °C	- 20 ... + 80 - 5 ... + 55 - 5 ... + 35		
Prot. rating in closed in-line connector		IP40		
Rated operating voltage of the main control switching devices	V AC Hz	230 ... 690 50/60		
Voltage limits	%	±15		
Undervoltage **Overvoltage**	V V	375 425		
Voltage drop for faulty fuses	V	> 13		
Delay time	s	0.1		
Relay 2		As relay 1 (fuse monitoring)		
Storage function		Off		
Open/closed-circuit principle		Closed-circuit principle		
Mode		Run mode		
Menu option		Display of voltage values/ signals		
Signaling relay acc. to IEC 60947-5-1	A kV V	I_{th} = 1.5 U_{imp} = 4 U_i = 250		
Signaling relay 1 **Signaling relay 2**		1 changeover contact for fuse monitoring only 1 changeover contact as output for central fault OR as signaling relay 1 (presetting)		
Load capacity of the signaling relay				
• U_e	V	24	125	240
• DC - 13; I_e	A	1	0.2	0.1
• AC - 15; I_e	A	1.5		
Short-circuit protection		Max. fuse protection DIAZED 2 A gLgG		

Electronic fuse monitoring, DC version (EFM 25)

Size		00	1	2 / 3
Apparent power consumption *S*	VA	Approx. 2.5		
Internal resist. of measurement circuit	MΩ	R_{in} > 6		
Storage temperature **Operating temperature** **Operating temperature (500 V and/or 500 A)**	°C °C °C	- 20 ... + 80 - 5 ... + 55 - 5 ... + 35		
Prot. rating in closed in-line connector		IP40		
Rated operating voltage of the main control switching devices	V DC	220 ... 440		
Voltage limits	%	±15		
Undervoltage **Overvoltage**	V V	200 240		
Voltage drop for faulty fuses	V	> 20		
Delay time	s	0.1		
Relay 2		As relay 1 (fuse monitoring)		
Storage function		Off		
Open/closed-circuit principle		Closed-circuit principle		
Mode		Run mode		
Menu option		Display of voltage values/ signals		
Signaling relay acc. to IEC 60947-5-1	A kV V	I_{th} = 1.5 U_{imp} = 4 U_i = 250		
Signaling relay 1 **Signaling relay 2**		1 changeover contact for fuse monitoring only 1 changeover contact as output for central fault OR as signaling relay 1 (presetting)		
Load capacity of the signaling relay				
• U_e	V	24	125	240
• DC - 13; I_e	A	1	0.2	0.1
• AC - 15; I_e	A	1.5		
Short-circuit protection		Max. fuse protection DIAZED 2 A gLgG		

Ammeters

Inputs		x/1 A or x/5 A
Overload		
• Moving-iron measuring instruments		1.2 times
• Bi-metal measuring instruments		Double
Slave pointer		
• Moving-iron measuring instruments	min	--
• Bi-metal measuring instruments	min	15
Power consumption		
• Moving-iron measuring instruments	VA	0.6
• Bi-metal measuring instruments	VA	1

Motorized operating mechanism

Size		00	1	2/3
Control supply voltage	V DC	24 ± 2		
Power consumption	A	1.1	1.3	2.8
Service life (no limitation of switch disconnector according to IEC 60947-3)				
Operating cycles total		1600		
Operating cycles under load		200		
Signal duration	s	Min. 0.5 or continuous signal		

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Selection and ordering data

Rated current I_n	Size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
A								kg
2-pole, high breaking capacity H								
Manually operated								
160	00		3NJ6202-3AA0□-0AA0		1	1 unit	1DL	3.630
250	1		3NJ6212-3AA0□-0AA0		1	1 unit	1DL	6.750
400	2		3NJ6222-3AA0□-0AA0		1	1 unit	1DL	15.000
630	3		3NJ6232-3AA0□-0AA0		1	1 unit	1DL	15.360
Manually operated, EFM 25								
160	00		3NJ6202-3AE0□-0AA0		1	1 unit	1DL	3.830
250	1		3NJ6212-3AE0□-0AA0		1	1 unit	1DL	6.950
400	2		3NJ6222-3AE0□-0AA0		1	1 unit	1DL	15.200
630	3		3NJ6232-3AE0□-0AA0		1	1 unit	1DL	15.560
Motorized operating mechanism								
160	00		3NJ6202-4AA0□-0AA0		1	1 unit	1DL	3.630
250	1		3NJ6212-4AA0□-0AA0		1	1 unit	1DL	6.750
400	2		3NJ6222-4AA0□-0AA0		1	1 unit	1DL	15.000
630	3		3NJ6232-4AA0□-0AA0		1	1 unit	1DL	15.360
Mot. operat. mechanism, EFM 25								
160	00		3NJ6202-4AE0□-0AA0		1	1 unit	1DL	4.330
250	1		3NJ6212-4AE0□-0AA0		1	1 unit	1DL	7.450
400	2		3NJ6222-4AE0□-0AA0		1	1 unit	1DL	15.700
630	3		3NJ6232-4AE0□-0AA0		1	1 unit	1DL	16.060
3-pole, standard breaking capacity S								
Manually operated								
160	00		3NJ6203-1AA0□-□□□□		1	1 unit	1DL	3.630
250	1		3NJ6213-1AA0□-□□□□		1	1 unit	1DL	6.750
400	2		3NJ6223-1AA0□-□□□□		1	1 unit	1DL	15.000
630	3		3NJ6233-1AA0□-□□□□		1	1 unit	1DL	15.360
Manually operated, EFM 10								
160	00		3NJ6203-1AB0□-□□□□		1	1 unit	1DL	3.830
250	1		3NJ6213-1AB0□-□□□□		1	1 unit	1DL	6.950
400	2		3NJ6223-1AB0□-□□□□		1	1 unit	1DL	15.200
630	3		3NJ6233-1AB0□-□□□□		1	1 unit	1DL	15.560
Manually operated, EFM 20								
160	00		3NJ6203-1AC0□-□□□□		1	1 unit	1DL	3.830
250	1		3NJ6213-1AC0□-□□□□		1	1 unit	1DL	6.950
400	2		3NJ6223-1AC0□-□□□□		1	1 unit	1DL	15.200
630	3		3NJ6233-1AC0□-□□□□		1	1 unit	1DL	15.560
3-pole, high breaking capacity H								
Manually operated								
160	00		3NJ6203-3AA0□-□□□□		1	1 unit	1DL	3.630
250	1		3NJ6213-3AA0□-□□□□		1	1 unit	1DL	6.750
400	2		3NJ6223-3AA0□-□□□□		1	1 unit	1DL	15.000
630	3		3NJ6233-3AA0□-□□□□		1	1 unit	1DL	15.360
Manually operated, EFM 10								
160	00		3NJ6203-3AB0□-□□□□		1	1 unit	1DL	3.830
250	1		3NJ6213-3AB0□-□□□□		1	1 unit	1DL	6.950
400	2		3NJ6223-3AB0□-□□□□		1	1 unit	1DL	15.200
630	3		3NJ6233-3AB0□-□□□□		1	1 unit	1DL	15.560
Manually operated, EFM 20								
160	00		3NJ6203-3AC0□-□□□□		1	1 unit	1DL	3.830
250	1		3NJ6213-3AC0□-□□□□		1	1 unit	1DL	6.950
400	2		3NJ6223-3AC0□-□□□□		1	1 unit	1DL	15.200
630	3		3NJ6233-3AC0□-□□□□		1	1 unit	1DL	15.560
Motorized operating mechanism								
160	00		3NJ6203-4AA0□-□□□□		1	1 unit	1DL	3.630
250	1		3NJ6213-4AA0□-□□□□		1	1 unit	1DL	6.750
400	2		3NJ6223-4AA0□-□□□□		1	1 unit	1DL	15.000
630	3		3NJ6233-4AA0□-□□□□		1	1 unit	1DL	15.360
Mot. operat. mechanism, EFM 10								
160	00		3NJ6203-4AB0□-□□□□		1	1 unit	1DL	4.330
250	1		3NJ6213-4AB0□-□□□□		1	1 unit	1DL	7.450
400	2		3NJ6223-4AB0□-□□□□		1	1 unit	1DL	15.700
630	3		3NJ6233-4AB0□-□□□□		1	1 unit	1DL	16.060
Mot. operat. mechanism, EFM 20								
160	00		3NJ6203-4AC0□-□□□□		1	1 unit	1DL	4.330
250	1		3NJ6213-4AC0□-□□□□		1	1 unit	1DL	7.450
400	2		3NJ6223-4AC0□-□□□□		1	1 unit	1DL	15.700
630	3		3NJ6233-4AC0□-□□□□		1	1 unit	1DL	16.060

	Article No. supplement	Add. price
Standard Article No. supplement (for more Article No. supplements, see page 7/139)		
Without auxiliary switches, ammeters or current transformers ►	0 0AA0	None

* You can order this quantity or a multiple thereof.

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For LV HRC fuse links

Rated current I_n	Size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
A								kg
4-pole, standard breaking capacity S								
Manually operated								
160	00		3NJ6204-1AA0□-□□□□		1	1 unit	1DL	6.160
250	1		3NJ6214-1AA0□-□□□□		1	1 unit	1DL	10.380
400	2		3NJ6224-1AA0□-□□□□		1	1 unit	1DL	18.900
630	3		3NJ6234-1AA0□-□□□□		1	1 unit	1DL	20.000
Manually operated, EFM 10								
160	00		3NJ6204-1AB0□-□□□□		1	1 unit	1DL	6.830
250	1		3NJ6214-1AB0□-□□□□		1	1 unit	1DL	9.950
400	2		3NJ6224-1AB0□-□□□□		1	1 unit	1DL	18.200
630	3		3NJ6234-1AB0□-□□□□		1	1 unit	1DL	18.560
Manually operated, EFM 20								
160	00		3NJ6204-1AC0□-□□□□		1	1 unit	1DL	6.830
250	1		3NJ6214-1AC0□-□□□□		1	1 unit	1DL	9.950
400	2		3NJ6224-1AC0□-□□□□		1	1 unit	1DL	18.200
630	3		3NJ6234-1AC0□-□□□□		1	1 unit	1DL	18.560
Motorized operating mechanism								
160	00		3NJ6204-2AA0□-□□□□		1	1 unit	1DL	6.160
250	1		3NJ6214-2AA0□-□□□□		1	1 unit	1DL	10.380
400	2		3NJ6224-2AA0□-□□□□		1	1 unit	1DL	18.900
630	3		3NJ6234-2AA0□-□□□□		1	1 unit	1DL	20.000
Mot. operat. mechanism, EFM 10								
160	00		3NJ6204-2AB0□-□□□□		1	1 unit	1DL	7.330
250	1		3NJ6214-2AB0□-□□□□		1	1 unit	1DL	10.450
400	2		3NJ6224-2AB0□-□□□□		1	1 unit	1DL	18.700
630	3		3NJ6234-2AB0□-□□□□		1	1 unit	1DL	19.060
Mot. operat. mechanism, EFM 20								
160	00		3NJ6204-2AC0□-□□□□		1	1 unit	1DL	7.330
250	1		3NJ6214-2AC0□-□□□□		1	1 unit	1DL	10.450
400	2		3NJ6224-2AC0□-□□□□		1	1 unit	1DL	18.700
630	3		3NJ6234-2AC0□-□□□□		1	1 unit	1DL	19.060

	Article No. supplement	Additional price
Standard Article No. supplement (for more Article No. supplements, see page 7/139)		
Without auxiliary switches, ammeters or current transformers ►	0 0AA0	None

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* You can order this quantity or a multiple thereof.

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Selection and ordering data

Rated current I_n	Size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
A								kg
2-pole, high breaking capacity H								
Manually operated								
160	00T[1)]		3NJ6262-3AA0□-0AA0		1	1 unit	1DL	3.630
250	B2		3NJ6272-3AA0□-0AA0		1	1 unit	1DL	6.750
400	B4		3NJ6282-3AA0□-0AA0		1	1 unit	1DL	15.000
630	3T[1)]		3NJ6292-3AA0□-0AA0		1	1 unit	1DL	15.360
Manually operated, EFM 25								
160	00T[1)]		3NJ6262-3AE0□-0AA0		1	1 unit	1DL	3.830
250	B2		3NJ6272-3AE0□-0AA0		1	1 unit	1DL	6.950
400	B4		3NJ6282-3AE0□-0AA0		1	1 unit	1DL	15.200
630	3T[1)]		3NJ6292-3AE0□-0AA0		1	1 unit	1DL	15.560
Motorized operating mechanism								
160	00T[1)]		3NJ6262-4AA0□-0AA0		1	1 unit	1DL	3.630
250	B2		3NJ6272-4AA0□-0AA0		1	1 unit	1DL	6.750
400	B4		3NJ6282-4AA0□-0AA0		1	1 unit	1DL	15.000
630	3T[1)]		3NJ6292-4AA0□-0AA0		1	1 unit	1DL	15.360
Mot. operat. mechanism, EFM 25								
160	00T[1)]		3NJ6262-4AE0□-0AA0		1	1 unit	1DL	4.330
250	B2		3NJ6272-4AE0□-0AA0		1	1 unit	1DL	7.450
400	B4		3NJ6282-4AE0□-0AA0		1	1 unit	1DL	15.700
630	3T[1)]		3NJ6292-4AE0□-0AA0		1	1 unit	1DL	16.060
3-pole, high breaking capacity H								
Manually operated								
63	A3		3NJ6243-3AA0□-□□□□		1	1 unit	1DL	3.630
100	A3		3NJ6253-3AA0□-□□□□		1	1 unit	1DL	3.630
160	00T[1)]		3NJ6263-3AA0□-□□□□		1	1 unit	1DL	3.630
250	B2		3NJ6273-3AA0□-□□□□		1	1 unit	1DL	6.750
400	B4		3NJ6283-3AA0□-□□□□		1	1 unit	1DL	15.000
630	3T[1)]		3NJ6293-3AA0□-□□□□		1	1 unit	1DL	15.360
Manually operated, EFM 10								
160	00T[1)]		3NJ6263-3AB0□-□□□□		1	1 unit	1DL	3.830
250	B2		3NJ6273-3AB0□-□□□□		1	1 unit	1DL	6.950
400	B4		3NJ6283-3AB0□-□□□□		1	1 unit	1DL	15.200
630	3T[1)]		3NJ6293-3AB0□-□□□□		1	1 unit	1DL	15.560
Manually operated, EFM 20								
160	00T[1)]		3NJ6263-3AC0□-□□□□		1	1 unit	1DL	3.830
250	B2		3NJ6273-3AC0□-□□□□		1	1 unit	1DL	6.950
400	B4		3NJ6283-3AC0□-□□□□		1	1 unit	1DL	15.200
630	3T[1)]		3NJ6293-3AC0□-□□□□		1	1 unit	1DL	15.560
Motorized operating mechanism								
160	00T[1)]		3NJ6263-4AA0□-□□□□		1	1 unit	1DL	3.630
250	B2		3NJ6273-4AA0□-□□□□		1	1 unit	1DL	6.750
400	B4		3NJ6283-4AA0□-□□□□		1	1 unit	1DL	15.000
630	3T[1)]		3NJ6293-4AA0□-□□□□		1	1 unit	1DL	15.360
Mot. operat. mechanism, EFM 10								
160	00T[1)]		3NJ6263-4AB0□-□□□□		1	1 unit	1DL	4.330
250	B2		3NJ6273-4AB0□-□□□□		1	1 unit	1DL	7.450
400	B4		3NJ6283-4AB0□-□□□□		1	1 unit	1DL	15.700
630	3T[1)]		3NJ6293-4AB0□-□□□□		1	1 unit	1DL	16.060
Mot. operat. mechanism, EFM 20								
160	00T[1)]		3NJ6263-4AC0□-□□□□		1	1 unit	1DL	4.330
250	B2		3NJ6273-4AC0□-□□□□		1	1 unit	1DL	7.450
400	B4		3NJ6283-4AC0□-□□□□		1	1 unit	1DL	15.700
630	3T[1)]		3NJ6293-4AC0□-□□□□		1	1 unit	1DL	16.060

	Article No. supplement	Additional price
Standard Article No. supplement (for more Article No. supplements, see page 7/139)		
Without auxiliary switches, ammeters or current transformers ►	0 0AA0	None

[1)] The fuse is available from Lawson Fuses (UK) and does not correspond to BS 88.

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For BS fuse links

Rated current I_n	Size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
A								kg
4-pole, standard breaking capacity S								
Manually operated								
160	00T[1)]		3NJ6264-1AA0□-□□□□		1	1 unit	1DL	6.160
250	B2		3NJ6274-1AA0□-□□□□		1	1 unit	1DL	10.380
400	B4		3NJ6284-1AA0□-□□□□		1	1 unit	1DL	18.900
630	3T[1)]		3NJ6294-1AA0□-□□□□		1	1 unit	1DL	20.000
Manually operated, EFM 10								
160	00T[1)]		3NJ6264-1AB0□-□□□□		1	1 unit	1DL	6.830
250	B2		3NJ6274-1AB0□-□□□□		1	1 unit	1DL	9.950
400	B4		3NJ6284-1AB0□-□□□□		1	1 unit	1DL	18.200
630	3T[1)]		3NJ6294-1AB0□-□□□□		1	1 unit	1DL	18.560
Manually operated, EFM 20								
160	00T[1)]		3NJ6264-1AC0□-□□□□		1	1 unit	1DL	6.830
250	B2		3NJ6274-1AC0□-□□□□		1	1 unit	1DL	9.950
400	B4		3NJ6284-1AC0□-□□□□		1	1 unit	1DL	18.200
630	3T[1)]		3NJ6294-1AC0□-□□□□		1	1 unit	1DL	18.560
Motorized operating mechanism								
160	00T[1)]		3NJ6264-2AA0□-□□□□		1	1 unit	1DL	6.160
250	B2		3NJ6274-2AA0□-□□□□		1	1 unit	1DL	10.380
400	B4		3NJ6284-2AA0□-□□□□		1	1 unit	1DL	18.900
630	3T[1)]		3NJ6294-2AA0□-□□□□		1	1 unit	1DL	20.000
Mot. operat. mechanism, EFM 10								
160	00T[1)]		3NJ6264-2AB0□-□□□□		1	1 unit	1DL	7.330
250	B2		3NJ6274-2AB0□-□□□□		1	1 unit	1DL	10.450
400	B4		3NJ6284-2AB0□-□□□□		1	1 unit	1DL	18.700
630	3T[1)]		3NJ6294-2AB0□-□□□□		1	1 unit	1DL	19.060
Mot. operat. mechanism, EFM 20								
160	00T[1)]		3NJ6264-2AC0□-□□□□		1	1 unit	1DL	7.330
250	B2		3NJ6274-2AC0□-□□□□		1	1 unit	1DL	10.450
400	B4		3NJ6284-2AC0□-□□□□		1	1 unit	1DL	18.700
630	3T[1)]		3NJ6294-2AC0□-□□□□		1	1 unit	1DL	19.060
			Article No. supplement	Additional price				
Standard Article No. supplement (for more Article No. supplements, see page 7/139)								
Without auxiliary switches, ammeters or current transformers		►	0 0AA0	None				

[1)] The fuse is available from Lawson Fuses (UK) and does not correspond to BS 88.

* You can order this quantity or a multiple thereof.

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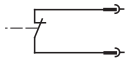
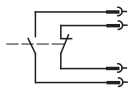
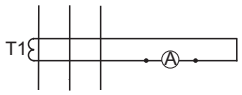
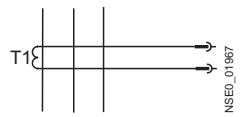
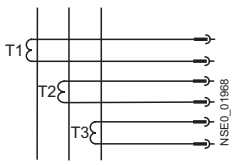
Options

1st Article No. supplement:
Auxiliary switch wired to multi-function plug

		DT	Article No. supplement 3NJ62 ..-....□-....	Additional price	PS*/ P. unit
	Without	►	**0**	**None**	1 unit
	1 NO contact		**1**	✓	1 unit
	1 NC contact		**2**	✓	1 unit
	1 NO contact + 1 NC contact		**3**	✓	1 unit

2nd Article No. supplement:
Ammeter and current transformer wired

	Ammeters	Current transformers			DT	Article No. supplement 3NJ62 ..-.....-□□□□	Additional price	PS*/ P. unit
		Primary current	Secondary current	Accuracy class				
		A	A					
For sizes 00 and 00T								
	Without	Without	Without	Without	►	**0AA0**	**None**	1 unit
	1 current transformer to 1 ammeter							
	Moving iron	50	1	1		**1DB1**	✓	1 unit
	Moving iron	50	5	1		**1DB4**	✓	1 unit
	Moving iron	100	1	1		**1DD1**	✓	1 unit
	Moving iron	100	5	1		**1DD4**	✓	1 unit
	Moving iron	150	1	1		**1DE1**	✓	1 unit
	Moving iron	150	5	1		**1DE4**	✓	1 unit
	Bi-metal	50	1	1		**2DB1**	✓	1 unit
	Bi-metal	50	5	1		**2DB4**	✓	1 unit
	Bi-metal	100	1	1		**2DD1**	✓	1 unit
	Bi-metal	100	5	1		**2DD4**	✓	1 unit
	Bi-metal	150	1	1		**2DE1**	✓	1 unit
	Bi-metal	150	5	1		**2DE4**	✓	1 unit
	1 current transformer to multi-function plug							
	Without	50	1	1		**0BB1**	✓	1 unit
	Without	50	5	1		**0BB4**	✓	1 unit
	Without	100	1	1		**0BD1**	✓	1 unit
	Without	100	1	0.5		**0BD2**	✓	1 unit
	Without	100	1	0.5 calibrated		**0BD3**	✓	1 unit
	Without	100	5	1		**0BD4**	✓	1 unit
	Without	100	5	0.5		**0BD5**	✓	1 unit
	Without	100	5	0.5 calibrated		**0BD6**	✓	1 unit
	Without	150	1	1		**0BE1**	✓	1 unit
	Without	150	1	0.5		**0BE2**	✓	1 unit
	Without	150	1	0.5 calibrated		**0BE3**	✓	1 unit
	Without	150	5	1		**0BE4**	✓	1 unit
	Without	150	5	0.5		**0BE5**	✓	1 unit
	Without	150	5	0.5 calibrated		**0BE6**	✓	1 unit
	3 current transformers to multi-function plug							
	Without	50	1	1		**0CB1**	✓	1 unit
	Without	50	5	1		**0CB4**	✓	1 unit
	Without	100	1	1		**0CD1**	✓	1 unit
	Without	100	1	0.5		**0CD2**	✓	1 unit
	Without	100	1	0.5 calibrated		**0CD3**	✓	1 unit
	Without	100	5	1		**0CD4**	✓	1 unit
	Without	100	5	0.5		**0CD5**	✓	1 unit
	Without	100	5	0.5 calibrated		**0CD6**	✓	1 unit
	Without	150	1	1		**0CE1**	✓	1 unit
	Without	150	1	0.5		**0CE2**	✓	1 unit
	Without	150	1	0.5 calibrated		**0CE3**	✓	1 unit
	Without	150	5	1		**0CE4**	✓	1 unit
	Without	150	5	0.5		**0CE5**	✓	1 unit
✓ Additional price	Without	150	5	0.5 calibrated		**0CE6**	✓	1 unit

*** You can order this quantity or a multiple thereof.**

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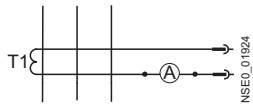
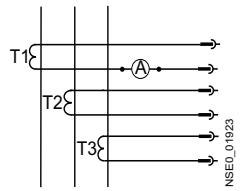
For LV HRC and BS fuse links

For sizes 00 and 00T (continued)

	Ammeters	Current transformers: Primary current	Current transformers: Secondary current	Current transformers: Accuracy class	DT	Article No. supplement 3NJ62 ..-.....-□□□□	Additional price	PS*/ P. unit
		A	A					
	1 current transformer to 1 ammeter and multi-function plug							
	Moving iron	50	1	1		**1EB1**	✓	1 unit
	Moving iron	50	5	1		**1EB4**	✓	1 unit
	Moving iron	100	1	1		**1ED1**	✓	1 unit
	Moving iron	100	1	0.5		**1ED2**	✓	1 unit
	Moving iron	100	1	0.5 calibrated		**1ED3**	✓	1 unit
	Moving iron	100	5	1		**1ED4**	✓	1 unit
	Moving iron	100	5	0.5		**1ED5**	✓	1 unit
	Moving iron	100	5	0.5 calibrated		**1ED6**	✓	1 unit
	Moving iron	150	1	1		**1EE1**	✓	1 unit
	Moving iron	150	1	0.5		**1EE2**	✓	1 unit
	Moving iron	150	1	0.5 calibrated		**1EE3**	✓	1 unit
	Moving iron	150	5	1		**1EE4**	✓	1 unit
	Moving iron	150	5	0.5		**1EE5**	✓	1 unit
	Moving iron	150	5	0.5 calibrated		**1EE6**	✓	1 unit
	Bi-metal	50	1	1		**2EB1**	✓	1 unit
	Bi-metal	50	5	1		**2EB4**	✓	1 unit
	Bi-metal	100	1	1		**2ED1**	✓	1 unit
	Bi-metal	100	1	0.5		**2ED2**	✓	1 unit
	Bi-metal	100	1	0.5 calibrated		**2ED3**	✓	1 unit
	Bi-metal	100	5	1		**2ED4**	✓	1 unit
	Bi-metal	100	5	0.5		**2ED5**	✓	1 unit
	Bi-metal	100	5	0.5 calibrated		**2ED6**	✓	1 unit
	Bi-metal	150	1	1		**2EE1**	✓	1 unit
	Bi-metal	150	1	0.5		**2EE2**	✓	1 unit
	Bi-metal	150	1	0.5 calibrated		**2EE3**	✓	1 unit
	Bi-metal	150	5	1		**2EE4**	✓	1 unit
	Bi-metal	150	5	0.5		**2EE5**	✓	1 unit
	Bi-metal	150	5	0.5 calibrated		**2EE6**	✓	1 unit
	3 current transformers to 1 ammeter and multi-function plug							
	Moving iron	50	1	1		**1FB1**	✓	1 unit
	Moving iron	50	5	1		**1FB4**	✓	1 unit
	Moving iron	100	1	1		**1FD1**	✓	1 unit
	Moving iron	100	1	0.5		**1FD2**	✓	1 unit
	Moving iron	100	1	0.5 calibrated		**1FD3**	✓	1 unit
	Moving iron	100	5	1		**1FD4**	✓	1 unit
	Moving iron	100	5	0.5		**1FD5**	✓	1 unit
	Moving iron	100	5	0.5 calibrated		**1FD6**	✓	1 unit
	Moving iron	150	1	1		**1FE1**	✓	1 unit
	Moving iron	150	5	0.5		**1FE2**	✓	1 unit
	Moving iron	150	5	0.5 calibrated		**1FE3**	✓	1 unit
	Moving iron	150	5	1		**1FE4**	✓	1 unit
	Moving iron	150	5	0.5		**1FE5**	✓	1 unit
	Moving iron	150	5	0.5 calibrated		**1FE6**	✓	1 unit
	Bi-metal	50	1	1		**2FB1**	✓	1 unit
	Bi-metal	50	5	1		**2FB4**	✓	1 unit
	Bi-metal	100	1	1		**2FD1**	✓	1 unit
	Bi-metal	100	1	0.5		**2FD2**	✓	1 unit
	Bi-metal	100	1	0.5 calibrated		**2FD3**	✓	1 unit
	Bi-metal	100	5	1		**2FD4**	✓	1 unit
	Bi-metal	100	5	0.5		**2FD5**	✓	1 unit
	Bi-metal	100	5	0.5 calibrated		**2FD6**	✓	1 unit
	Bi-metal	150	1	1		**2FE1**	✓	1 unit
	Bi-metal	150	1	0.5		**2FE2**	✓	1 unit
	Bi-metal	150	1	0.5 calibrated		**2FE3**	✓	1 unit
	Bi-metal	150	5	1		**2FE4**	✓	1 unit
	Bi-metal	150	5	0.5		**2FE5**	✓	1 unit
	Bi-metal	150	5	0.5 calibrated		**2FE6**	✓	1 unit

✓ Additional price

* You can order this quantity or a multiple thereof.

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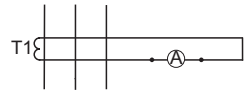
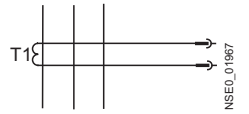
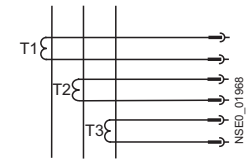
	Ammeters	Current transformers			DT	Article No. supplement	Additional price	PS*/ P. unit
		Primary current	Secondary current	Accuracy class		3NJ62 ..-.....-□□□□		
		A	A					
For sizes 1 and B2								
	Without	Without	Without	Without	▶	**0AA0**	**None**	1 unit
	1 current transformer to 1 ammeter							
	Moving iron	50	1	1		**1DB1**	✓	1 unit
	Moving iron	50	5	1		**1DB4**	✓	1 unit
	Moving iron	100	1	1		**1DD1**	✓	1 unit
	Moving iron	100	5	1		**1DD4**	✓	1 unit
	Moving iron	150	1	1		**1DE1**	✓	1 unit
	Moving iron	150	5	1		**1DE4**	✓	1 unit
	Moving iron	200	1	1		**1DF1**	✓	1 unit
	Moving iron	200	5	1		**1DF4**	✓	1 unit
	Moving iron	250	1	1		**1DG1**	✓	1 unit
	Moving iron	250	5	1		**1DG4**	✓	1 unit
	Bi-metal	50	1	1		**2DB1**	✓	1 unit
	Bi-metal	50	5	1		**2DB4**	✓	1 unit
	Bi-metal	100	1	1		**2DD1**	✓	1 unit
	Bi-metal	100	5	1		**2DD4**	✓	1 unit
	Bi-metal	150	1	1		**2DE1**	✓	1 unit
	Bi-metal	150	5	1		**2DE4**	✓	1 unit
	Bi-metal	200	1	1		**2DF1**	✓	1 unit
	Bi-metal	200	5	1		**2DF4**	✓	1 unit
	Bi-metal	250	1	1		**2DG1**	✓	1 unit
	Bi-metal	250	5	1		**2DG4**	✓	1 unit
	1 current transformer to multi-function plug							
	Without	50	1	1		**0BB1**	✓	1 unit
	Without	50	5	1		**0BB4**	✓	1 unit
	Without	100	1	1		**0BD1**	✓	1 unit
	Without	100	1	0.5		**0BD2**	✓	1 unit
	Without	100	5	1		**0BD4**	✓	1 unit
	Without	100	5	0.5		**0BD5**	✓	1 unit
	Without	150	1	1		**0BE1**	✓	1 unit
	Without	150	1	0.5		**0BE2**	✓	1 unit
	Without	150	5	1		**0BE4**	✓	1 unit
	Without	150	5	0.5		**0BE5**	✓	1 unit
	Without	200	1	1		**0BF1**	✓	1 unit
	Without	200	1	0.5		**0BF2**	✓	1 unit
	Without	200	5	1		**0BF4**	✓	1 unit
	Without	200	5	0.5		**0BF5**	✓	1 unit
	Without	250	1	1		**0BG1**	✓	1 unit
	Without	250	1	0.5		**0BG2**	✓	1 unit
	Without	250	5	1		**0BG4**	✓	1 unit
	Without	250	5	0.5		**0BG5**	✓	1 unit
	3 current transformers to multi-function plug							
	Without	50	1	1		**0CB1**	✓	1 unit
	Without	50	5	1		**0CB4**	✓	1 unit
	Without	100	1	1		**0CD1**	✓	1 unit
	Without	100	1	0.5		**0CD2**	✓	1 unit
	Without	100	5	1		**0CD4**	✓	1 unit
	Without	100	5	0.5		**0CD5**	✓	1 unit
	Without	150	1	1		**0CE1**	✓	1 unit
	Without	150	1	0.5		**0CE2**	✓	1 unit
	Without	150	5	1		**0CE4**	✓	1 unit
	Without	150	5	0.5		**0CE5**	✓	1 unit
	Without	200	1	1		**0CF1**	✓	1 unit
	Without	200	1	0.5		**0CF2**	✓	1 unit
	Without	200	5	1		**0CF4**	✓	1 unit
	Without	200	5	0.5		**0CF5**	✓	1 unit
	Without	250	1	1		**0CG1**	✓	1 unit
	Without	250	1	0.5		**0CG2**	✓	1 unit
	Without	250	5	1		**0CG4**	✓	1 unit
	Without	250	5	0.5		**0CG5**	✓	1 unit

✓ Additional price

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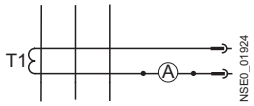
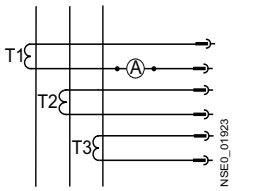
For LV HRC and BS fuse links

For sizes 1 and B2 (continued)



1 current transformer to 1 ammeter and multi-function plug

Ammeters	Current transformers: Primary current A	Current transformers: Secondary current A	Current transformers: Accuracy class	DT	Article No. supplement 3NJ62 ..-.....-□□□□	Additional price	PS*/ P. unit
Moving iron	50	1	1		1EB1	✓	1 unit
Moving iron	50	5	1		1EB4	✓	1 unit
Moving iron	100	1	1		1ED1	✓	1 unit
Moving iron	100	1	0.5		1ED2	✓	1 unit
Moving iron	100	5	1		1ED4	✓	1 unit
Moving iron	100	5	0.5		1ED5	✓	1 unit
Moving iron	150	1	1		1EE1	✓	1 unit
Moving iron	150	1	0.5		1EE2	✓	1 unit
Moving iron	150	5	1		1EE4	✓	1 unit
Moving iron	150	5	0.5		1EE5	✓	1 unit
Moving iron	200	1	1		1EF1	✓	1 unit
Moving iron	200	1	0.5		1EF2	✓	1 unit
Moving iron	200	5	1		1EF4	✓	1 unit
Moving iron	200	5	0.5		1EF5	✓	1 unit
Moving iron	250	1	1		1EG1	✓	1 unit
Moving iron	250	1	0.5		1EG2	✓	1 unit
Moving iron	250	5	1		1EG4	✓	1 unit
Moving iron	250	5	0.5		1EG5	✓	1 unit
Bi-metal	50	1	1		2EB1	✓	1 unit
Bi-metal	50	5	1		2EB4	✓	1 unit
Bi-metal	100	1	1		2ED1	✓	1 unit
Bi-metal	100	1	0.5		2ED2	✓	1 unit
Bi-metal	100	5	1		2ED4	✓	1 unit
Bi-metal	100	5	0.5		2ED5	✓	1 unit
Bi-metal	150	1	1		2EE1	✓	1 unit
Bi-metal	150	1	0.5		2EE2	✓	1 unit
Bi-metal	150	5	1		2EE4	✓	1 unit
Bi-metal	150	5	0.5		2EE5	✓	1 unit
Bi-metal	200	1	1		2EF1	✓	1 unit
Bi-metal	200	1	0.5		2EF2	✓	1 unit
Bi-metal	200	5	1		2EF4	✓	1 unit
Bi-metal	200	5	0.5		2EF5	✓	1 unit
Bi-metal	250	1	1		2EG1	✓	1 unit
Bi-metal	250	1	0.5		2EG2	✓	1 unit
Bi-metal	250	5	1		2EG4	✓	1 unit
Bi-metal	250	5	0.5		2EG5	✓	1 unit



3 current transformers to 1 ammeter and multi-function plug

Ammeters	Current transformers: Primary current A	Current transformers: Secondary current A	Current transformers: Accuracy class	DT	Article No. supplement 3NJ62 ..-.....-□□□□	Additional price	PS*/ P. unit
Moving iron	50	1	1		1FB1	✓	1 unit
Moving iron	50	5	1		1FB4	✓	1 unit
Moving iron	100	1	1		1FD1	✓	1 unit
Moving iron	100	1	0.5		1FD2	✓	1 unit
Moving iron	100	5	1		1FD4	✓	1 unit
Moving iron	100	5	0.5		1FD5	✓	1 unit
Moving iron	150	1	1		1FE1	✓	1 unit
Moving iron	150	1	0.5		1FE2	✓	1 unit
Moving iron	150	5	1		1FE4	✓	1 unit
Moving iron	150	5	0.5		1FE5	✓	1 unit
Moving iron	200	1	1		1FF1	✓	1 unit
Moving iron	200	1	0.5		1FF2	✓	1 unit
Moving iron	200	5	1		1FF4	✓	1 unit
Moving iron	200	5	0.5		1FF5	✓	1 unit
Moving iron	250	1	1		1FG1	✓	1 unit
Moving iron	250	1	0.5		1FG2	✓	1 unit
Moving iron	250	5	1		1FG4	✓	1 unit
Moving iron	250	5	0.5		1FG5	✓	1 unit
Bi-metal	50	1	1		2FB1	✓	1 unit
Bi-metal	50	5	1		2FB4	✓	1 unit
Bi-metal	100	1	1		2FD1	✓	1 unit
Bi-metal	100	1	0.5		2FD2	✓	1 unit
Bi-metal	100	5	1		2FD4	✓	1 unit
Bi-metal	100	5	0.5		2FD5	✓	1 unit
Bi-metal	150	1	1		2FE1	✓	1 unit
Bi-metal	150	1	0.5		2FE2	✓	1 unit
Bi-metal	150	5	1		2FE4	✓	1 unit
Bi-metal	150	5	0.5		2FE5	✓	1 unit
Bi-metal	200	1	1		2FF1	✓	1 unit
Bi-metal	200	1	0.5		2FF2	✓	1 unit
Bi-metal	200	5	1		2FF4	✓	1 unit
Bi-metal	200	5	0.5		2FF5	✓	1 unit
Bi-metal	250	1	1		2FG1	✓	1 unit
Bi-metal	250	1	0.5		2FG2	✓	1 unit
Bi-metal	250	5	1		2FG4	✓	1 unit
Bi-metal	250	5	0.5		2FG5	✓	1 unit

✓ Additional price

* You can order this quantity or a multiple thereof.

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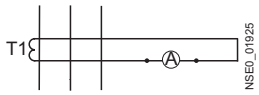
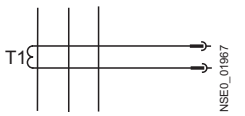
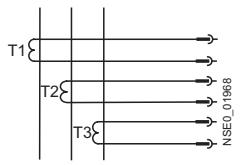
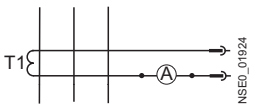
	Ammeters	Current transformers			DT	Article No. supplement	Additional price	PS*/ P. unit
		Primary current	Secondary current	Accuracy class		3NJ62 ..-.....-□□□□		
		A	A					
For sizes 2 and B4								
	Without	Without	Without		►	**0AA0**	**None**	1 unit
	1 current transformer to 1 ammeter							
	Moving iron	300	1	1		**1DH1**	✓	1 unit
	Moving iron	300	5	1		**1DH4**	✓	1 unit
	Moving iron	400	1	1		**1DJ1**	✓	1 unit
	Moving iron	400	5	1		**1DJ4**	✓	1 unit
	Bi-metal	300	1	1		**2DH1**	✓	1 unit
	Bi-metal	300	5	1		**2DH4**	✓	1 unit
	Bi-metal	400	1	1		**2DJ1**	✓	1 unit
	Bi-metal	400	5	1		**2DJ4**	✓	1 unit
	1 current transformer to multi-function plug							
	Without	300	1	1		**0BH1**	✓	1 unit
	Without	300	1	0.5		**0BH2**	✓	1 unit
	Without	300	1	0.5 calibrated		**0BH3**	✓	1 unit
	Without	300	5	1		**0BH4**	✓	1 unit
	Without	300	5	0.5		**0BH5**	✓	1 unit
	Without	300	5	0.5 calibrated		**0BH6**	✓	1 unit
	Without	400	1	1		**0BJ1**	✓	1 unit
	Without	400	1	0.5		**0BJ2**	✓	1 unit
	Without	400	1	0.5 calibrated		**0BJ3**	✓	1 unit
	Without	400	5	1		**0BJ4**	✓	1 unit
	Without	400	5	0.5		**0BJ5**	✓	1 unit
	Without	400	5	0.5 calibrated		**0BJ6**	✓	1 unit
	3 current transformers to multi-function plug							
	Without	300	1	1		**0CH1**	✓	1 unit
	Without	300	1	0.5		**0CH2**	✓	1 unit
	Without	300	1	0.5 calibrated		**0CH3**	✓	1 unit
	Without	300	5	1		**0CH4**	✓	1 unit
	Without	300	5	0.5		**0CH5**	✓	1 unit
	Without	300	5	0.5 calibrated		**0CH6**	✓	1 unit
	Without	400	1	1		**0CJ1**	✓	1 unit
	Without	400	1	0.5		**0CJ2**	✓	1 unit
	Without	400	1	0.5 calibrated		**0CJ3**	✓	1 unit
	Without	400	5	1		**0CJ4**	✓	1 unit
	Without	400	5	0.5		**0CJ5**	✓	1 unit
	Without	400	5	0.5 calibrated		**0CJ6**	✓	1 unit
	1 current transformer to 1 ammeter and multi-function plug							
	Moving iron	300	1	1		**1EH1**	✓	1 unit
	Moving iron	300	1	0.5		**1EH2**	✓	1 unit
	Moving iron	300	1	0.5 calibrated		**1EH3**	✓	1 unit
	Moving iron	300	5	1		**1EH4**	✓	1 unit
	Moving iron	300	5	0.5		**1EH5**	✓	1 unit
	Moving iron	300	5	0.5 calibrated		**1EH6**	✓	1 unit
	Moving iron	400	1	1		**1EJ1**	✓	1 unit
	Moving iron	400	1	0.5		**1EJ2**	✓	1 unit
	Moving iron	400	1	0.5 calibrated		**1EJ3**	✓	1 unit
	Moving iron	400	5	1		**1EJ4**	✓	1 unit
	Moving iron	400	5	0.5		**1EJ5**	✓	1 unit
	Moving iron	400	5	0.5 calibrated		**1EJ6**	✓	1 unit
	Bi-metal	300	1	1		**2EH1**	✓	1 unit
	Bi-metal	300	1	0.5		**2EH2**	✓	1 unit
	Bi-metal	300	1	0.5 calibrated		**2EH3**	✓	1 unit
	Bi-metal	300	5	1		**2EH4**	✓	1 unit
	Bi-metal	300	5	0.5		**2EH5**	✓	1 unit
	Bi-metal	300	5	0.5 calibrated		**2EH6**	✓	1 unit
	Bi-metal	400	1	1		**2EJ1**	✓	1 unit
	Bi-metal	400	1	0.5		**2EJ2**	✓	1 unit
	Bi-metal	400	1	0.5 calibrated		**2EJ3**	✓	1 unit
	Bi-metal	400	5	1		**2EJ4**	✓	1 unit
	Bi-metal	400	5	0.5		**2EJ5**	✓	1 unit
	Bi-metal	400	5	0.5 calibrated		**2EJ6**	✓	1 unit

✓ Additional price

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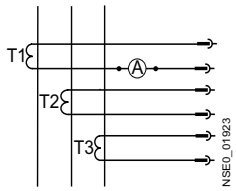
For LV HRC and BS fuse links

For sizes 2 and B4 (continued)



3 current transformers to 1 ammeter and multi-function plug

Ammeters	Current transformers: Primary current	Current transformers: Secondary current	Current transformers: Accuracy class	DT	Article No. supplement 3NJ62 ..-.....-□□□□	Additional price	PS*/ P. unit
	A	A					
Moving iron	300	1	1		**1FH1**	✓	1 unit
Moving iron	300	1	0.5		**1FH2**	✓	1 unit
Moving iron	300	1	0.5 calibrated		**1FH3**	✓	1 unit
Moving iron	300	5	1		**1FH4**	✓	1 unit
Moving iron	300	5	0.5		**1FH5**	✓	1 unit
Moving iron	300	5	0.5 calibrated		**1FH6**	✓	1 unit
Moving iron	400	1	1		**1FJ1**	✓	1 unit
Moving iron	400	1	0.5		**1FJ2**	✓	1 unit
Moving iron	400	1	0.5 calibrated		**1FJ3**	✓	1 unit
Moving iron	400	5	1		**1FJ4**	✓	1 unit
Moving iron	400	5	0.5		**1FJ5**	✓	1 unit
Moving iron	400	5	0.5 calibrated		**1FJ6**	✓	1 unit
Bi-metal	300	1	1		**2FH1**	✓	1 unit
Bi-metal	300	1	0.5		**2FH2**	✓	1 unit
Bi-metal	300	1	0.5 calibrated		**2FH3**	✓	1 unit
Bi-metal	300	5	1		**2FH4**	✓	1 unit
Bi-metal	300	5	0.5		**2FH5**	✓	1 unit
Bi-metal	300	5	0.5 calibrated		**2FH6**	✓	1 unit
Bi-metal	400	1	1		**2FJ1**	✓	1 unit
Bi-metal	400	1	0.5		**2FJ2**	✓	1 unit
Bi-metal	400	1	0.5 calibrated		**2FJ3**	✓	1 unit
Bi-metal	400	5	1		**2FJ4**	✓	1 unit
Bi-metal	400	5	0.5		**2FJ5**	✓	1 unit
Bi-metal	400	5	0.5 calibrated		**2FJ6**	✓	1 unit

✓ Additional price

* You can order this quantity or a multiple thereof.

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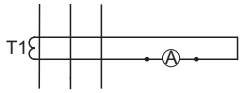
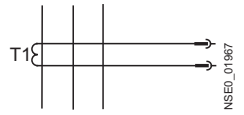
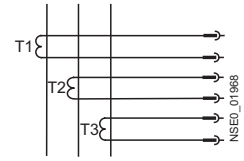
	Ammeters	Current transformers			DT	Article No. supplement	Additional price	PS*/ P. unit
		Primary current	Secondary current	Accuracy class		3NJ62 ..-.....-□□□□		
		A	A					
For sizes 3 and 3T								
	Without	Without	Without	Without	▶	**0AA0**	**None**	1 unit
	1 current transformer to 1 ammeter							
	Moving iron	300	1	1		**1DH1**	✓	1 unit
	Moving iron	300	5	1		**1DH4**	✓	1 unit
	Moving iron	400	1	1		**1DJ1**	✓	1 unit
	Moving iron	400	5	1		**1DJ4**	✓	1 unit
	Moving iron	500	1	1		**1DK1**	✓	1 unit
	Moving iron	500	5	1		**1DK4**	✓	1 unit
	Moving iron	600	1	1		**1DL1**	✓	1 unit
	Moving iron	600	5	1		**1DL4**	✓	1 unit
	Bi-metal	300	1	1		**2DH1**	✓	1 unit
	Bi-metal	300	5	1		**2DH4**	✓	1 unit
	Bi-metal	400	1	1		**2DJ1**	✓	1 unit
	Bi-metal	400	5	1		**2DJ4**	✓	1 unit
	Bi-metal	500	1	1		**2DK1**	✓	1 unit
	Bi-metal	500	5	1		**2DK4**	✓	1 unit
	Bi-metal	600	1	1		**2DL1**	✓	1 unit
	Bi-metal	600	5	1		**2DL4**	✓	1 unit
	1 current transformer to multi-function plug							
	Without	300	1	1		**0BH1**	✓	1 unit
	Without	300	1	0.5		**0BH2**	✓	1 unit
	Without	300	1	0.5 calibrated		**0BH3**	✓	1 unit
	Without	300	5	1		**0BH4**	✓	1 unit
	Without	300	5	0.5		**0BH5**	✓	1 unit
	Without	300	5	0.5 calibrated		**0BH6**	✓	1 unit
	Without	400	1	1		**0BJ1**	✓	1 unit
	Without	400	1	0.5		**0BJ2**	✓	1 unit
	Without	400	1	0.5 calibrated		**0BJ3**	✓	1 unit
	Without	400	5	1		**0BJ4**	✓	1 unit
	Without	400	5	0.5		**0BJ5**	✓	1 unit
	Without	400	5	0.5 calibrated		**0BJ6**	✓	1 unit
	Without	500	1	1		**0BK1**	✓	1 unit
	Without	500	1	0.5		**0BK2**	✓	1 unit
	Without	500	1	0.5 calibrated		**0BK3**	✓	1 unit
	Without	500	5	1		**0BK4**	✓	1 unit
	Without	500	5	0.5		**0BK5**	✓	1 unit
	Without	500	5	0.5 calibrated		**0BK6**	✓	1 unit
	Without	600	1	1		**0BL1**	✓	1 unit
	Without	600	1	0.5		**0BL2**	✓	1 unit
	Without	600	1	0.5 calibrated		**0BL3**	✓	1 unit
	Without	600	5	1		**0BL4**	✓	1 unit
	Without	600	5	0.5		**0BL5**	✓	1 unit
	Without	600	5	0.5 calibrated		**0BL6**	✓	1 unit
	3 current transformers to multi-function plug							
	Without	300	1	1		**0CH1**	✓	1 unit
	Without	300	1	0.5		**0CH2**	✓	1 unit
	Without	300	1	0.5 calibrated		**0CH3**	✓	1 unit
	Without	300	5	1		**0CH4**	✓	1 unit
	Without	300	5	0.5		**0CH5**	✓	1 unit
	Without	300	5	0.5 calibrated		**0CH6**	✓	1 unit
	Without	400	1	1		**0CJ1**	✓	1 unit
	Without	400	1	0.5		**0CJ2**	✓	1 unit
	Without	400	1	0.5 calibrated		**0CJ3**	✓	1 unit
	Without	400	5	1		**0CJ4**	✓	1 unit
	Without	400	5	0.5		**0CJ5**	✓	1 unit
	Without	400	5	0.5 calibrated		**0CJ6**	✓	1 unit
	Without	500	1	1		**0CK1**	✓	1 unit
	Without	500	1	0.5		**0CK2**	✓	1 unit
	Without	500	1	0.5 calibrated		**0CK3**	✓	1 unit
	Without	500	5	1		**0CK4**	✓	1 unit
	Without	500	5	0.5		**0CK5**	✓	1 unit
	Without	500	5	0.5 calibrated		**0CK6**	✓	1 unit
	Without	600	1	1		**0CL1**	✓	1 unit
	Without	600	1	0.5		**0CL2**	✓	1 unit
	Without	600	1	0.5 calibrated		**0CL3**	✓	1 unit
	Without	600	5	1		**0CL4**	✓	1 unit
	Without	600	5	0.5		**0CL5**	✓	1 unit
	Without	600	5	0.5 calibrated		**0CL6**	✓	1 unit

✓ Additional price

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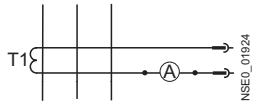
For LV HRC and BS fuse links

For sizes 3 and 3T (continued)



1 current transformer to 1 ammeter and multi-function plug

Ammeters	Current transformers: Primary current	Current transformers: Secondary current	Current transformers: Accuracy class	DT	Article No. supplement 3NJ62 ..-.....-□□□□	Additional price	PS*/ P. unit
	A	A					
Moving iron	400	1	1		1EH1	✓	1 unit
Moving iron	400	1	0.5		1EH2	✓	1 unit
Moving iron	300	1	0.5 calibrated		1EH3	✓	1 unit
Moving iron	300	5	1		1EH4	✓	1 unit
Moving iron	300	5	0.5		1EH5	✓	1 unit
Moving iron	300	5	0.5 calibrated		1EH6	✓	1 unit
Moving iron	400	1	1		1EJ1	✓	1 unit
Moving iron	400	1	0.5		1EJ2	✓	1 unit
Moving iron	400	1	0.5 calibrated		1EJ3	✓	1 unit
Moving iron	400	5	1		1EJ4	✓	1 unit
Moving iron	400	5	0.5		1EJ5	✓	1 unit
Moving iron	400	5	0.5 calibrated		1EJ6	✓	1 unit
Moving iron	500	1	1		1EK1	✓	1 unit
Moving iron	500	1	0.5		1EK2	✓	1 unit
Moving iron	500	1	0.5 calibrated		1EK3	✓	1 unit
Moving iron	500	5	1		1EK4	✓	1 unit
Moving iron	500	5	0.5		1EK5	✓	1 unit
Moving iron	500	5	0.5 calibrated		1EK6	✓	1 unit
Moving iron	600	1	1		1EL1	✓	1 unit
Moving iron	600	1	0.5		1EL2	✓	1 unit
Moving iron	600	1	0.5 calibrated		1EL3	✓	1 unit
Moving iron	600	5	1		1EL4	✓	1 unit
Moving iron	600	5	0.5		1EL5	✓	1 unit
Moving iron	600	5	0.5 calibrated		1EL6	✓	1 unit
Bi-metal	300	1	1		2EH1	✓	1 unit
Bi-metal	300	1	0.5		2EH2	✓	1 unit
Bi-metal	300	1	0.5 calibrated		2EH3	✓	1 unit
Bi-metal	300	5	1		2EH4	✓	1 unit
Bi-metal	300	5	0.5		2EH5	✓	1 unit
Bi-metal	300	5	0.5 calibrated		2EH6	✓	1 unit
Bi-metal	400	1	1		2EJ1	✓	1 unit
Bi-metal	400	1	0.5		2EJ2	✓	1 unit
Bi-metal	400	1	0.5 calibrated		2EJ3	✓	1 unit
Bi-metal	400	5	1		2EJ4	✓	1 unit
Bi-metal	400	5	0.5		2EJ5	✓	1 unit
Bi-metal	400	5	0.5 calibrated		2EJ6	✓	1 unit
Bi-metal	500	1	1		2EK1	✓	1 unit
Bi-metal	500	1	0.5		2EK2	✓	1 unit
Bi-metal	500	1	0.5 calibrated		2EK3	✓	1 unit
Bi-metal	500	5	1		2EK4	✓	1 unit
Bi-metal	500	5	0.5		2EK5	✓	1 unit
Bi-metal	500	5	0.5 calibrated		2EK6	✓	1 unit
Bi-metal	600	1	1		2EL1	✓	1 unit
Bi-metal	600	1	0.5		2EL2	✓	1 unit
Bi-metal	600	1	0.5 calibrated		2EL3	✓	1 unit
Bi-metal	600	5	1		2EL4	✓	1 unit
Bi-metal	600	5	0.5		2EL5	✓	1 unit
Bi-metal	600	5	0.5 calibrated		2EL6	✓	1 unit

✓ Additional price

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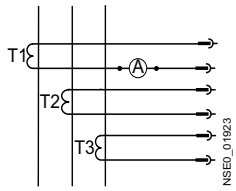
For sizes 3 and 3T (continued)



3 current transformers to 1 ammeter and multi-function plug

Ammeters	Current transformers: Primary current A	Current transformers: Secondary current A	Current transformers: Accuracy class	DT	Article No. supplement 3NJ62 ..-.....-□□□□	Additional price	PS*/ P. unit
Moving iron	300	1	1		**1FH1**	✓	1 unit
Moving iron	300	1	0.5		**1FH2**	✓	1 unit
Moving iron	300	1	0.5 calibrated		**1FH3**	✓	1 unit
Moving iron	300	5	1		**1FH4**	✓	1 unit
Moving iron	300	5	0.5		**1FH5**	✓	1 unit
Moving iron	300	5	0.5 calibrated		**1FH6**	✓	1 unit
Moving iron	400	1	1		**1FJ1**	✓	1 unit
Moving iron	400	1	0.5		**1FJ2**	✓	1 unit
Moving iron	400	1	0.5 calibrated		**1FJ3**	✓	1 unit
Moving iron	400	5	1		**1FJ4**	✓	1 unit
Moving iron	400	5	0.5		**1FJ5**	✓	1 unit
Moving iron	400	5	0.5 calibrated		**1FJ6**	✓	1 unit
Moving iron	500	1	1		**1FK1**	✓	1 unit
Moving iron	500	1	0.5		**1FK2**	✓	1 unit
Moving iron	500	1	0.5 calibrated		**1FK3**	✓	1 unit
Moving iron	500	5	1		**1FK4**	✓	1 unit
Moving iron	500	5	0.5		**1FK5**	✓	1 unit
Moving iron	500	5	0.5 calibrated		**1FK6**	✓	1 unit
Moving iron	600	1	1		**1FL1**	✓	1 unit
Moving iron	600	1	0.5		**1FL2**	✓	1 unit
Moving iron	600	1	0.5 calibrated		**1FL3**	✓	1 unit
Moving iron	600	5	1		**1FL4**	✓	1 unit
Moving iron	600	5	0.5		**1FL5**	✓	1 unit
Moving iron	600	5	0.5 calibrated		**1FL6**	✓	1 unit
Bi-metal	300	1	1		**2FH1**	✓	1 unit
Bi-metal	300	1	0.5		**2FH2**	✓	1 unit
Bi-metal	300	1	0.5 calibrated		**2FH3**	✓	1 unit
Bi-metal	300	5	1		**2FH4**	✓	1 unit
Bi-metal	300	5	0.5		**2FH5**	✓	1 unit
Bi-metal	300	5	0.5 calibrated		**2FH6**	✓	1 unit
Bi-metal	400	1	1		**2FJ1**	✓	1 unit
Bi-metal	400	1	0.5		**2FJ2**	✓	1 unit
Bi-metal	400	1	0.5 calibrated		**2FJ3**	✓	1 unit
Bi-metal	400	5	1		**2FJ4**	✓	1 unit
Bi-metal	400	5	0.5		**2FJ5**	✓	1 unit
Bi-metal	400	5	0.5 calibrated		**2FJ6**	✓	1 unit
Bi-metal	500	1	1		**2FK1**	✓	1 unit
Bi-metal	500	1	0.5		**2FK2**	✓	1 unit
Bi-metal	500	1	0.5 calibrated		**2FK3**	✓	1 unit
Bi-metal	500	5	1		**2FK4**	✓	1 unit
Bi-metal	500	5	0.5		**2FK5**	✓	1 unit
Bi-metal	500	5	0.5 calibrated		**2FK6**	✓	1 unit
Bi-metal	600	1	1		**2FL1**	✓	1 unit
Bi-metal	600	1	0.5		**2FL2**	✓	1 unit
Bi-metal	600	1	0.5 calibrated		**2FL3**	✓	1 unit
Bi-metal	600	5	1		**2FL4**	✓	1 unit
Bi-metal	600	5	0.5		**2FL5**	✓	1 unit
Bi-metal	600	5	0.5 calibrated		**2FL6**	✓	1 unit

✓ Additional price

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Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
For sizes 00, A3 and 00T								
3NJ6923-1BA00	**Terminals**							
	Single terminal for 2-/3-pole devices, 10 ... 95 mm² (1 set = 3 units)		**3NJ6923-1BA00**		1	1 unit	1DL	0.239
	Single terminal for 4-pole devices, 10 ... 95 mm² (1 set = 4 units)		**3NJ6924-1BA00**		1	1 unit	1DL	0.320
3NJ6923-1DA00	**Terminal covers**							
	For 2-/3-pole devices		**3NJ6923-1DA00**		1	1 unit	1DL	0.091
	Only for 4th pole		**3NJ6904-1DA00**		1	1 unit	1DL	0.078
3NJ6923-1EB00	**Contact extensions**							
	3-pole		**3NJ6923-1EB00**		1	1 unit	1DL	1.998
	4-pole		**3NJ6924-1EB00**		1	1 unit	1DL	2.810
3NJ6923-3FB00	**Electronic fuse monitoring and line monitoring devices**							
	EFM 10, fuse monitoring for AC networks		**3NJ6920-3FB00**		1	1 unit	1DL	0.100
	EFM 20, fuse monitoring and line monitoring for AC networks		**3NJ6920-3FC00**		1	1 unit	1DL	0.100
	EFM 25, fuse monitoring and line monitoring for DC networks		**3NJ6920-3FE00**		1	1 unit	1DL	0.100
3NJ6923-3FC00								
3NJ6920-2BB00	**Auxiliary switches**							
	1 NO contact (1 NO) with cover		**3NJ6920-2BB00**		1	1 unit	1DL	0.097
	1 NO contact (1 NO)		**3NJ6900-2BC00**		1	1 unit	1DL	0.013
	1 NC contact (1 NC) with cover		**3NJ6920-2CB00**		1	1 unit	1DL	0.092
	1 NC contact (1 NC)		**3NJ6900-2CC00**		1	1 unit	1DL	0.013
3NJ6900-2BC00								
3NJ6920-3BD11	**Current transformers for main devices and contact extensions**							
	∅ = Feed-through opening diameter							
	The current transformers can also be used with the 7KM PAC measuring devices, See chapter "Measuring Devices and Power Monitoring"							
	50 A/1 A Class 1 1 VA, ∅ 21 mm		**3NJ6920-3BB11**		1	1 unit	1DL	0.171
	50 A/5 A Class 1 1 VA, ∅ 21 mm		**3NJ6920-3BB21**		1	1 unit	1DL	0.168
	100 A/1 A Class 1 2.5 VA, ∅ 21 mm		**3NJ6920-3BD11**		1	1 unit	1DL	0.182
	100 A/1 A Class 0.5 1.5 VA, ∅ 21 mm		**3NJ6920-3BD12**		1	1 unit	1DL	0.184
	100 A/1 A Class 0.5 calibrated 1.5 VA, ∅ 14 mm		**3NJ6920-3BD13**		1	1 unit	1DL	0.184
	100 A/5 A Class 1 2.5 VA, ∅ 21 mm		**3NJ6920-3BD21**		1	1 unit	1DL	0.175
	100 A/5 A Class 0.5 1.5 VA, ∅ 21 mm		**3NJ6920-3BD22**		1	1 unit	1DL	0.173
	100 A/5 A Class 0.5 calibrated 1.5 VA, ∅ 14 mm		**3NJ6920-3BD23**		1	1 unit	1DL	0.187
	150 A/1 A Class 1 2.5 VA, ∅ 21 mm		**3NJ6920-3BE11**		1	1 unit	1DL	0.175
	150 A/1 A Class 0.5 1.5 VA, ∅ 21 mm		**3NJ6920-3BE12**		1	1 unit	1DL	0.182
	150 A/1 A Class 0.5 calibrated 2.5 VA, ∅ 14 mm		**3NJ6920-3BE13**		1	1 unit	1DL	0.222
	150 A/5 A Class 1 1.5 VA, ∅ 21 mm		**3NJ6920-3BE21**		1	1 unit	1DL	0.185
	150 A/5 A Class 0.5 1.5 VA, ∅ 21 mm		**3NJ6920-3BE22**		1	1 unit	1DL	0.183
	150 A/5 A Class 0.5 calibrated 2.5 VA, ∅ 14 mm		**3NJ6920-3BE23**		1	1 unit	1DL	0.182

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	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
For sizes 00, A3 and 00T (continued)								
3NJ6920-3DB00	**Current transformer busbars for current transformers with feed-through opening ∅ 21 mm**							
	For 1 current transformer		3NJ6920-3DB00		1	1 unit	1DL	0.066
	For 3 current transformers		3NJ6920-3DC00		1	1 unit	1DL	0.191
3NJ6920-3DC00	For 4 current transformers[1]		3NJ6920-3DD00		1	1 unit	1DL	0.259
	Current transformer busbars for current transformers with feed-through opening ∅ 14 mm							
	For 1 current transformer		3NJ6920-3DE00		1	1 unit	1DL	0.062
	For 3 current transformers		3NJ6920-3DF00		1	1 unit	1DL	0.182
3NJ6920-3DD00	For 4 current transformers[1]		3NJ6920-3DG00		1	1 unit	1DL	0.248
3NJ6900-4GA00	**Holders for ammeters** For sizes 00, 1, 2, 3		3NJ6900-4GA00		1	1 unit	1DL	0.059
3NJ6900-4H...	**Ammeters** **Moving-iron measuring instruments for measurements on transformer x/1 A with double overload**							
	50 A/1 A 0.6 VA		3NJ6900-4HB11		1	1 unit	1DL	0.083
	100 A/1 A 0.6 VA		3NJ6900-4HD11		1	1 unit	1DL	0.086
	150 A/1 A 0.6 VA		3NJ6900-4HE11		1	1 unit	1DL	0.085
	Moving-iron measuring instruments for measurements on transformer x/5 A with double overload							
	50 A/5 A 0.6 VA		3NJ6900-4HB21		1	1 unit	1DL	0.092
	100 A/5 A 0.6 VA		3NJ6900-4HD21		1	1 unit	1DL	0.093
	150 A/5 A 0.6 VA		3NJ6900-4HE21		1	1 unit	1DL	0.092
3NJ6900-4H...	**Bi-metal measuring instruments for measurements on transformer x/1 A with 1.2-times overload**							
	50 A/1 A 1 VA		3NJ6900-4HB12		1	1 unit	1DL	0.063
	100 A/1 A 1 VA		3NJ6900-4HD12		1	1 unit	1DL	0.064
	150 A/1 A 1 VA		3NJ6900-4HE12		1	1 unit	1DL	0.068
	Bi-metal measuring instruments for measurements on transformer x/5 A with 1.2-times overload							
	50 A/5 A 1 VA		3NJ6900-4HB22		1	1 unit	1DL	0.067
	100 A/5 A 1 VA		3NJ6900-4HD22		1	1 unit	1DL	0.065
	150 A/5 A 1 VA		3NJ6900-4HE22		1	1 unit	1DL	0.065
3NJ6920-3EB00	**Multi-function plugs**							
	6 x 2.5 mm², with fixing screws		3NJ6920-3EB00		1	1 unit	1DL	0.043
	8 x 2.5 mm², without fixing screws		3NJ6920-3ED00		1	1 unit	1DL	0.053
3NJ6920-3ED00	10 x 1.5 mm² and 8 x 2.5 mm², without fixing screws		3NJ6920-3EE00		1	1 unit	1DL	0.068
3NJ6920-3EE00								
	Front panels							
3NJ6923-4BB00	For NH: 3NJ6203-1AA... and 3NJ6203-3AA... without/with EFM		3NJ6923-4BB00		1	1 unit	1DL	0.370
	For BS: 3NJ6203-1AA... and 3NJ6203-3AA... without/with EFM		3NJ6923-4BC00		1	1 unit	1DL	0.400

[1] Not available in combination with multi-function plugs.

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Accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
For sizes 1 and B2								
3NJ6933-1BA00	**Terminals**							
	Single terminal for 2-/3-pole devices, 16 ... 300 mm² (1 set = 3 units)		**3NJ6933-1BA00**		1	1 unit	1DL	0.440
	Single terminal for 4-pole devices, 16 ... 300 mm² (1 set = 4 units)		**3NJ6934-1BA00**		1	1 unit	1DL	0.591
3NJ6933-1DB00	**Terminal covers**							
	For 2-/3-pole devices		**3NJ6933-1DA01**		1	1 unit	1DL	0.166
	Internal terminal covers for 2-/3-pole devices		**3NJ6933-1DB00**		1	1 unit	1DL	0.022
	Only for 4th pole		**3NJ6904-1DA00**		1	1 unit	1DL	0.078
3NJ6933-1EB00	**Contact extensions**							
	3-pole		**3NJ6933-1EB00**		1	1 unit	1DL	2.820
	4-pole		**3NJ6934-1EB00**		1	1 unit	1DL	4.103
3NJ6923-3FB00	**Electronic fuse monitoring and line monitoring devices**							
	EFM 10, fuse monitoring for AC networks		**3NJ6930-3FB00**		1	1 unit	1DL	0.100
	EFM 20, fuse monitoring and line monitoring for AC networks		**3NJ6930-3FC00**		1	1 unit	1DL	0.110
	EFM 25, fuse monitoring and line monitoring for DC networks		**3NJ6930-3FE00**		1	1 unit	1DL	0.100
3NJ6923-3FC00								
3NJ6930-2BB00	**Auxiliary switches**							
	1 NO contact (1 NO) with cover		**3NJ6930-2BB00**		1	1 unit	1DL	0.060
	1 NO contact (1 NO)		**3NJ6900-2BC00**		1	1 unit	1DL	0.013
	1 NC contact (1 NC) with cover		**3NJ6930-2CB00**		1	1 unit	1DL	0.060
	1 NC contact (1 NC)		**3NJ6900-2CC00**		1	1 unit	1DL	0.013
3NJ6900-2BC00								
	Current transformers for main devices and contact extensions							
	∅ = Feed-through opening diameter							
	The current transformers can also be used with the 7KM PAC measuring devices, see chapter "Measuring Devices and Power Monitoring"							
3NJ6920-3BD11	50 A/1 A Class 1 1 VA, ∅ 21 mm		**3NJ6920-3BB11**		1	1 unit	1DL	0.171
	50 A/5 A Class 1 1 VA, ∅ 21 mm		**3NJ6920-3BB21**		1	1 unit	1DL	0.168
	100 A/1 A Class 1 2.5 VA, ∅ 21 mm		**3NJ6920-3BD11**		1	1 unit	1DL	0.182
	100 A/1 A Class 0.5 1.5 VA, ∅ 21 mm		**3NJ6920-3BD12**		1	1 unit	1DL	0.184
	100 A/5 A Class 1 2.5 VA, ∅ 21 mm		**3NJ6920-3BD21**		1	1 unit	1DL	0.175
	100 A/5 A Class 0.5 1.5 VA, ∅ 21 mm		**3NJ6920-3BD22**		1	1 unit	1DL	0.173
	150 A/1 A Class 1 2.5 VA, ∅ 21 mm		**3NJ6920-3BE11**		1	1 unit	1DL	0.175
	150 A/1 A Class 0.5 1.5 VA, ∅ 21 mm		**3NJ6920-3BE12**		1	1 unit	1DL	0.182
	150 A/5 A Class 1 1.5 VA, ∅ 21 mm		**3NJ6920-3BE21**		1	1 unit	1DL	0.185
	150 A/5 A Class 0.5 1.5 VA, ∅ 21 mm		**3NJ6920-3BE22**		1	1 unit	1DL	0.183
	200 A/1 A Class 1 2.5 VA, ∅ 21 mm		**3NJ6930-3BF11**		1	1 unit	1DL	0.191
	200 A/1 A Class 0.5 5 VA, ∅ 21 mm		**3NJ6930-3BF12**		1	1 unit	1DL	0.188
	200 A/5 A Class 1 2.5 VA, ∅ 21 mm		**3NJ6930-3BF21**		1	1 unit	1DL	0.162
	200 A/5 A Class 0.5 2.5 VA, ∅ 21 mm		**3NJ6930-3BF22**		1	1 unit	1DL	0.158
	250 A/1 A Class 1 5 VA, ∅ 21 mm		**3NJ6930-3BG11**		1	1 unit	1DL	0.192
	250 A/1 A Class 0.5 5 VA, ∅ 21 mm		**3NJ6930-3BG12**		1	1 unit	1DL	0.186
	250 A/5 A Class 1 2.5 VA, ∅ 21 mm		**3NJ6930-3BG21**		1	1 unit	1DL	0.181
	250 A/5 A Class 0.5 2.5 VA, ∅ 21 mm		**3NJ6930-3BG22**		1	1 unit	1DL	0.177

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	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
For sizes 1 and B2 (continued)								
3NJ6930-3DB00	**Current transformer busbars for current transformers with feed-through opening ∅ 21 mm**							
	For 1 current transformer		**3NJ6930-3DB00**		1	1 unit	1DL	0.121
3NJ6930-3DC00	For 3 current transformers		**3NJ6930-3DC00**		1	1 unit	1DL	0.374
3NJ6930-3DD00	For 4 current transformers[1]		**3NJ6930-3DD00**		1	1 unit	1DL	0.382
3NJ6900-4GA00	**Holders for ammeters**		**3NJ6900-4GA00**		1	1 unit	1DL	0.059
	For sizes 00, 1, 2, 3							
3NJ6900-4H...	**Ammeters**							
	Moving-iron measuring instruments for measurements on transformer x/1 A with double overload							
	50 A/1 A 0.6 VA		**3NJ6900-4HB11**		1	1 unit	1DL	0.083
	100 A/1 A 0.6 VA		**3NJ6900-4HD11**		1	1 unit	1DL	0.086
	150 A/1 A 0.6 VA		**3NJ6900-4HE11**		1	1 unit	1DL	0.085
	200 A/1 A 0.6 VA		**3NJ6900-4HF11**		1	1 unit	1DL	0.085
	250 A/1 A 0.6 VA		**3NJ6900-4HG11**		1	1 unit	1DL	0.085
	Moving-iron measuring instruments for measurements on transformer x/5 A with double overload							
	50 A/5 A 0.6 VA		**3NJ6900-4HB21**		1	1 unit	1DL	0.092
	100 A/5 A 0.6 VA		**3NJ6900-4HD21**		1	1 unit	1DL	0.093
	150 A/5 A 0.6 VA		**3NJ6900-4HE21**		1	1 unit	1DL	0.092
	200 A/5 A 0.6 VA		**3NJ6900-4HF21**		1	1 unit	1DL	0.092
	250 A/5 A 0.6 VA		**3NJ6900-4HG21**		1	1 unit	1DL	0.089
3NJ6900-4H...	**Bi-metal measuring instruments for measurements on transformer x/1 A with 1.2-times overload**							
	50 A/1 A 1 VA		**3NJ6900-4HB12**		1	1 unit	1DL	0.063
	100 A/1 A 1 VA		**3NJ6900-4HD12**		1	1 unit	1DL	0.064
	150 A/1 A 1 VA		**3NJ6900-4HE12**		1	1 unit	1DL	0.068
	200 A/1 A 1 VA		**3NJ6900-4HF12**		1	1 unit	1DL	0.067
	250 A/1 A 1 VA		**3NJ6900-4HG12**		1	1 unit	1DL	0.064
	Bi-metal measuring instruments for measurements on transformer x/5 A with 1.2-times overload							
	50 A/5 A 1 VA		**3NJ6900-4HB22**		1	1 unit	1DL	0.067
	100 A/5 A 1 VA		**3NJ6900-4HD22**		1	1 unit	1DL	0.065
	150 A/5 A 1 VA		**3NJ6900-4HE22**		1	1 unit	1DL	0.065
	200 A/5 A 1 VA		**3NJ6900-4HF22**		1	1 unit	1DL	0.068
	250 A/5 A 1 VA		**3NJ6900-4HG22**		1	1 unit	1DL	0.066
3NJ6920-3EB00	**Multi-function plugs**							
	6 x 2.5 mm^2, with fixing screws		**3NJ6920-3EB00**		1	1 unit	1DL	0.043
	8 x 2.5 mm^2, without fixing screws		**3NJ6920-3ED00**		1	1 unit	1DL	0.053
3NJ6940-3EE00	10 x 1.5 mm^2 and 8 x 2.5 mm^2, without fixing screws		**3NJ6920-3EE00**		1	1 unit	1DL	0.068
3NJ6933-4BB00	**Front panels**							
	For NH: 3NJ6213-1AA... and 3NJ6213-3AA... without/with EFM		**3NJ6933-4BB00**		1	1 unit	1DL	0.521
	For BS: 3NJ6213-1AA... and 3NJ6213-3AA... without/with EFM		**3NJ6933-4BC00**		1	1 unit	1DL	0.500

[1] Not available in combination with multi-function plug.

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Accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
For size 2, 3, B4 and 3T								
3NJ6943-1CA00	**Terminals**							
	Double terminal for 2-/3-pole devices, 2 x (16 mm² ... 300 mm², 1 set = 6 units)		**3NJ6943-1CA00**		1	1 unit	1DL	0.920
	Double terminal for 4-pole devices, 2 x (16 mm² ... 300 mm², 1 set = 8 units)		**3NJ6944-1CA00**		1	1 unit	1DL	1.175
3NJ6943-1DA00	**Terminal covers**							
	For 2-/3-pole devices		**3NJ6943-1DA00**		1	1 unit	1DL	0.197
	Only for 4th pole		**3NJ6904-1DA00**		1	1 unit	1DL	0.078
3NJ6944-1EB00	**Contact extensions**							
	3-pole		**3NJ6943-1EB00**		1	1 unit	1DL	4.200
	4-pole		**3NJ6944-1EB00**		1	1 unit	1DL	8.620
3NJ6923-3FB00	**Electronic fuse monitoring and line monitoring devices**							
	EFM 10, fuse monitoring for AC networks		**3NJ6940-3FB00**		1	1 unit	1DL	0.100
	EFM 20, fuse monitoring and line monitoring for AC networks		**3NJ6940-3FC00**		1	1 unit	1DL	0.110
3NJ6923-3FC00	EFM 25, fuse monitoring and line monitoring for DC networks		**3NJ6940-3FE00**		1	1 unit	1DL	0.100
3NJ6940-2BB00	**Auxiliary switches**							
	1 NO contact (1 NO) with cover		**3NJ6940-2BB00**		1	1 unit	1DL	0.024
	1 NO contact (1 NO)		**3NJ6900-2BC00**		1	1 unit	1DL	0.013
	1 NC contact (1 NC) with cover		**3NJ6940-2CB00**		1	1 unit	1DL	0.036
3NJ6900-2BC00	1 NC contact (1 NC)		**3NJ6900-2CC00**		1	1 unit	1DL	0.013
	Current transformers for main devices and contact extensions							
3NJ6940-3B...	300 A/1 A	Class 1	5 VA	**3NJ6940-3BH11**	1	1 unit	1DL	0.329
	300 A/1 A	Class 0.5	5 VA	**3NJ6940-3BH12**	1	1 unit	1DL	0.503
	300 A/1 A	Class 0.5 calibrated	5 VA	**3NJ6940-3BH13**	1	1 unit	1DL	0.433
	300 A/5 A	Class 1	5 VA	**3NJ6940-3BH21**	1	1 unit	1DL	0.324
	300 A/5 A	Class 0.5	5 VA	**3NJ6940-3BH22**	1	1 unit	1DL	0.397
	300 A/5 A	Class 0.5 calibrated	5 VA	**3NJ6940-3BH23**	1	1 unit	1DL	0.429
	400 A/1 A	Class 1	5 VA	**3NJ6940-3BJ11**	1	1 unit	1DL	0.362
	400 A/1 A	Class 0.5	5 VA	**3NJ6940-3BJ12**	1	1 unit	1DL	0.362
	400 A/1 A	Class 0.5 calibrated	5 VA	**3NJ6940-3BJ13**	1	1 unit	1DL	0.363
	400 A/5 A	Class 1	5 VA	**3NJ6940-3BJ21**	1	1 unit	1DL	0.332
	400 A/5 A	Class 0.5	5 VA	**3NJ6940-3BJ22**	1	1 unit	1DL	0.328
	400 A/5 A	Class 0.5 calibrated	5 VA	**3NJ6940-3BJ23**	1	1 unit	1DL	0.356
	500 A/1 A	Class 1	5 VA	**3NJ6940-3BK11**	1	1 unit	1DL	0.372
	500 A/1 A	Class 0.5	5 VA	**3NJ6940-3BK12**	1	1 unit	1DL	0.359
	500 A/1 A	Class 0.5 calibrated	5 VA	**3NJ6940-3BK13**	1	1 unit	1DL	0.460
	500 A/5 A	Class 1	5 VA	**3NJ6940-3BK21**	1	1 unit	1DL	0.363
	500 A/5 A	Class 0.5	5 VA	**3NJ6940-3BK22**	1	1 unit	1DL	0.339
	500 A/5 A	Class 0.5 calibrated	5 VA	**3NJ6940-3BK23**	1	1 unit	1DL	0.374
	600 A/1 A	Class 1	5 VA	**3NJ6940-3BL11**	1	1 unit	1DL	0.317
	600 A/1 A	Class 0.5	5 VA	**3NJ6940-3BL12**	1	1 unit	1DL	0.321
	600 A/1 A	Class 0.5 calibrated	5 VA	**3NJ6940-3BL13**	1	1 unit	1DL	0.337
	600 A/5 A	Class 1	5 VA	**3NJ6940-3BL21**	1	1 unit	1DL	0.313
	600 A/5 A	Class 0.5	5 VA	**3NJ6940-3BL22**	1	1 unit	1DL	0.307
	600 A/5 A	Class 0.5 calibrated	5 VA	**3NJ6940-3BL23**	1	1 unit	1DL	0.389

The current transformers can also be used with the 7KM PAC measuring devices, see chapter "Measuring Devices and Power Monitoring".

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	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
For size 2, 3, B4 and 3T (continued)								
3NJ6900-4GA00	**Holders for ammeters** For sizes 00, 1, 2, 3		**3NJ6900-4GA00**		1	1 unit	1DL	0.059
3NJ6900-4H...	**Ammeters** **Moving-iron measuring instruments for measuring input on transformer x/1 A with double overload**							
	300 A/1 A	0.6 VA	**3NJ6900-4HH11**		1	1 unit	1DL	0.085
	400 A/1 A	0.6 VA	**3NJ6900-4HJ11**		1	1 unit	1DL	0.085
	500 A/1 A	0.6 VA	**3NJ6900-4HK11**		1	1 unit	1DL	0.085
	600 A/1 A	0.6 VA	**3NJ6900-4HL11**		1	1 unit	1DL	0.086
	Moving-iron measuring instruments for measuring input on transformer x/5 A with double overload							
	300 A/5 A	0.6 VA	**3NJ6900-4HH21**		1	1 unit	1DL	0.092
	400 A/5 A	0.6 VA	**3NJ6900-4HJ21**		1	1 unit	1DL	0.093
	500 A/5 A	0.6 VA	**3NJ6900-4HK21**		1	1 unit	1DL	0.090
	600 A/5 A	0.6 VA	**3NJ6900-4HL21**		1	1 unit	1DL	0.086
3NJ6900-4H...	**Bi-metal measuring instruments for measurements on transformer x/1 A with 1.2-times overload**							
	300 A/1 A	1 VA	**3NJ6900-4HH12**		1	1 unit	1DL	0.067
	400 A/1 A	1 VA	**3NJ6900-4HJ12**		1	1 unit	1DL	0.063
	500 A/1 A	1 VA	**3NJ6900-4HK12**		1	1 unit	1DL	0.067
	600 A/1 A	1 VA	**3NJ6900-4HL12**		1	1 unit	1DL	0.062
	Bi-metal measuring instruments for measurements on transformer x/5 A with 1.2-times overload							
	300 A/5 A	1 VA	**3NJ6900-4HH22**		1	1 unit	1DL	0.068
	400 A/5 A	1 VA	**3NJ6900-4HJ22**		1	1 unit	1DL	0.064
	500 A/5 A	1 VA	**3NJ6900-4HK22**		1	1 unit	1DL	0.065
	600 A/5 A	1 VA	**3NJ6900-4HL22**		1	1 unit	1DL	0.068
3NJ6940-3EC00	**Multi-function plugs**							
	8 x 2.5 mm^2, with fixing screws		**3NJ6940-3EC00**		1	1 unit	1DL	0.082
	8 x 2.5 mm^2, without fixing screws		**3NJ6940-3ED00**		1	1 unit	1DL	0.084
3NJ6940-3ED00	12 x 1.5 mm^2 and 8 x 2.5 mm^2, without fixing screws		**3NJ6940-3EF00**		1	1 unit	1DL	0.104
3NJ6940-3EF00								
3NJ6943-4BB00	**Front panels**							
	For NH: 3NJ6223-1AA... and 3NJ6223-3AA... without/with EFM		**3NJ6943-4BB00**		1	1 unit	1DL	0.851
	For BS: 3NJ6223-1AA... and 3NJ6223-3AA... without/with EFM		**3NJ6943-4BC00**		1	1 unit	1DL	0.700
	For NH: 3NJ6233-1AA... and 3NJ6233-3AA... without/with EFM		**3NJ6953-4BB00**		1	1 unit	1DL	0.849
	For BS: 3NJ6233-1AA... and 3NJ6233-3AA... without/with EFM		**3NJ6953-4BC00**		1	1 unit	1DL	0.700

*** You can order this quantity or a multiple thereof.**

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Accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Common accessories								
3NJ6916-4EA00	**Busbar cover**							
	Mounting height 200 mm, IP20		3NJ6916-4EA00		1	1 unit	1CL	0.490
3NJ6900-4CB00	**Blanking covers**							
	Mounting height 50 mm, IP41		3NJ6900-4CB00		1	1 unit	1DL	0.335
3NJ6915-3BA00	**Connection modules**							
	For power takeoff from field distribution bus up to 400 A		3NJ6915-3BA00		1	1 unit	1CL	1.578
3NJ6900-4FB00	**Guide rails**							
	Depth 200 mm (1 x left and 1 x right)		3NJ6900-4FB00		1	1 unit	1DL	0.280
	Depth 400 mm (1 x left and 1 x right)		3NJ6900-4FC00		1	1 unit	1DL	0.513
3NJ6900-4FC00								
	NH fuse puller tongs							
	For NH00		XPT:8PT9624		1	1 unit	1EA	0.497
	For NH1, 2, 3		XPT:8PT9625		1	1 unit	1EA	0.505
	Locking devices for padlocks							
	For all devices		3NJ6900-4LL		1	1 unit	1DL	0.040

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* You can order this quantity or a multiple thereof.

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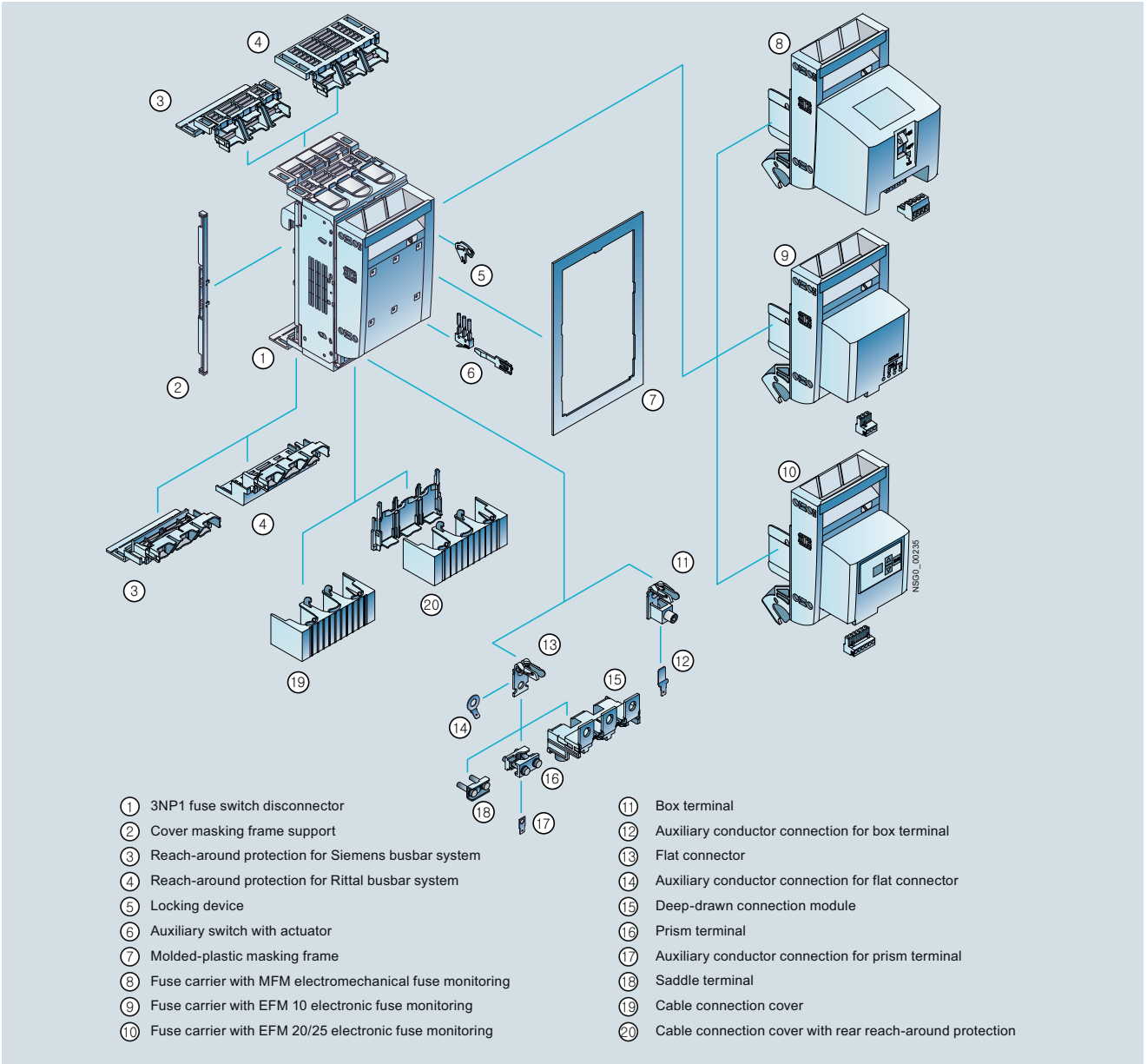
Overview

3NP1 fuse switch disconnectors

All key product features at a glance

- Box terminals available for all sizes
- Connection of circular conductors and laminated conductors
- Fuse monitoring possible throughout
- Busbar supports can be built over
- Conversion of 5/10 mm thick busbars without parts which can be lost or broken off
- Convertibility of cable feeder at top/bottom without intervention in the internal conducting paths
- Optimum integration in various system environments through cover levels and on busbar systems with/without base
- Touch protection also with rear incoming feeder
- Fuses are removed using a release shaft without the fuses being touched
- All units can be sealed and locked

Overview of all components and accessory parts



1 3NP1 fuse switch disconnector
2 Cover masking frame support
3 Reach-around protection for Siemens busbar system
4 Reach-around protection for Rittal busbar system
5 Locking device
6 Auxiliary switch with actuator
7 Molded-plastic masking frame
8 Fuse carrier with MFM electromechanical fuse monitoring
9 Fuse carrier with EFM 10 electronic fuse monitoring
10 Fuse carrier with EFM 20/25 electronic fuse monitoring
11 Box terminal
12 Auxiliary conductor connection for box terminal
13 Flat connector
14 Auxiliary conductor connection for flat connector
15 Deep-drawn connection module
16 Prism terminal
17 Auxiliary conductor connection for prism terminal
18 Saddle terminal
19 Cable connection cover
20 Cable connection cover with rear reach-around protection

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Introduction

Benefits

Advantages during planning and configuration

- Low level of equipment variation due to easy convertibility of cable feeder at top/bottom (delivered from factory with cable feeder at bottom)
- Only one device variant for applications in industry and infrastructure thanks to touch and reach-around protection as a standard feature
- Uniform grid sizes for easy configuration

Advantages during operation and service

- The optional rear covers for the cable connections ensure optimum touch protection even for switchboard assemblies with rear access.
- Innovative design enables the highest safety for equipment and personnel.
- Fuses can be released and removed using a release shaft.
- Lockable and sealable design enables safe working and prevents unauthorized access.

Advantages during installation

- Only one device version is required for cable feeders at top/bottom and there is no need to intervene in the internal conducting paths.
- One device version with very high short-circuit values dispenses with having to order and install arc splitters to increase the electrical values.
- On all sizes it is possible to install 2 CO contacts for indicating the switching position.
- All devices feature all-round touch protection.
- Box terminals are available for all sizes and shorten the mounting time appreciably.
- Snapping on the sizes NH000 and NH00 shortens the mounting time greatly compared to fixing with screws.
- The screw-fixing method on sizes NH1, NH2 and NH3 provides for easy positioning and at the same time secure contacting of the larger and heavier device versions.
- Small space requirement through compact devices and busbar supports which can be built over
- Device versions for busbar mounting can be converted to 5 mm or 10 mm thick busbars without parts which can be lost or broken off.

Application

Possible uses

3NP1 fuse switch disconnectors can be used for protecting and switching the most diverse electrical loads:

- Motor starter combinations
- In conjunction with SITOR semiconductor fuses for the protection of frequency converters and soft starters
- Fusing of compensation modules
- Cable feeders
- Group fusing of small loads

The devices are optimized for operation in all kinds of system environments:

- Low-voltage switchboard assemblies for power distribution and MCCs (e.g. main and sub-distribution boards)
- Distribution systems with cover levels of 32 and 70 mm or 45 and 70 mm
- Mechanical engineering
- Railway applications

Fuse monitoring

Fuse monitoring devices are used to detect, indicate and report faults:

- MFM – electromechanical fuse monitoring for AC/DC networks
- EFM 10 – electronic fuse monitoring for AC networks
- EFM 20 – electronic fuse monitoring with line monitoring for AC networks
- EFM 25 – electronic fuse monitoring with line monitoring for DC networks

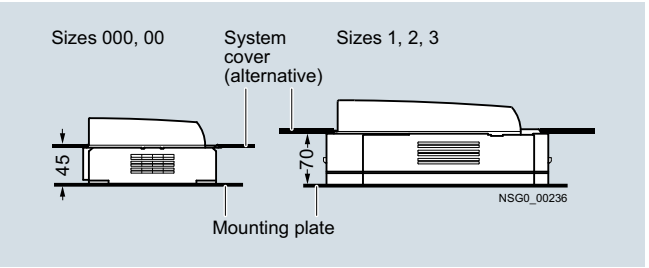
Standards and regulations

The 3NP1 fuse switch disconnectors are compliant with:

- IEC 60947-1, EN 60947-1
- IEC 60947-3, EN 60947-3

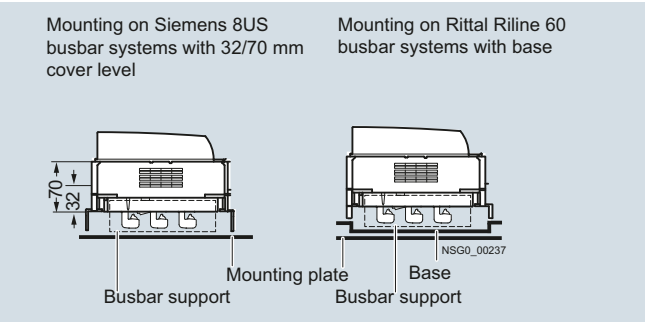
Mounting

Floor mounting



3NP1 fuse switch disconnector for floor mounting

Busbar mounting



3NP1 fuse switch disconnector for busbar mounting

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Technical specifications

Standards			**IEC / EN 60947-1, IEC / EN 60947-3, VDE 0660 Part 7**				
Type			**3NP1123...**	**3NP1133...**	**3NP1143...**	**3NP1153...**	**3NP1163...**
Rated uninterrupted current I_u		A	160[1]	160	250	400	630
For fuse links acc. to IEC 60269-2		Size	000	00 and 000	1 and 0	2 and 1	3 and 2
Conventional free air thermal current I_{th}		A	160	160	250	400	630
Rated operational voltage U_e							
• At 50 Hz/60 Hz AC		V	690	690	690	690	690
• With DC (3 conducting paths series-connected)		V	440	440	440	440	440
• With DC (2 conducting paths series-connected)		V	220/240	220/240	220/240	220/240	220/240
• With utilization category AC-20 or DC-20	Max.	V	1000				
Rated insulation voltage U_i[2]		V	1000	1000	1000	1000	1000
Rated impulse withstand voltage U_{imp}		kV	8	8	8	8	8
Rated conditional short-circuit current with fuses (by fast switch on)		Size/A	000/160	00/160	1/250	2/400	3/630
• Rated current at 500 V / 690 V AC		kA	80/50	80/50	80/50	80/50	80/50
• Permissible let-through current of the fuses, peak value		kA	10	15	25	40	50
Short-circuit strength with fuses (with closed disconnector)		Size/A	000/160	00/160	1/250	2/400	3/630
• Rated current at 500 V / 690 V, rms value		kA	120/100	120/100	120/100	100/100	100/100
• Let-through I^2t value		kA^2s	56	158	780	2150	5400
• Permissible let-through current of the fuses, peak value		kA	15	23	32	40	60
Rated making capacity with isolating blades at 500 V AC		kA	2	6	17	17	17
Rated making and breaking capacity							
• At AC-21B, 22B, 23B	400 V AC	A	160	160	250	400	630
• At AC-21B	500 V AC	A	160	160	250	400	630
• At AC-22B	500 V AC	A	125	160	250	400	630
• At AC-23B	500 V AC	A	40	63	200	315	500
• At AC-21 B	690 V AC	A	160	160	250	400	630
• At AC-22B	690 V AC	A	50	125	250	400	500
• At AC-23B	690 V AC	A	25	35	100	125	200
• With DC-21B (2 cond. paths series-connected)	240 V DC	A	160	160	250	400	630
• With DC-22B (2 cond. paths series-connected)	240 V DC	A	100	160	250	400	630
• With DC-23B (2 cond. paths series-connected)	240 V DC	A	80	100	200	250	400
• With DC-21B (3 cond. paths series-connected)	440 V DC	A	100	160	250	400	630
• With DC-22B (3 cond. paths series-connected)	440 V DC	A	50	125	200	315	500
• With DC-23B (3 cond. paths series-connected)	440 V DC	A	25	63	100	160	250
Capacitor switching capacity							
At 400 V AC							
• Capacitor rating		kvar	50	50	50	50	50
• Rated current I_n		A	72	72	72	72	72
At 525 V AC							
• Capacitor rating		kvar	50	50	50	50	50
• Rated current I_n		A	55	55	55	55	55
Permissible ambient temperature[3]		°C	-25 ... +55 for operation, -50 ... +80 during storage				
Mechanical endurance, operating cycles			2000	2000	1600	1000	1000
Degree of protection (operator side)							
W/o molded-plastic masking frame / cable lug cover			IP30 (switch closed) / IP20 (switch open)				
With molded-plastic masking frame / cable lug cover			IP40 (switch closed) / IP20 (switch open)				
Power loss of switch at I_{th} (plus fuses)		W	9	12	23	34	48
Maximum power loss of the usable fuses (per fuse)[4]		W	7.5[5]	12	23	34	48
Max. conductor cross-section of main conductor connection							
Flat terminals		mm^2		Up to 95 (M8)	Up to 150 (M10)	Up to 240 (M10)	Up to 300 (M10)
Box terminals		mm^2	1.5 ... 50	6 ... 70	70 ... 185	120 ... 240	150 ... 300
Prism terminals		mm^2	--	35 ... 95	70 ... 150	120 ... 240	150 ... 300
Saddle terminals		mm^2	--	1.5 ... 70	70 ... 120	120 ... 240	150 ... 300
Laminated conductors in box terminal		mm	8 x 8	9 x 8	10 x 20	10 x 32	20 x 32
Rated operational current of auxiliary switch (at max. 250 V AC)							
3NP19...-1FA00 auxiliary switch		A	0.25 (I_{th} = 5 A)				
3NP19...-1FB00 auxiliary switch (solid-state compatible)		A	0.1 (I_{th} = 0.1 A)				
Permissible mounting positions			Vertical and horizontal (no derating)				

1) 160 A available in combination with feeder terminal 3NP1923-1BD00, otherwise max. 100 A

2) Up to pollution degree 2, above this U_i= 690 V

3) Only with isolating blades; otherwise, please observe specifications of fuse manufacturer

4) Values are valid when using LV HRC fuse systems with characteristic gG. If using fuses for semiconductor protection, please refer to the assignment table, see page 7/172.

5) For operation up to 160 A, max. 9 W

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Floor mounting

Selection and ordering data

	Rated current I_u	Size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A								kg
For 45 mm cover level									
3NP133-1CA20	***Basic units***								
	Flat terminals								
	160	00	►	**3NP1133-1CA10**		1	1 unit	1DL	0.806
	Box terminals								
	100[1)]	000	►	**3NP1123-1CA20**		1	1 unit	1DL	0.551
	160	00	►	**3NP1133-1CA20**		1	1 unit	1DL	0.822
3NP1133-1CA21	***With MFM electromechanical fuse monitoring***								
	Flat terminals								
	160	00		**3NP1133-1CA11**		1	1 unit	1DL	1.419
	Box terminals								
	160	00		**3NP1133-1CA21**		1	1 unit	1DL	1.445
3NP1133-1CA22	***With electronic EFM 10 fuse monitoring***								
	Flat terminals								
	160	00		**3NP1133-1CA12**		1	1 unit	1DL	1.110
	Box terminals								
	100[1)]	000		**3NP1123-1CA22**		1	1 unit	1DL	0.705
	160	00		**3NP1133-1CA22**		1	1 unit	1DL	1.137
3NP1133-1CA23	***With electronic EFM 20 fuse monitoring and line monitoring***								
	Flat terminals								
	160	00		**3NP1133-1CA13**		1	1 unit	1DL	1.125
	Box terminals								
	100[1)]	000		**3NP1123-1CA23**		1	1 unit	1DL	0.714
	160	00		**3NP1133-1CA23**		1	1 unit	1DL	1.149

[1)] 160 A available in combination with feeder terminal 3NP1923-1BD00

* You can order this quantity or a multiple thereof.

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	Rated current I_u	Size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A								kg
For 70 mm cover level									
	Basic units								
	Flat terminals								
3NP1143-1DA20	250	1	►	**3NP1143-1DA10**		1	1 unit	1DL	2.838
	400	2	►	**3NP1153-1DA10**		1	1 unit	1DL	3.764
	630	3	►	**3NP1163-1DA10**		1	1 unit	1DL	4.639
	Box terminals								
	250	1		**3NP1143-1DA20**		1	1 unit	1DL	2.950
	400	2		**3NP1153-1DA20**		1	1 unit	1DL	4.432
	630	3		**3NP1163-1DA20**		1	1 unit	1DL	5.305
	With MFM electromechanical fuse monitoring								
	Flat terminals								
3NP1143-1DA21	250	1		**3NP1143-1DA11**		1	1 unit	1DL	3.480
	400	2		**3NP1153-1DA11**		1	1 unit	1DL	4.478
	630	3		**3NP1163-1DA11**		1	1 unit	1DL	5.326
	Box terminals								
	250	1		**3NP1143-1DA21**		1	1 unit	1DL	3.636
	400	2		**3NP1153-1DA21**		1	1 unit	1DL	5.189
	630	3		**3NP1163-1DA21**		1	1 unit	1DL	5.981
	With electronic EFM 10 fuse monitoring								
	Flat terminals								
3NP1143-1DA22	250	1		**3NP1143-1DA12**		1	1 unit	1DL	3.177
	400	2		**3NP1153-1DA12**		1	1 unit	1DL	4.137
	630	3		**3NP1163-1DA12**		1	1 unit	1DL	5.004
	Box terminals								
	250	1		**3NP1143-1DA22**		1	1 unit	1DL	3.320
	400	2		**3NP1153-1DA22**		1	1 unit	1DL	4.824
	630	3		**3NP1163-1DA22**		1	1 unit	1DL	5.603
	With electronic EFM 20 fuse monitoring and line monitoring								
	Flat terminals								
3NP1143-1DA23	250	1		**3NP1143-1DA13**		1	1 unit	1DL	3.215
	400	2		**3NP1153-1DA13**		1	1 unit	1DL	4.186
	630	3		**3NP1163-1DA13**		1	1 unit	1DL	5.013
	Box terminals								
	250	1		**3NP1143-1DA23**		1	1 unit	1DL	3.360
	400	2		**3NP1153-1DA23**		1	1 unit	1DL	4.842
	630	3		**3NP1163-1DA23**		1	1 unit	1DL	5.716

*** You can order this quantity or a multiple thereof.**

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For 40 mm busbar system

Selection and ordering data

	Rated current I_u	Size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A								kg
With reach-around protection suitable for Siemens 8US busbar system and Rittal 40 mm busbar system without base[1]									
	Basic units								
3NP1133-1BB20	**Flat terminals**								
	160	00		**3NP1133-1BB10**		1	1 unit	1DL	1.116
	Box terminals								
	100[2]	000		**3NP1123-1BB20**		1	1 unit	1DL	0.934
	160	00		**3NP1133-1BB20**		1	1 unit	1DL	1.101
	With MFM electromechanical fuse monitoring								
3NP1133-1BB21	**Flat terminals**								
	160	00		**3NP1133-1BB11**		1	1 unit	1DL	1.724
	Box terminals								
	160	00		**3NP1133-1BB21**		1	1 unit	1DL	1.726
	With electronic EFM 10 fuse monitoring								
3NP1133-1BB22	**Flat terminals**								
	160	00		**3NP1133-1BB12**		1	1 unit	1DL	1.415
	Box terminals								
	100[2]	000		**3NP1123-1BB22**		1	1 unit	1DL	1.110
	160	00		**3NP1133-1BB22**		1	1 unit	1DL	1.395
	With electronic EFM 20 fuse monitoring and line monitoring								
3NP1133-1BB23	**Flat terminals**								
	160	00		**3NP1133-1BB13**		1	1 unit	1DL	1.120
	Box terminals								
	100[2]	000		**3NP1123-1BB23**		1	1 unit	1DL	1.107
	160	00		**3NP1133-1BB23**		1	1 unit	1DL	1.120

[1] Cannot be used with T profile rails

[2] 160 A available in combination with feeder terminal 3NP1923-1BD00

Note:

Delivered from factory with cable feeder at bottom and convertible by the customer

* You can order this quantity or a multiple thereof.

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	Rated current I_u	Size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A								kg
With reach-around protection suitable for Rittal 40 mm busbar system with base[1]									
	Basic units								
3NP1133-1JB20	**Flat terminals**								
	160	00		**3NP1133-1JB10**		1	1 unit	1DL	1.126
	Box terminals								
	100[2]	000		**3NP1123-1JB20**		1	1 unit	1DL	0.907
	160	00		**3NP1133-1JB20**		1	1 unit	1DL	1.092
	With MFM electromechanical fuse monitoring								
3NP1133-1JB21	**Flat terminals**								
	160	00		**3NP1133-1JB11**		1	1 unit	1DL	1.667
	Box terminals								
	160	00		**3NP1133-1JB21**		1	1 unit	1DL	1.690
	With electronic EFM 10 fuse monitoring								
3NP1133-1JB22	**Flat terminals**								
	160	00		**3NP1133-1JB12**		1	1 unit	1DL	1.120
	Box terminals								
	100[2]	000		**3NP1123-1JB22**		1	1 unit	1DL	0.940
	160	00		**3NP1133-1JB22**		1	1 unit	1DL	1.120
	With electronic EFM 20 fuse monitoring and line monitoring								
3NP1133-1JB23	**Flat terminals**								
	160	00		**3NP1133-1JB13**		1	1 unit	1DL	1.120
	Box terminals								
	100[2]	000		**3NP1123-1JB23**		1	1 unit	1DL	1.080
	160	00		**3NP1133-1JB23**		1	1 unit	1DL	1.414

[1] Cannot be used with T profile rails

[2] 160 A available in combination with feeder terminal 3NP1923-1BD00

Note:

Delivered from factory with cable feeder at bottom and convertible by the customer

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For 60 mm busbar system

Selection and ordering data

	Rated current I_u	Size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A								kg
With reach-around protection suitable for Siemens 8US, Wöhner Classic, and Rittal RiLine60 busbar systems without base									
	Basic units								
	Flat terminals								
	160	00	►	3NP1133-1BC10		1	1 unit	1DL	1.111
	250	1	►	3NP1143-1BC10		1	1 unit	1DL	3.260
	400	2		3NP1153-1BC10		1	1 unit	1DL	4.314
	630	3		3NP1163-1BC10		1	1 unit	1DL	5.285
	Box terminals								
	100[1)]	000	►	3NP1123-1BC20		1	1 unit	1DL	0.949
3NP1133-1BC20	160	00	►	3NP1133-1BC20		1	1 unit	1DL	1.129
	250	1	►	3NP1143-1BC20		1	1 unit	1DL	3.312
	400	2		3NP1153-1BC20		1	1 unit	1DL	4.739
	630	3		3NP1163-1BC20		1	1 unit	1DL	5.538
	With MFM electromechanical fuse monitoring								
	Flat terminals								
	160	00		3NP1133-1BC11		1	1 unit	1DL	1.705
	250	1		3NP1143-1BC11		1	1 unit	1DL	3.927
	400	2		3NP1153-1BC11		1	1 unit	1DL	5.061
	630	3		3NP1163-1BC11		1	1 unit	1DL	5.944
	Box terminals								
3NP1133-1BC21	160	00		3NP1133-1BC21		1	1 unit	1DL	1.692
	250	1		3NP1143-1BC21		1	1 unit	1DL	4.000
	400	2		3NP1153-1BC21		1	1 unit	1DL	5.343
	630	3		3NP1163-1BC21		1	1 unit	1DL	6.229
	With electronic EFM 10 fuse monitoring								
	Flat terminals								
	160	00		3NP1133-1BC12		1	1 unit	1DL	1.379
	250	1		3NP1143-1BC12		1	1 unit	1DL	3.593
	400	2		3NP1153-1BC12		1	1 unit	1DL	4.707
	630	3		3NP1163-1BC12		1	1 unit	1DL	5.642
	Box terminals								
	100[1)]	000		3NP1123-1BC22		1	1 unit	1DL	1.101
3NP1133-1BC22	160	00		3NP1133-1BC22		1	1 unit	1DL	1.403
	250	1		3NP1143-1BC22		1	1 unit	1DL	3.691
	400	2		3NP1153-1BC22		1	1 unit	1DL	5.059
	630	3		3NP1163-1BC22		1	1 unit	1DL	5.894
	With electronic EFM 20 fuse monitoring and line monitoring								
	Flat terminals								
	160	00		3NP1133-1BC13		1	1 unit	1DL	1.414
	250	1		3NP1143-1BC13		1	1 unit	1DL	3.641
	400	2		3NP1153-1BC13		1	1 unit	1DL	4.731
	630	3		3NP1163-1BC13		1	1 unit	1DL	5.620
	Box terminals								
	100[1)]	000		3NP1123-1BC23		1	1 unit	1DL	1.121
3NP1133-1BC23	160	00		3NP1133-1BC23		1	1 unit	1DL	1.390
	250	1		3NP1143-1BC23		1	1 unit	1DL	3.711
	400	2		3NP1153-1BC23		1	1 unit	1DL	5.090
	630	3		3NP1163-1BC23		1	1 unit	1DL	5.920

[1)] 160 A available in combination with feeder terminal 3NP1923-1BD00

Note:

Delivered from factory with cable feeder at bottom and convertible by the customer

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	Rated current I_u	Size	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A								kg
With reach-around protection suitable for Rittal RiLine60 busbar system with base									
	Basic units								
	Flat terminals								
	160	00		3NP1133-1JC10		1	1 unit	1DL	1.114
	250	1		3NP1143-1JC10		1	1 unit	1DL	3.246
	400	2		3NP1153-1JC10		1	1 unit	1DL	4.439
	630	3		3NP1163-1JC10		1	1 unit	1DL	5.286
	Box terminals								
3NP1133-1JC20	100[1)]	000		3NP1123-1JC20		1	1 unit	1DL	0.908
	160	00		3NP1133-1JC20		1	1 unit	1DL	1.123
	250	1		3NP1143-1JC20		1	1 unit	1DL	3.418
	400	2		3NP1153-1JC20		1	1 unit	1DL	4.742
	630	3		3NP1163-1JC20		1	1 unit	1DL	5.602
	With MFM electromechanical fuse monitoring								
	Flat terminals								
	160	00		3NP1133-1JC11		1	1 unit	1DL	1.674
	250	1		3NP1143-1JC11		1	1 unit	1DL	3.957
	400	2		3NP1153-1JC11		1	1 unit	1DL	5.021
	630	3		3NP1163-1JC11		1	1 unit	1DL	5.925
	Box terminals								
3NP1133-1JC21	160	00		3NP1133-1JC21		1	1 unit	1DL	1.703
	250	1		3NP1143-1JC21		1	1 unit	1DL	4.023
	400	2		3NP1153-1JC21		1	1 unit	1DL	5.400
	630	3		3NP1163-1JC21		1	1 unit	1DL	6.310
	With electronic EFM 10 fuse monitoring								
	Flat terminals								
	160	00		3NP1133-1JC12		1	1 unit	1DL	1.380
	250	1		3NP1143-1JC12		1	1 unit	1DL	3.638
	400	2		3NP1153-1JC12		1	1 unit	1DL	4.721
	630	3		3NP1163-1JC12		1	1 unit	1DL	1.000
	Box terminals								
3NP1133-1JC22	100[1)]	000		3NP1123-1JC22		1	1 unit	1DL	1.065
	160	00		3NP1133-1JC22		1	1 unit	1DL	1.385
	250	1		3NP1143-1JC22		1	1 unit	1DL	3.644
	400	2		3NP1153-1JC22		1	1 unit	1DL	5.074
	630	3		3NP1163-1JC22		1	1 unit	1DL	5.956
	With electronic EFM 20 fuse monitoring and line monitoring								
	Flat terminals								
	160	00		3NP1133-1JC13		1	1 unit	1DL	1.401
	250	1		3NP1143-1JC13		1	1 unit	1DL	3.667
	400	2		3NP1153-1JC13		1	1 unit	1DL	4.740
	630	3		3NP1163-1JC13		1	1 unit	1DL	6.980
	Box terminals								
3NP1133-1JC23	100[1)]	000		3NP1123-1JC23		1	1 unit	1DL	1.086
	160	00		3NP1133-1JC23		1	1 unit	1DL	1.413
	250	1		3NP1143-1JC23		1	1 unit	1DL	3.690
	400	2		3NP1153-1JC23		1	1 unit	1DL	5.130
	630	3		3NP1163-1JC23		1	1 unit	1DL	2.120

1) 160 A available in combination with feeder terminal 3NP1923-1BD00

Note:

Delivered from factory with cable feeder at bottom and convertible by the customer

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Accessories

Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
For size 000								
	Connection methods							
3NP1923-1BD00	**Feeder terminals**, 16 ... 95 mm^2 (1 set = 3 units) • For 3NP1123 with box terminal for use up to 160 A • For infeed when using the 3-phase busbar • For connection of copper conductors		3NP1923-1BD00		1	1 unit	1DL	0.259
3NP1923-1BE20	**Three-tier terminals**, 3 x 2.5 ... 16 mm^2, (1 set = 3 units) • For 3NP1123 with box terminal • For connection of copper conductors		3NP1923-1BE20		1	1 unit	1DL	0.131
3NP1923-1BF10	**Covering caps** for 1 blank space on a three-phase busbar (1 set = 20 units)		3NP1923-1BF10		1	1 unit	1DL	0.011
3NP1933-1BF30	**Three-phase busbar** I_u = max. 225 A							
	• For 2x NH000		3NP1923-1BF20		1	1 unit	1DL	0.268
	• For 3x NH000		3NP1923-1BF30		1	1 unit	1DL	0.444
	• For 4x NH000		3NP1923-1BF40		1	1 unit	1DL	0.651
3NP1933-1BF50	**Link rail**, I_u = max. 225 A for 3-phase busbars		3NP1923-1BF50		1	1 unit	1DL	0.263
3NP1933-1BG40	**Auxiliary conductor connections** For flat tab sleeve 6.3 x 0.8 mm, max. 5 A (1 set = 3 units) For 3NP1123 with box terminal		3NP1923-1BG40		1	1 unit	1DL	0.007

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	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
For size 000 (continued)								
	Device covers, auxiliary switches							
3NP1923-1CA10	**Reach-around protection for busbar mounting** 1x top, 1x bottom Spare part, included in scope of delivery of the 3NP1, can also be used for retrofitting to a different busbar system							
	• For Siemens 8US system		**3NP1923-1CA10**		1	1 unit	1DL	0.052
	• For Rittal system		**3NP1923-1CA20**		1	1 unit	1DL	0.055
3NP1923-1CB00	**Cable connection covers** Only for busbar systems 40 mm / 60 mm, top and bottom		**3NP1923-1CB00**		1	1 unit	1DL	0.040
3NP1923-1CF00	**Masking frame supports** (1 set = 2 units)		**3NP1923-1CF00**		1	1 unit	1DL	0.008
	Covers							
	External dimensions (H x W) 215 x 130 mm		**3NP1923-1DA00**		1	1 unit	1DL	0.034
3NP1923-1EA00	**Fixing kits**							
	For 1 standard mounting rail	►	**3NP1923-1EA00**		1	1 unit	1DL	0.064
3NP1920-1FA00	**Auxiliary switches**							
	1 CO contact	►	**3NP1920-1FA00**		1	1 unit	1DL	0.020
	1 CO contact, solid-state compatible		**3NP1920-1FB00**		1	1 unit	1DL	0.021
3NP1923-1GA00	**Fuse carriers**							
	Spare part, included in scope of delivery of the 3NP1, fuse monitoring can be retrofitted by replacing the fuse carrier		**3NP1923-1GA00**		1	1 unit	1DL	0.142
	• Standard		**3NP1923-1GA00**		1	1 unit	1DL	0.142
	• With electronic EFM 10 fuse monitoring		**3NP1923-1GB20**		1	1 unit	1DL	0.309
	• With electronic EFM 20 fuse monitoring and line monitoring		**3NP1923-1GB30**		1	1 unit	1DL	0.345
	• With electronic EFM 25 fuse monitoring and line monitoring		**3NP1923-1GB50**		1	1 unit	1DL	0.315
3NP1900-1HA00	**Locking devices**							
	(1 set = 10 units)		**3NP1900-1HA00**		1	1 unit	1DL	0.023

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Accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
For size 00								
	Connection methods							
3NP1933-1BA00	**Saddle terminals**, 1.5 ... 70 mm^2 (1 set = 3 units) • For 3NP1133 with flat terminal • For connection of copper conductors		**3NP1933-1BA00**		1	1 unit	1DL	0.047
3NP1933-1BB10	**Prism terminals** single, 35 ... 95 mm^2 (1 set = 3 units) • For 3NP1133 with flat terminal • For connection of copper or aluminum conductors		**3NP1933-1BB10**		1	1 unit	1DL	0.126
3NP1933-1BC00	**Terminal kits**, 6 ... 70 mm^2 For 32-mm cover level with box terminal • For 3NP1133 with flat terminal • For connection of copper conductors		**3NP1933-1BC00**		1	1 unit	1DL	0.191
3NP1933-1BE10	**Three-tier terminals**, 3 x 2.5 ... 16 mm^2 (1 set = 3 units) • For 3NP1133 with flat terminal • For connection of copper conductors		**3NP1933-1BE10**		1	1 unit	1DL	0.113
3NP1923-1BE20	**Three-tier terminals**, 3 x 2.5 ... 16 mm^2 (1 set = 3 units) • For 3NP1133 with box terminal • For connection of copper conductors		**3NP1923-1BE20**		1	1 unit	1DL	0.131
3NP1933-1BG10	**Auxiliary conductor connections** For flat tab sleeve 6.3 x 0.8 mm, max. 5 A For flat terminal (1 set = 3 units)		**3NP1933-1BG10**		1	1 unit	1DL	0.003
3NP1933-1BG30	**Auxiliary conductor connections** For flat tab sleeve 6.3 x 0.8 mm, max. 5 A For prism terminal (1 set = 3 units)		**3NP1933-1BG30**		1	1 unit	1DL	0.001
3NP1933-1BG40	**Auxiliary conductor connections** For flat tab sleeve 6.3 x 0.8 mm, max. 5 A For box terminal (1 set = 3 units)		**3NP1933-1BG40**		1	1 unit	1DL	0.008

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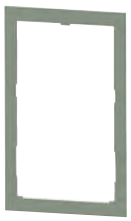
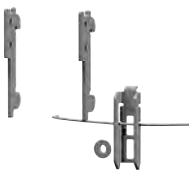
	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
For size 00 (continued)								
	Device covers, auxiliary switches							
3NP1933-1CA10	**Reach-around protection for busbar mounting** 1x top, 1x bottom Spare part, included in scope of delivery of the 3NP1, can also be used for retrofitting to a different busbar system							
	• For Siemens 8US system		3NP1933-1CA10		1	1 unit	1DL	0.063
	• For Rittal system		3NP1933-1CA20		1	1 unit	1DL	0.049
3NP1933-1CB00	**Cable connection covers** (at top and bottom) For flat terminal	►	3NP1933-1CB00		1	1 unit	1DL	0.063
3NP1933-1CC00	**Cable connection covers** with rear reach-around protection in case of busbar mounting (at top and bottom) for flat terminal	►	3NP1933-1CC00		1	1 unit	1DL	0.088
3NP1933-1CD00	**Cable connection covers** with rear reach-around protection in case of busbar mounting (at top and bottom) for flat terminal	►	3NP1933-1CD00		1	1 unit	1DL	0.107
	Masking frame supports (1 set = 2 units)		3NP1933-1CF00		1	1 unit	1DL	0.022
 3NP1933-1DA00	**Covers** External dimensions (H x W) 215 x 130 mm		3NP1933-1DA00		1	1 unit	1DL	0.038
 3NP1933-1EB00	**Fixing kits** For 2 standard mounting rails 125/150 mm	►	3NP1933-1EB00		1	1 unit	1DL	0.053
3NP1930-1FB00	**Auxiliary switches** 1 CO contact	►	3NP1930-1FA00		1	1 unit	1DL	0.022
	1 CO contact, solid-state compatible		3NP1930-1FB00		1	1 unit	1DL	0.022
3NP1933-1GB10	**Fuse carriers** Spare part, included in scope of delivery of the 3NP1, fuse monitoring can be retrofitted by replacing the fuse carrier							
	• Standard		3NP1933-1GA00		1	1 unit	1DL	0.236
	• With MFM electromechanical fuse monitoring		3NP1933-1GB10		1	1 unit	1DL	0.686
	• With electronic EFM 10 fuse monitoring		3NP1933-1GB20		1	1 unit	1DL	0.395
	• With electronic EFM 20 fuse monitoring and line monitoring		3NP1933-1GB30		1	1 unit	1DL	0.407
	• With electronic EFM 25 fuse monitoring and line monitoring		3NP1933-1GB50		1	1 unit	1DL	0.401
	Locking devices (1 set = 10 units)		3NP1900-1HA00		1	1 unit	1DL	0.023

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Accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
For size 1								
	Connection methods							
3NP1943-1BA00	**Saddle terminals**, 70 ... 120 mm^2 (1 set = 3 units) • For 3NP1143 with flat terminal • For connection of copper conductors		**3NP1943-1BA00**		1	1 unit	1DL	0.132
3NP1943-1BB10	**Prism terminals** single, 70 ... 150 mm^2 (1 set = 3 units) • For 3NP1143 with flat terminal • For connection of copper or aluminum conductors		**3NP1943-1BB10**		1	1 unit	1DL	0.309
3NP1943-1BB20	**Prism terminals** double, 2 x 35 ... 70 mm^2 (1 set = 3 units) • For 3NP1143 with flat terminal • For connection of copper or aluminum conductors		**3NP1943-1BB20**		1	1 unit	1DL	0.459
3NP1943-1BG10	**Auxiliary conductor connections** For flat tab sleeve 6.3 x 0.8 mm, max. 5 A For flat terminal (1 set = 3 units)		**3NP1943-1BG10**		1	1 unit	1DL	0.001
3NP1943-1BG30	**Auxiliary conductor connections** For flat tab sleeve 6.3 x 0.8 mm; max. 5 A For saddle-type or prism terminals (1 set = 3 units)		**3NP1943-1BG30**		1	1 unit	1DL	0.008
3NP1943-1BG40	**Auxiliary conductor connections** For flat tab sleeve 6.3 x 0.8 mm; max. 5 A For box terminal (1 set = 3 units)		**3NP1943-1BG40**		1	1 unit	1DL	0.011

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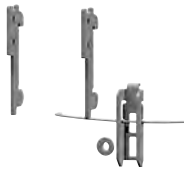
	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
For size 1 (continued)								
	Device covers, auxiliary switches							
3NP1943-1CA10	**Reach-around protection for busbar mounting**							
	1x top, 1x bottom Spare part, included in scope of delivery of the 3NP1, can also be used for retrofitting to a different busbar system							
	• For Siemens 8US system		3NP1943-1CA10		1	1 unit	1DL	0.033
	• For Rittal system		3NP1943-1CA20		1	1 unit	1DL	0.043
3NP1943-1CB00	**Cable connection covers** (at top and bottom)	►	3NP1943-1CB00		1	1 unit	1DL	0.182
3NP1943-1CD00	**Cable connection covers** with rear reach-around protection (at top and bottom)	►	3NP1943-1CD00		1	1 unit	1DL	0.366
	Masking frame supports (1 set = 2 units)		3NP1943-1CF00		1	1 unit	1DL	0.044
	Covers							
	External dimensions (H x W) 375 x 220 mm		3NP1943-1DA00		1	1 unit	1DL	0.118
 3NP1943-1EB00	**Fixing kits**							
	For 2 standard mounting rails 125/150 mm		3NP1943-1EB00		1	1 unit	1DL	0.053
3NP1940-1FA00	**Auxiliary switches**							
	1 CO contact	►	3NP1940-1FA00		1	1 unit	1DL	0.023
	1 CO contact, solid-state compatible		3NP1940-1FB00		1	1 unit	1DL	0.020
3NP1943-1GB20	**Fuse carriers**							
	Spare part, included in scope of delivery of the 3NP1, fuse monitoring can be retrofitted by replacing the fuse carrier							
	• Standard		3NP1943-1GA00		1	1 unit	1DL	0.759
	• With MFM electromechanical fuse monitoring		3NP1943-1GB10		1	1 unit	1DL	1.375
	• With electronic EFM 10 fuse monitoring		3NP1943-1GB20		1	1 unit	1DL	1.032
	• With electronic EFM 20 fuse monitoring and line monitoring		3NP1943-1GB30		1	1 unit	1DL	1.025
	• With electronic EFM 25 fuse monitoring and line monitoring		3NP1943-1GB50		1	1 unit	1DL	1.007
	Locking devices							
	(1 set = 10 units)		3NP1900-1HA00		1	1 unit	1DL	0.023

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Accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
For size 2								
	Connection methods							
3NP1953-1BA00	**Saddle terminals**, 120 ... 240 mm^2 (1 set = 3 units) • For 3NP1153 with flat terminal • For connection of copper conductors		3NP1953-1BA00		1	1 unit	1DL	0.372
3NP1953-1BB10	**Prism terminals** single, 120 ... 240 mm^2 (1 set = 3 units) • For 3NP1153 with flat terminal • For connection of copper or aluminum conductors		3NP1953-1BB10		1	1 unit	1DL	0.509
3NP1953-1BB20	**Prism terminals** double, 2 x 70 ... 120 mm^2 (1 set = 3 units) • For 3NP1153 with flat terminal • For connection of copper or aluminum conductors		3NP1953-1BB20		1	1 unit	1DL	0.738
3NP1943-1BG10	**Auxiliary conductor connections** For flat tab sleeve 6.3 x 0.8 mm, max. 5 A For flat terminal (1 set = 3 units)		3NP1943-1BG10		1	1 unit	1DL	0.001
3NP1953-1BG30	**Auxiliary conductor connections** For flat tab sleeve 6.3 x 0.8 mm; max. 5 A For saddle-type or prism terminals (1 set = 3 units)		3NP1953-1BG30		1	1 unit	1DL	0.006
3NP1953-1BG40	**Auxiliary conductor connections** For flat tab sleeve 6.3 x 0.8 mm; max. 5 A For box terminal (1 set = 3 units)		3NP1953-1BG40		1	1 unit	1DL	0.034
	Device covers, auxiliary switches							
3NP1953-1CA10	**Reach-around protection for busbar mounting** 1x top, 1x bottom Spare part, included in scope of delivery of the 3NP1, can also be used for retrofitting to a different busbar system							
	• For Siemens 8US system		3NP1953-1CA10		1	1 unit	1DL	0.039
	• For Rittal system		3NP1953-1CA20		1	1 unit	1DL	0.041
3NP1953-1CB00	**Cable connection covers** (at top and bottom)	►	3NP1953-1CB00		1	1 unit	1DL	0.242
	Cable connection covers with rear reach-around protection (at top and bottom)	►	3NP1953-1CD00		1	1 unit	1DL	0.479
	Masking frame supports (1 set = 2 units)		3NP1943-1CF00		1	1 unit	1DL	0.044
	Covers							
	External dimensions (H x W) 375 x 245 mm		3NP1953-1DA00		1	1 unit	1DL	0.101
	Auxiliary switches							
3NP1940-1FA00	1 CO contact	►	3NP1940-1FA00		1	1 unit	1DL	0.023
	1 CO contact, solid-state compatible		3NP1940-1FB00		1	1 unit	1DL	0.020
	Fuse carriers							
3NP1953-1GB30	Spare part, included in scope of delivery of the 3NP1, fuse monitoring can be retrofitted by replacing the fuse carrier							
	• Standard		3NP1953-1GA00		1	1 unit	1DL	0.849
	• With MFM electromechanical fuse monitoring		3NP1953-1GB10		1	1 unit	1DL	1.463
	• With electronic EFM 10 fuse monitoring		3NP1953-1GB20		1	1 unit	1DL	1.080
	• With electronic EFM 20 fuse monitoring and line monitoring		3NP1953-1GB30		1	1 unit	1DL	1.107
	• With electronic EFM 25 fuse monitoring and line monitoring		3NP1953-1GB50		1	1 unit	1DL	3.000
	Locking devices							
	(1 set = 10 units)		3NP1900-1HA00		1	1 unit	1DL	0.023

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	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
For size 3								
	Connection methods							
3NP1963-1BA00	**Saddle terminals**, 150 ... 300 mm² (1 set = 3 units) • For 3NP1163 with flat terminal • For connection of copper conductors		3NP1963-1BA00		1	1 unit	1DL	0.379
3NP1963-1BB10	**Prism terminals** single, 150 ... 300 mm² (1 set = 3 units) • For 3NP1163 with flat terminal • For connection of copper or aluminum conductors		3NP1963-1BB10		1	1 unit	1DL	0.664
3NP1963-1BB20	**Prism terminals** double, 2 x 150 ... 185 mm² (1 set = 3 units) • For 3NP1163 with flat terminal • For connection of copper or aluminum conductors		3NP1963-1BB20		1	1 unit	1DL	1.053
3NP1943-1BG10	**Auxiliary conductor connections** For flat tab sleeve 6.3 x 0.8 mm, max. 5 A For flat terminal (1 set = 3 units)		3NP1943-1BG10		1	1 unit	1DL	0.001
3NP1953-1BG30	**Auxiliary conductor connections** For flat tab sleeve 6.3 x 0.8 mm, max. 5 A for saddle-type or prism terminal (1 set = 3 units)		3NP1953-1BG30		1	1 unit	1DL	0.006
3NP1953-1BG40	**Auxiliary conductor connections** For flat tab sleeve 6.3 x 0.8 mm, max. 5 A for box terminal (1 set = 3 units)		3NP1953-1BG40		1	1 unit	1DL	0.034
	Device covers, auxiliary switches							
3NP1963-1CA10	**Reach-around protection for busbar mounting** 1x top, 1x bottom Spare part, included in scope of delivery of the 3NP1, can also be used for retrofitting to a different busbar system							
	• For Siemens 8US system		3NP1963-1CA10		1	1 unit	1DL	0.041
	• For Rittal system		3NP1963-1CA20		1	1 unit	1DL	0.048
3NP1963-1CB00	**Cable connection covers** (at top and bottom)	►	3NP1963-1CB00		1	1 unit	1DL	0.274
	Cable connection covers With rear reach-around protection (at top and bottom)	►	3NP1963-1CD00		1	1 unit	1DL	0.556
	Masking frame supports (1 set = 2 units)		3NP1943-1CF00		1	1 unit	1DL	0.044
	Covers							
	External dimensions (H x W) 375 x 290 mm		3NP1963-1DA00		1	1 unit	1DL	0.143
	Auxiliary switches							
3NP1940-1FA00	1 CO contact	►	3NP1940-1FA00		1	1 unit	1DL	0.023
	1 CO contact, solid-state compatible		3NP1940-1FB00		1	1 unit	1DL	0.020
	Fuse carriers Spare part, included in scope of delivery of the 3NP1, fuse monitoring can be retrofitted by replacing the fuse carrier							
	• Standard		3NP1963-1GA00		1	1 unit	1DL	1.012
	• With MFM electromechanical fuse monitoring		3NP1963-1GB10		1	1 unit	1DL	1.529
	• With electronic EFM 10 fuse monitoring		3NP1963-1GB20		1	1 unit	1DL	1.232
	• With electronic EFM 20 fuse monitoring and line monitoring		3NP1963-1GB30		1	1 unit	1DL	1.265
3NP1963-1GB50	• With electronic EFM 25 fuse monitoring and line monitoring		3NP1963-1GB50		1	1 unit	1DL	1.230
	Locking devices							
	(1 set = 10 units)		3NP1900-1HA00		1	1 unit	1DL	0.023

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*** You can order this quantity or a multiple thereof.**

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Overview

The 3NP1 fuse switch disconnectors are suitable for all fuses in LV HRC design; see chapter "Fuse Systems".

SITOR semiconductor fuses in LV HRC design can also be used, although it must be noted that, compared to cable and line protection fuses, these get much hotter during operation. For this reason, the fuse must be operated below the rated current I_n of the device (derating) when installed in a closed switching device.

The following table shows the permissible load currents of the SITOR semiconductor fuses for installation in 3NP1. The values were determined using the conductor cross-sections specified in the table.

Note

If using smaller cross-sections, a considerably higher derating is required due to the lower heat dissipation.

SITOR semiconductor fuses for 3NP1 fuse switch disconnectors: Assignment table

SITOR semiconductor fuse data						Permissible load currents of fuse when installed in					
						3NP1 for floor mounting			3NP1 for busbar mounting		
Type [1) 2)]	Rated current I_n	Rated voltage [3)]	Operational class	Size	Required conductor cross-section Cu	Type	Size	Permissible load current [4)]	Type	Size	Permissible load current [4) 5)]
	A	V AC			mm²			A			A
3NC23..	150	500	gR	3	70	3NP1163	3	140	3NP1163	3	150
3NC2425..	200	500	gR	3	95	3NP1163	3	175	3NP1163	3	190
3NC2427..	250	500	gR	3	120	3NP1163	3	220	3NP1163	3	237
3NC2428..	300	500	gR	3	185	3NP1163	3	250	3NP1163	3	285
3NC2431..	350	500	gR	3	240	3NP1163	3	320	3NP1163	3	332
3NC2432..	400	500	aR	3	240	3NP1163	3	370	3NP1163	3	380
3NC3336-1	630	1000	aR	3	2x (40x5)	3NP1163	3	500	3NP1163	3	500
3NC3430-1	315	1250	aR	3	2x95	3NP1163	3	280	3NP1163	3	285
3NC3432-1	400	1250	aR	3	2x120	3NP1163	3	340	3NP1163	3	340
3NC3434-1	500	1250	aR	3	2x150	3NP1163	3	400	3NP1163	3	425
3NC3436-1	630	1250	aR	3	2x (40x5)	3NP1163	3	460	3NP1163	3	535
3NC8423..	150	660	gR	3	70	3NP1163	3	120	3NP1163	3	140
3NC8425..	200	660	gR	3	95	3NP1163	3	160	3NP1163	3	190
3NC8427..	250	660	gR	3	120	3NP1163	3	200	3NP1163	3	240
3NC8431..	350	660	gR	3	240	3NP1163	3	270	3NP1163	3	300
3NC8434..	500	660	gR	3	2x 150	3NP1163	3	385	3NP1163	3	385
3NE1020-2	80	690	gR	00	25	3NP1133	00	80	3NP1133	00	80
3NE1021-0	100	690	gS	00	35	3NP1133	00	100	3NP1133	00	100
3NE1021-2	100	690	gR	00	35	3NP1133	00	95	3NP1133	00	95
3NE1022-0	125	690	gS	00	50	3NP1133	00	120	3NP1133	00	120
3NE1022-2	125	690	gR	00	50	3NP1133	00	115	3NP1133	00	115
3NE1224-0	160	690	gS	1	70	3NP1143 3NP1153	1 2	160 160	3NP1143 3NP1153	1 2	160 160
3NE1224-2/-3	160	690	gR	1	70	3NP1143 3NP1153	1 2	150 200	3NP1143 3NP1153	1 2	152 200
3NE1224-2/-3	160	690	gR	1	70	3NP1143 3NP1153	1 2	150 160	3NP1143 3NP1153	1 2	152 160
3NE1225-2/-3	200	690	gR	1	95	3NP1143 3NP1153	1 2	180 190	3NP1143 3NP1153	1 2	180 190
3NE1227-0	250	690	gS	1	120	3NP1143 3NP1153	1 2	235 250	3NP1143 3NP1153	1 2	238 250
3NE1227-2/-3	250	690	gR	1	120	3NP1143 3NP1153	1 2	220 235	3NP1143 3NP1153	1 2	213 235
3NE1230-0	315	690	gS	1	2x 70	3NP1153	2	290	3NP1153	2	315
3NE1230-2/-3	315	690	gR	1	2x 70	3NP1153 3NP1163	2 3	278 380	3NP1153 3NP1163	2 3	315 400
3NE1331-0	350	690	gS	2	2x 95	3NP1153 3NP1163	2 3	315 340	3NP1153 3NP1163	2 3	350 350
3NE1331-2/-3	350	690	gR	2	2x 95	3NP1153 3NP1163	2 3	300 330	3NP1153 3NP1163	2 3	330 350
3NE1332-0	400	690	gS	2	2x 95	3NP1153	2	340	3NP1153	2	380
3NE1332-2/-3	400	690	gR	2	2x 95	3NP1153 3NP1163	2 3	328 370	3NP1153 3NP1163	2 3	360 400
3NE1333-0	450	690	gS	2	2x 120	3NP1163	3	450	3NP1163	3	430
3NE1333-2/-3	450	690	gR	2	2x 120	3NP1163	3	430	3NP1163	3	420

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SITOR semiconductor fuse data						Permissible load currents of fuse when installed in					
						3NP1 for floor mounting			3NP1 for busbar mounting		
Type [1) 2)]	Rated current I_n	Rated voltage [3)]	Operational class	Size	Required conductor cross-section Cu	Type	Size	Permissible load current [4)]	Type	Size	Permissible load current [4) 5)]
	A	V AC			mm²			A			A
3NE1334-0	500	690	gS	2	2x 120	3NP1163	3	500	3NP1163	3	450
3NE1334-2/-3	500	690	gR	2	2x 120	3NP1163	3	475	3NP1163	3	450
3NE1435-0	560	690	gS	3	2x 150	3NP1163	3	560	3NP1163	3	520
3NE1435-2/-3	560	690	gR	3	2x 150	3NP1163	3	555	3NP1163	3	510
3NE1436-0	630	690	gS	3	2x 185	3NP1163	3	630	3NP1163	3	585
3NE1436-2/-3	630	690	gR	3	2x 185	3NP1163	3	620	3NP1163	3	570
3NE1437-0	710	690	gS	3	2x (40x5)	--	--	--	3NP1163	3	605
3NE1437-1	710	600	gR	3	2x (40x5)	--	--	--	3NP1163	3	590
3NE1437-2/-3	710	690	gR	3	2x (40x5)	--	--	--	3NP1163	3	580
3NE1438-0	800	690	gS	3	2x (50x5)	--	--	--	3NP1163	3	630
3NE1438-1	800	600	gR	3	2x (50x5)	--	--	--	3NP1163	3	610
3NE1438-2/-3	800	690	gR	3	2x (50x5)	--	--	--	3NP1163	3	600
3NE1447-2/-3	670	690	gR	3	2x (40x5)	--	--	--	3NP1163	3	575
3NE1448-2/-3	850	690	gR	3	2x (40x8)	--	--	--	3NP1163	3	630
3NE1802-0	40	690	gS	000	10	3NP1123	000	40	3NP1123	000	40
						3NP1133	00	40	3NP1133	00	40
3NE1803-0	35	690	gS	000	6	3NP1123	000	35	3NP1123	000	35
						3NP1133	00	35	3NP1133	00	35
3NE1813-0	16	690	gS	000	1.5	3NP1123	000	16	3NP1123	000	16
						3NP1133	00	16	3NP1133	00	16
3NE1814-0	20	690	gS	000	2.5	3NP1123	000	20	3NP1123	000	20
						3NP1133	00	20	3NP1133	00	20
3NE1815-0	25	690	gS	000	4	3NP1123	000	25	3NP1123	000	25
						3NP1133	00	25	3NP1133	00	25
3NE1817-0	50	690	gS	000	10	3NP1123	000	50	3NP1123	000	50
						3NP1133	00	50	3NP1133	00	50
3NE1818-0	63	690	gS	000	16	3NP1123	000	63	3NP1123	000	63
						3NP1133	00	63	3NP1133	00	63
3NE1820-0	80	690	gS	000	25	3NP1123	000	80	3NP1123	000	80
						3NP1133	00	80	3NP1133	00	80
3NE3221	100	1000	aR	1	35	3NP1143	1	88	3NP1143	1	95
						3NP1153	2	95	3NP1153	2	100
3NE3222	125	1000	aR	1	50	3NP1143	1	102	3NP1143	1	113
						3NP1153	2	110	3NP1153	2	125
3NE3224	160	1000	aR	1	70	3NP1143	1	130	3NP1143	1	140
						3NP1153	2	140	3NP1153	2	150
3NE3225	200	1000	aR	1	95	3NP1143	1	163	3NP1143	1	170
						3NP1153	2	175	3NP1153	2	180
3NE3227	250	1000	aR	1	120	3NP1143	1	195	3NP1143	1	200
						3NP1153	2	210	3NP1153	2	215
3NE3230-0B	315	1000	aR	1	185	3NP1153	2	270	3NP1153	2	265
3NE3231	350	1000	aR	1	240	3NP1153	2	290	3NP1153	2	280
3NE3232-0B	400	1000	aR	1	240	3NP1153	2	320	3NP1153	2	310
3NE3233	450	1000	aR	1	2x 150	3NP1153	2	360	3NP1153	2	330
3NE3332-0B	400	1000	aR	2	240	3NP1153	2	330	3NP1163	3	360
						3NP1163	3	360	--	--	--
3NE3333	450	1000	aR	2	2x 150	3NP1163	3	375	3NP1163	3	390
3NE3334-0B	500	1000	aR	2	2x 150	3NP1163	3	420	3NP1163	3	415
3NE3335	560	1000	aR	2	2x 185	3NP1163	3	475	3NP1163	3	460
3NE3336	630	1000	aR	2	2x 185	3NP1163	3	540	3NP1163	3	500
3NE3337-8	710	900	aR	2	2x (40x5)	3NP1163	3	580	3NP1163	3	500
3NE3338-8	800	800	aR	2	2x 240	3NP1163	3	605	3NP1163	3	500
3NE3340-8	900	690	aR	2	2x (40x8)	3NP1163	3	630	3NP1163	3	500
3NE4101	32	1000	gR	0	6	3NP1143	1	30	3NP1143	1	32
3NE4102	40	1000	gR	0	10	3NP1143	1	35	3NP1143	1	40
3NE4117	50	1000	gR	0	10	3NP1143	1	42	3NP1143	1	50
3NE4118	63	1000	aR	0	16	3NP1143	1	55	3NP1143	1	60
3NE4120	80	1000	aR	0	25	3NP1143	1	71	3NP1143	1	76
3NE4121	100	1000	aR	0	35	3NP1143	1	84	3NP1143	1	93
3NE4122	125	1000	aR	0	50	3NP1143	1	107	3NP1143	1	115
3NE4124	160	1000	aR	0	70	3NP1143	1	134	3NP1143	1	144
3NE4327-0B	250	800	aR	2	150	3NP1153	2	195	3NP1163	3	220
						3NP1163	3	215	3NP1163	3	220

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Fuses

SITOR semiconductor fuse data

Type [1) 2)]	Rated current I_n	Rated voltage [3)]	Operational class	Size	Required conductor cross-section Cu	**Permissible load currents of fuse when installed in**					
						3NP1 for floor mounting			**3NP1 for busbar mounting**		
						Type	Size	Permissible load current [4)]	Type	Size	Permissible load current [4) 5)]
	A	V AC			mm^2			A			A
3NE4330-0B	315	800	aR	2	240	3NP1153 3NP1163	2 3	240 270	3NP1163 --	3 --	255 --
3NE4333-0B	450	800	aR	2	2x (30x5)	3NP1163	3	370	3NP1163	3	355
3NE4334-0B	500	800	aR	2	2x (30x5)	3NP1163	3	410	3NP1163	3	390
3NE4337	710	800	aR	2	2x (50x5)	3NP1163	3	540	3NP1163	3	500
3NE8015-1	25	690	gR	00	4	3NP1133	00	25	3NP1133	00	25
3NE8003-1	35	690	gR	00	6	3NP1133	00	32	3NP1133	00	35
3NE8017-1	50	690	gR	00	10	3NP1133	00	43	3NP1133	00	50
3NE8018-1	63	690	gR	00	16	3NP1133	00	52	3NP1133	00	60
3NE8020-1	80	690	aR	00	25	3NP1133	00	65	3NP1133	00	72
3NE8021-1	100	690	aR	00	35	3NP1133	00	85	3NP1133	00	85
3NE8022-1	125	690	aR	00	50	3NP1133	00	100	3NP1133	00	100
3NE8024-1	160	690	aR	00	70	3NP1133	00	120	3NP1133	00	115

1) Due to the mechanical stress on the relatively long fuse blades, SITOR 3NE41 semiconductor fuses should only be switched occasionally and only at zero current.

2) Permissible load currents for 3NE8…-0MK see Configuration Manual "Fuse Systems", or on request

3) 3NP1 fuse switch disconnectors may be operated at up to 1000 V AC/DC with the following restrictions:
- Degree of pollution 2 (instead of 3)
- AC20 or DC20 – i.e. switching only without load

4) In the case of cyclic loads, the currents may have to be further reduced (precise values on request).

5) Values apply if used with 30 x 10 mm rails; for size 00: 12 x 5 mm and top busbar connection – values for other configurations available on request

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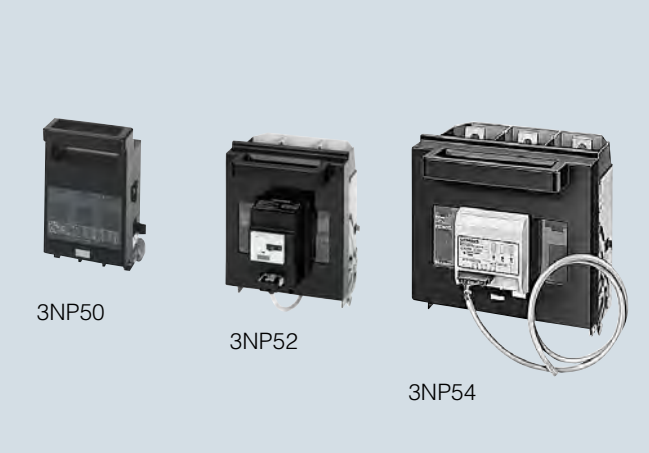
Overview



3NP5 fuse switch disconnector range

3NP5 fuse switch disconnectors are controls for the occasional manual switching/isolating of loads and distribution boards. They are able to switch on, control and switch off the specified rated current (including a specific overload).

With the 3NP5 fuse switch disconnectors, all poles of downstream electric loads can be safely disconnected from the system under load.

Application

The 3NP5 fuse switch disconnectors are ideally suited for surface mounting and installation in the ALPHA distribution boards and SIVACON sicube 8MF1 system cubicles.

The ability to mount them on a range of different busbar systems allows their very diverse implementation in switchboard cabinet and control engineering.

The 3NP5 fuse switch disconnectors are ideal for operation in combination with other switching devices, for example in capacitor modules for reactive-power compensation.

In conjunction with semiconductor protection fuses (e.g. SITOR), these are used for the effective protection of frequency converters and soft starters.

The 3NP5 fuse switch disconnectors are suitable for use in any climate and comply with standards IEC 60947-1, IEC 60947-3 and DIN VDE 0660 Part 107.

In addition, the 3NP5 series of fuse switch disconnectors complies with the requirements of BS 5419 and is also approved for operation in marine applications.

All 3NP5 fuse switch disconnectors can be sealed as standard (or can be sealed through accessories).

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Technical specifications

Standards		**IEC 60947-1, IEC 60947-3, VDE 0660 Part 107**						
Type		**3NP50**	**3NP52**		**3NP53**		**3NP54**	
Rated uninterrupted current I_u	A	160	250		400		630	
For fuse links acc. to IEC 60269-2	Size	00	1 and 0		2 and 1		3 and 2	
Conventional free air thermal current I_{th}	A	160	250		400		630	
Rated operational voltage U_e								
• 50/60 Hz AC	V	690						
• DC	V	440 (3 conducting paths series-connected), 220 (2 conducting paths series-connected, with fuse monitoring through 3RV)						
Rated insulation voltage U_i	V	690[1]	690[1]		690[1]		690[1]	
Rated impulse withstand voltage U_{imp}	kV	6	6		6		6	
Rated conditional short-circuit current with fuses (by fast switch on)								
Rated current	Size/A	00/160	1/250		2/400		3/630	
• At 500 V AC (rms value)	kA	50	50		50		50	
Permissible let-through current of the fuses (peak value)	kA	15	25		40		50	
Short-circuit strength with fuses (with closed disconnector)								
• Rated current	Size/A	00/160	1/250		2/400		3/630	
• At 500 V AC (rms value)	kA	100	100		50		50	
• Maximum permissible let-through I^2t value	kA^2s	223	780		2150		5400	
• Permissible let-through current of the fuses (peak value)	kA	23	32		40		60	
Rated short-circuit making capacity with isolating blades[2]	Size	00	1		2		3	
• At 500 V AC (peak value)	kA	6	17		17		17	
Rated making and breaking capacity[2] (infeed from top or bottom)[3]	Size	00	1	0	2	1	3	2
Breaking current I_c								
• At p.f. = 0.35, rms value at 500 V	A	1300	2500	1600	4000	2500	5040	4000
• At p.f. = 0.35, rms value at 690 V	A	800	1280	1000	2520	1600	3200	2520
• At p.f. = 0.35 and 400 V AC, with fuse links, rms value	A	1600	2500	1600	4000	2500	5040	4000
Rated operational current I_e								
• At AC-21B, AC-22B, AC-23B at 400 V AC, with fuse links	A	160	250	160	400	250	630	400
• At AC-21B, AC-22B, AC-23B at 500 V AC, with fuse links	A	160	250	160	400	250	630	400
• At AC-21B, AC-22B at 690 V AC	A	160	250	160	400	250	630	400
• At AC-23B at 690 V AC	A	100	160	125	315	200	400	315
At 220 (440) V DC, with 2 (3) conducting paths series-connected and fuse links:								
• Breaking current I_c (L/R = 15 ms)	A	640	1000	640	1600	1600	2520	1600
• Rated operational current I_e for DC-23B	A	160	250	160	400	250	630	400
Capacitor switching capacity								
• Capacitor rating at 400 V AC	kvar	80	90		150		250	
• Rated current I_n at 525 V AC	A	116	130		216		361	
• Capacitor rating	kvar	100	125		200		300	
• Rated current I_n	A	110	137		220		330	
Permissible ambient temperature[4]	°C	-25 ... +55 for operation[5], -50 ... +80 during storage						
Mechanical endurance, operating cycles		1600						
Degree of protection								
• Without molded-plastic masking frame		IP00, for 3NP52 with terminal clamp connection, degree of protection IP10						
• With molded-plastic masking frame with closed fuse carrier on the operator side		IP30						
• With molded-plastic masking frame with open fuse carrier		IP10						
Power loss of the switch at I_{th} (without power loss of the fuse links)								
• Without busbar adapter	W	7.8 (16.3)[5]	7.5		15		39	
Maximum power loss of the usable fuses (per fuse)[6]	W	12	23		37		50	
Main conductor connections								
Flat terminal for connection of								
• Crimped cable lugs acc. to DIN 46234 (conductor cross-section, stranded)	mm^2	2.5 ... 120	6 ... 150		6 ... 240		6 ... 2 × 240	
• Pressed cable lugs acc. to DIN 46235 (conductor cross-section, stranded)	mm^2	16 ... 70	16 ... 150		16 ... 240		16 ... 2 × 240	
• Busbars (usable busbar width)	mm	16 ... 22	22 ... 30		22 ... 30		22 ... 30	
Clamp terminals	mm^2	2.5 ... 50[7]	35 ... 120		--		--	
Auxiliary switch 1 NO + 1 NC (accessories)		The same voltage potential must be applied to the NO and NC contacts						
• At 50 Hz/60 Hz to 400 V AC, rated operational current I_e at AC-12/AC-15 A	A	16/6						
• Flat plug-in terminals (DIN 46244)		A 6.3 ... 0.8						
Permissible mounting positions		Vertical or horizontal installation (switching capacity may be reduced with horizontal installation)						
Signaling contact for solid-state fuse monitoring		1 NO + 1 NC						
• Rated operational current I_e at 250 V, DC-13	A	0.27						
• Rated operational current I_e at 240 V, AC-15	A	1.5						
• Thermal free-air rated current I_{th}	A	5						

1) When observing degree of pollution 2 (instead of 3) operation is also possible up to U_i = 1000 V.

2) Rated making and breaking current according to IEC 60947-3:
Rated making current
I = 10 × I_e (AC-23); 3 × I_e (AC-22); 1.5 × I_e (AC-21);
Rated breaking current
I_e = 8 × I_e (AC-23); 3 × I_e (AC-22); 1.5 × I_e (AC-21).

3) When electronic fuse monitors are used, infeed must be from the top.

4) When using isolating blades. If using fuse links, please observe specifications of fuse manufacturer.

5) With busbar adapter.

6) Values are valid when using LV HRC fuse systems with characteristic gG. If using fuses for semiconductor protection, please refer to the assignment table, see page 7/185.

7) When connecting one conductor.
For 2 conductors max. 1 x 50 mm^2 and 1 x 35 mm^2.

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Selection and ordering data

	Rated uninterrupted current I_u	Connection type	Size	Auxiliary switches at the switch disconnectors Version	DT	**Degree of protection IP00, without fuse links, without isolating blades, with terminal screws** Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A										kg
Completely compartmentalized, with high speed closing feature											
3NP5060-0CA00	160	Flat terminals[1]	00	Without[2]	►	**3NP5060-0CA00**		1	1 unit	1CL	1.610
				1 NO + 1 NC		**3NP5060-0CA10**		1	1 unit	1CL	1.639
		Clamp terminals	00	Without[2]		**3NP5060-0CB00**		1	1 unit	1CL	1.733
				1 NO + 1 NC		**3NP5060-0CB10**		1	1 unit	1CL	1.761
3NP5260-0CA00	250	Flat terminals	1	Without	►	**3NP5260-0CA00**		1	1 unit	1CL	5.360
				1 NO + 1 NC		**3NP5260-0CA10**		1	1 unit	1CL	5.412
		Clamp terminals	1	Without		**3NP5260-0CB00**		1	1 unit	1CL	5.649
				1 NO + 1 NC		**3NP5260-0CB10**		1	1 unit	1CL	5.601
3NP5360-0CA00	400	Flat terminals	2	Without	►	**3NP5360-0CA00**		1	1 unit	1CL	6.510
				1 NO + 1 NC		**3NP5360-0CA10**		1	1 unit	1CL	6.475
3NP5460-0CA00	630	Flat terminals	3	Without	►	**3NP5460-0CA00**		1	1 unit	1CL	7.890
				1 NO + 1 NC		**3NP5460-0CA10**		1	1 unit	1CL	7.036

1) For 3NP5060 with flat terminals, appropriate 3NY1106 cable lug covers must be used to provide a finger-safe cover, according to DIN VDE 0106 Part 100, see page 7/183, Accessories

2) If the auxiliary switch is retrofitted, additional drill holes are required on the switch.

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For 40 mm busbar system

Selection and ordering data

Rated uninterrupted current I_u	Connection type	Size	Auxiliary switches at the switch disconnectors Version	DT	**Degree of protection IP00, without fuse links, without isolating blades, with terminal screws** Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
A										kg
Completely compartmentalized, with high speed closing feature[1]										
Busbars with a width of 12 mm and a thickness of 5 mm or 10 mm										
160	Flat terminals	00	Without		**3NP5065-1CF00**		1	1 unit	1CL	2.306
			1 NO + 1 NC		**3NP5065-1CF10**		1	1 unit	1CL	2.290
	Clamp terminals	00	Without		**3NP5065-1CG00**		1	1 unit	1CL	2.351
			1 NO + 1 NC		**3NP5065-1CG10**		1	1 unit	1CL	2.396

[1] For accessories and more devices on busbar systems, see page 7/183, Accessories

* You can order this quantity or a multiple thereof.

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Overview

Note:

For disconnector versions "for installation in any distribution board" and busbar adapters, see page 7/184.

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With fuse monitoring

Selection and ordering data

Fuse monitoring by circuit breakers

Floor mounting

Rated uninterrupted current I_u	Connection type	Size	Auxiliary switches		DT	**Degree of protection IP00, without fuse links, without isolating blades, with terminal screws**		PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
			At switch disconnectors	At circuit breakers		Article No. www.siemens.com/product?Article No.	Price per PU				
A			Version	Version							kg
Completely compartmentalized, with high speed closing feature with fuse monitoring by SIRIUS circuit breakers											
With plug-in connection of the auxiliary switch connecting cable (length approx. 1 m) to the circuit breakers											
160	Flat terminals[1]	00	1 NO + 1 NC	1 NO + 1 NC	►	**3NP5060-0EA86**		1	1 unit	1CL	2.435
			1 NO + 1 NC	2 NO		**3NP5060-0EA26**		1	1 unit	1CL	2.459
	Clamp terminals	00	1 NO + 1 NC	1 NO + 1 NC		**3NP5060-0EB86**		1	1 unit	1CL	2.570
			1 NO + 1 NC	2 NO		**3NP5060-0EB26**		1	1 unit	1CL	2.562
250	Flat terminals	1	1 NO + 1 NC	1 NO + 1 NC	►	**3NP5260-0EA86**		1	1 unit	1CL	5.962
			1 NO + 1 NC	2 NO		**3NP5260-0EA26**		1	1 unit	1CL	5.981
	Clamp terminals	1	1 NO + 1 NC	1 NO + 1 NC		**3NP5260-0EB86**		1	1 unit	1CL	6.202
			1 NO + 1 NC	2 NO		**3NP5260-0EB26**		1	1 unit	1CL	6.169
400	Flat terminals	2	1 NO + 1 NC	1 NO + 1 NC	►	**3NP5360-0EA86**		1	1 unit	1CL	7.052
			1 NO + 1 NC	2 NO		**3NP5360-0EA26**		1	1 unit	1CL	7.042
630	Flat terminals	3	1 NO + 1 NC	1 NO + 1 NC	►	**3NP5460-0EA86**		1	1 unit	1CL	8.437
			1 NO + 1 NC	2 NO		**3NP5460-0EA26**		1	1 unit	1CL	8.443

3NP5260-0EA86

3NP5360-0EA86

3NP5460-0EA86

[1] For 3NP5060 with flat terminals, appropriate 3NY1106 cable lug covers must be used to provide a finger-safe cover, according to DIN VDE 0106 Part 100, see page 7/183, Accessories.

For 40 mm busbar system

Rated uninterrupted current I_u	Connection type	Size	Auxiliary switches		DT	**Degree of protection IP00, without fuse links, without isolating blades, with terminal screws**		PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
			At switch disconnectors	At circuit breakers		Article No. www.siemens.com/product?Article No.	Price per PU				
A			Version	Version							kg
Completely compartmentalized, with high speed closing feature with fuse monitoring by SIRIUS circuit breakers[1]											
Busbars with a width of 12 mm and thickness of 5 mm or 10 mm											
160	Flat terminals	00	1 NO + 1 NC	1 NO + 1 NC		**3NP5065-1EF86**		1	1 unit	1CL	2.869
			1 NO + 1 NC	2 NO		**3NP5065-1EF26**		1	1 unit	1CL	2.807
	Clamp terminals	00	1 NO + 1 NC	1 NO + 1 NC		**3NP5065-1EG86**		1	1 unit	1CL	2.876
			1 NO + 1 NC	2 NO		**3NP5065-1EG26**		1	1 unit	1CL	2.974

[1] For accessories and more devices on busbar systems, see chapter "Busbar Systems"

For 60 mm busbar system

Note:

For disconnector versions "for installation in any distribution board" and busbar adapters, see chapter "Busbar Systems".

* You can order this quantity or a multiple thereof.

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Fuse monitoring by electronic fuse monitoring device

Floor mounting

	Rated uninterrupted current I_u	Connection type	Size	Auxiliary switches At switch disconnectors	At fuse monitoring devices	DT	**Degree of protection IP00, without fuse links, without isolating blades, with terminal screws** Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A			Version	Version							kg
Completely compartmentalized, with high-speed closing feature with electronic fuse monitoring EF (self-powered), open-circuit principle												
	For rated operational voltages U_e from 400 V to 500 V AC, infeed must come from above! With plug-in connection for connecting cables from auxiliary switches (approx. 1 m long) to the fuse monitoring device, status indicator: Green LED illuminated, - Fault indication: Green LED flashing, - Fuse failure: Red LED (display per phase)											
3NP5060-0HA13	160	Flat terminals[1)]	00	1 NO + 1 NC	2 NO + 1 NC		**3NP5060-0HA13**		1	1 unit	1CL	2.334
		Clamp terminals	00	1 NO + 1 NC	2 NO + 1 NC		**3NP5060-0HB13**		1	1 unit	1CL	2.366
3NP5260-0HA13	250	Flat terminals	1	1 NO + 1 NC	2 NO + 1 NC		**3NP5260-0HA13**		1	1 unit	1CL	5.930
3NP5360-0HA13	400	Flat terminals	2	1 NO + 1 NC	2 NO + 1 NC		**3NP5360-0HA13**		1	1 unit	1CL	6.937
3NP5460-0HA13	630	Flat terminals	3	1 NO + 1 NC	2 NO + 1 NC		**3NP5460-0HA13**		1	1 unit	1CL	8.313

[1)] For 3NP5060 with flat terminals, appropriate 3NY1106 cable lug covers must be used to provide a finger-safe cover, according to DIN VDE 0106 Part 100, see page 7/183, Accessories.

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With fuse monitoring

For 40 mm busbar system

	Rated uninterrupted current I_u	Connection type	Size	Auxiliary switches		DT	**Degree of protection IP00, without fuse links, without isolating blades, with terminal screws**		PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
				At switch disconnectors	At fuse monitoring devices							
	A			Version	Version		Article No. www.siemens.com/product?Article No.	Price per PU				kg
Completely compartmentalized, with high-speed closing feature with electronic fuse monitoring EF (self-powered), open-circuit principle												
	For rated operational voltages U_e from 400 V to 500 V AC, infeed must come from above!											
	Busbars with a width of 12 mm and thickness of 5 mm or 10 mm											
3NP5065-1HF13	160	Flat terminals	00	1 NO + 1 NC	2 NO + 1 NC		**3NP5065-1HF13**		1	1 unit	1CL	2.697

For 60 mm busbar system

Note:

For disconnector versions "for installation in any distribution board" and busbar adapters, see page 7/184.

* You can order this quantity or a multiple thereof.

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Selection and ordering data

Version		For fuse switch disconnectors	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Fuse carriers									
3NY1074		3NP506.-.C..0		**3NY1074**		1	1 unit	1CL	0.575
		3NP5260-.C..0		**3NY1371**		1	1 unit	1CL	1.753
		3NP5360-.C..0		**3NY1372**		1	1 unit	1CL	1.912
		3NP5460-.C..0		**3NY1373**		1	1 unit	1CL	2.091
With fuse monitoring by 3RV1 MSPs		3NP506.-.E..6		**3NY1420**		1	1 unit	1CL	1.289
		3NP5260-.E..6		**3NY1421**		1	1 unit	1CL	2.217
(with auxiliary switch 1 NO + 1 NC), with plug-in connection, without connector and connecting cable		3NP5360-.E..6		**3NY1422**		1	1 unit	1CL	2.272
		3NP5460-.E..6		**3NY1423**		1	1 unit	1CL	2.511
Connector and connecting cable									
1 m long		3NP5 with 3RV1		**3NY1910**		1	1 unit	1CL	0.102
3 m long				**3NY1911**		1	1 unit	1CL	0.270
With electronic fuse monitoring for 400 V ... 500 V		3NP506.-.H.13		**3NY1513-0**		1	1 unit	1CL	1.026
		3NP5260-.H.13		**3NY1513-2**		1	1 unit	1CL	2.130
(with auxiliary switch 1 NO + 1 NC), with plug-in connection, without connector and connecting cable		3NP5360-.H.13		**3NY1513-3**		1	1 unit	1CL	2.180
3NY1513-3		3NP5460-.H.13		**3NY1513-4**		1	1 unit	1CL	0.325
Connector and connecting cable (6-pole) 3 m long		3NP5 with EFM		**3NY1915**		1	1 unit	1CL	0.322
3NY1915									
Auxiliary switch 1 NO + 1 NC									
With actuating cams, screws and washers (mounting kit)		3NP50[1)]		**3NY3033**		1	1 unit	1CL	0.018
3NY3033									
With fixing bracket and screws (mounting kit)		3NP52... 3NP54		**3NY3034**		1	1 unit	1CL	0.019
3NY3034									
Arc chutes									
(3 units each are required for 3NP52, 3NP53 and 3NP54)		3NP50		**3NY4031**		1	1 unit	1CL	0.221
		3NP52		**3NY4011**		1	1 unit	1CL	0.185
		3NP53, 3NP54		**3NY4012**		1	1 unit	1CL	0.242
3NY4031									
3NY4011									
Molded-plastic masking frames									
As replacement for masking frames from assembly kits for flush mounting (without fixing brackets and small components)	300 × 220 mm	3NY1210		**3NY1102**		1	1 unit	1CL	0.084
	300 × 245 mm	3NY1211		**3NY1103**		1	1 unit	1CL	0.078
	300 × 290 mm	3NY1212		**3NY1104**		1	1 unit	1CL	0.084

1) If retrofitted, drill holes are required.

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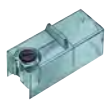
Accessories

Assembly kits for distribution systems

	Version	For fuse switch disconnectors	Dimensions	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
			mm							kg
For installation in any distribution board										
	Molded-plastic masking frames		Height × Width							
	For installation in cabinet	3NP50 with and without auxiliary switch	215 × 135		3NY1105		1	1/400 units	1CL	0.044
		With auxiliary switch	215 × 135		3NY1115		1	1/400 units	1CL	0.038
	For installation in metal front panels	With and without auxiliary switch	220 × 160		3NY1125		1	1 unit	1CL	0.060
3NY1107	For covering connection terminals	3NP50 with and without auxiliary switch	265 × 135		3NY1107		1	1 unit	1CL	0.071
3NY1106	For covering cable lug connections	3NP50 with and without auxiliary switch	290 × 135		3NY1106		1	1/225 units	1CL	0.071
	For separate covering of top and bottom cable lug connections	With auxiliary switch	290 × 135		3NY1116		1	1/225 units	1CL	0.070
		3NP50 with and without auxiliary switch	290 × 135		3NY1108		1	1/200 units	1CL	0.046
3NY1212	**Assembly kits for flush mounting**									
	With molded-plastic masking frame, fixing brackets and small components; for disconnectors with and without auxiliary switches	3NP5060	250 × 149		3NY1208		1	1 unit	1CL	0.514
		3NP5260	300 × 220		3NY1210		1	1 unit	1CL	0.291
		3NP5360	300 × 245		3NY1211		1	1 unit	1CL	0.298
		3NP5460	300 × 290		3NY1212		1	1 unit	1CL	0.320
 3TX6546-3B	**Covers for cable lug connections**		Cover length							
	(1 set = 6 units) can be screwed onto free screw end to protect against accidental touch	3NP52	99		3NY1241		1	1 unit	1CL	0.208
		3NP53/3NP54	95		3TX6546-3B		1	1 unit	41B	0.278
			120		3NY1245		1	1 unit	1CL	0.337
3NY1907	**Clamp terminals** (1 set = 3 units)		Conductor cross-section							
		3NP50	2.5 ... 50 mm² [1]		3NY1903		1	1 unit	1CL	0.110
		3NP52	35 ... 120 mm²		3NY1907		1	1 unit	1CL	0.223
8US1210-4AG00	**Busbar adapters**		Busbar width							
	For 60 mm busbar system	3NP50	108		8US1291-4SB00		1	1 unit	1CU	0.529
		3NP52, 3NP53, 3NP54 [2]	250 (length 320 mm, M10 terminal screws, connecting cables must be manufactured)		8US1210-4AG00		1	1 unit	1CU	2.868

[1] Also available in 2-wire version: 1 × 2.5 mm² ... 50 mm² and 1 × 2.5 ... 35 mm².

[2] Disconnector is wider than adapter. The adapter can, however, be expanded to 276 mm with two 8US1998-2BM00 side modules

* You can order this quantity or a multiple thereof.

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Overview

3NP5 fuse switch disconnectors are suitable for all fuses in LV HRC design; see chapter "Fuse Systems".

SITOR semiconductor fuses in LV HRC design can also be used, although it must be noted that, compared to cable and line protection fuses, these get much hotter during operation. For this reason, the fuse must be operated below the rated current I_n of the device (derating) when installed in a closed switching device.

The following table shows the permissible load currents of the SITOR semiconductor fuses for installation in 3NP5. The values were determined using the conductor cross-sections specified in the table.

Note

If using smaller cross-sections, a considerably higher derating is required due to the lower heat dissipation.

SITOR semiconductor fuses for 3NP5 fuse switch disconnectors: Assignment table

SITOR semiconductor fuse data						**Permissible load currents of fuse when installed in 3NP5 for floor mounting**					
						Type 3NP5			**Alternative type 3NP5**		
Type [1)2)]	Rated current I_n	Rated voltage [3)]	Operational class	Size	Required conductor cross-section Cu	Type	Size	Permissible load current [4)]	Type	Size	Permissible load current [4)]
	A	V AC			mm²			A			A
3NC2423..	150	500	gR	3	70	3NP54	3	145	--	--	--
3NC2425..	200	500	gR	3	95	3NP54	3	180	--	--	--
3NC2427..	250	500	gR	3	120	3NP54	3	225	--	--	--
3NC2428..	300	500	gR	3	185	3NP54	3	255	--	--	--
3NC2431..	350	500	gR	3	240	3NP54	3	330	--	--	--
3NC2432..	400	500	aR	3	240	3NP54	3	400	--	--	--
3NC3336-1	630	1000	aR	3	2x (40x5)	3NP54	3	530	--	--	--
3NC3337-1	710	1000	aR	3	2x (50x5)	3NP54	3	570	--	--	--
3NC3338-1	800	1000	aR	3	2x (40x8)	3NP54	3	630	--	--	--
3NC3340-1	900	1000	aR	3	2x (40x8)	3NP54	3	700[5)]	--	--	--
3NC3341-1	1000	1000	aR	3	2x (50x8)	3NP54	3	770[5)]	--	--	--
3NC3342-1	1100	800	aR	3	2x (50x8)	3NP54	3	800[5)]	--	--	--
3NC3343-1	1250	800	aR	3	2x (50x8)	3NP54	3	850[5)]	--	--	--
3NC3430-1	315	1250	aR	3	2x95	3NP54	3	295	--	--	--
3NC3432-1	400	1250	aR	3	2x120	3NP54	3	355	--	--	--
3NC3434-1	500	1250	aR	3	2x150	3NP54	3	440	--	--	--
3NC3436-1	630	1250	aR	3	2x (40x5)	3NP54	3	520	--	--	--
3NC3438-1	800	1100	aR	3	2x (40x8)	3NP54	3	625	--	--	--
3NC8423..	150	660	gR	3	70	3NP54	3	135	--	--	--
3NC8425..	200	660	gR	3	95	3NP54	3	180	--	--	--
3NC8427..	250	660	gR	3	120	3NP54	3	225	--	--	--
3NC8431..	350	660	gR	3	240	3NP54	3	300	--	--	--
3NC8434..	500	660	gR	3	2x 150	3NP54	3	425	--	--	--
3NC8444-3C	1000	600	aR	3	2x (60x6)	3NP54	3	800[5)]	--	--	--
3NE1020-2	80	690	gR	00	25	3NP50	00	80	--	--	--
3NE1021-0	100	690	gS	00	35	3NP50	00	100	--	--	--
3NE1021-2	100	690	gR	00	35	3NP50	00	100	--	--	--
3NE1022-0	125	690	gS	00	50	3NP50	00	125	--	--	--
3NE1022-2	125	690	gR	00	50	3NP50	00	125	--	--	--
3NE1224-0	160	690	gS	1	70	3NP52	1	160	3NP53	2	160
3NE1224-2/-3	160	690	gR	1	70	3NP52	1	160	3NP53	2	160
3NE1225-0	200	690	gS	1	95	3NP52	1	200	3NP53	2	200
3NE1225-2	200	690	gR	1	95	3NP52	1	200	3NP53	2	200
3NE1225-3	200	690	gR	1	95	3NP52	1	190	3NP53	2	200
3NE1227-0	250	690	gS	1	120	3NP52	1	250	3NP53	2	250
3NE1227-2	250	690	gR	1	120	3NP52	1	250	3NP53	2	250
3NE1227-3	250	690	gR	1	120	3NP52	1	235	3NP53	2	250
3NE1230-0	315	690	gS	1	2x 70	3NP53	2	315	--	--	--
3NE1230-2/-3	315	690	gR	1	2x 70	3NP53	2	315	--	--	--
3NE1331-0	350	690	gS	2	2x 95	3NP53	2	350	3NP54	3	350
3NE1331-2/-3	350	690	gR	2	2x 95	3NP53	2	350	3NP54	3	350

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Fuses

SITOR semiconductor fuse data						Permissible load currents of fuse when installed in 3NP5 for floor mounting					
						Type 3NP5			Alternative type 3NP5		
Type [1)2)]	Rated current I_n	Rated voltage [3)]	Operational class	Size	Required conductor cross-section Cu	Type	Size	Permissible load current [4)]	Type	Size	Permissible load current [4)]
	A	V AC			mm²			A			A
3NE1332-0	400	690	gS	2	2x 95	3NP53	2	400	3NP54	3	400
3NE1332-2/-3	400	690	gR	2	2x 95	3NP53	2	400	3NP54	3	400
3NE1333-0	450	690	gS	2	2x 120	3NP54	3	450	--	--	--
3NE1333-2/-3	450	690	gR	2	2x 120	3NP54	3	450	--	--	--
3NE1334-0	500	690	gS	2	2x 120	3NP54	3	500	--	--	--
3NE1334-2/-3	500	690	gR	2	2x 120	3NP54	3	500	--	--	--
3NE1435-0	560	690	gS	3	2x 150	3NP54	3	560	--	--	--
3NE1435-2/-3	560	690	gR	3	2x 150	3NP54	3	560	--	--	--
3NE1436-0	630	690	gS	3	2x 185	3NP54	3	630	--	--	--
3NE1436-2/-3	630	690	gR	3	2x 185	3NP54	3	625	--	--	--
3NE1437-0	710	690	gS	3	2x (40x5)	3NP54	3	710[5)]	--	--	--
3NE1437-1	710	600	gR	3	2x (40x5)	3NP54	3	690[5)]	--	--	--
3NE1437-2/-3	710	690	gR	3	2x (40x5)	3NP54	3	685[5)]	--	--	--
3NE1438-0	800	690	gS	3	2x (50x5)	3NP54	3	800[5)]	--	--	--
3NE1438-1	800	600	gR	3	2x (50x5)	3NP54	3	750[5)]	--	--	--
3NE1438-2/-3	800	690	gR	3	2x (50x5)	3NP54	3	770[5)]	--	--	--
3NE1447-2/-3	670	690	gR	3	2x (40x5)	3NP54	3	655[5)]	--	--	--
3NE1448-2/-3	850	690	gR	3	2x (40x8)	3NP54	3	820[5)]	--	--	--
3NE1802-0	40	690	gS	000	10	3NP50	00	40	--	--	--
3NE1803-0	35	690	gS	000	6	3NP50	00	35	--	--	--
3NE1813-0	16	690	gS	000	1.5	3NP50	00	16	--	--	--
3NE1814-0	20	690	gS	000	2.5	3NP50	00	20	--	--	--
3NE1815-0	25	690	gS	000	4	3NP50	00	25	--	--	--
3NE1817-0	50	690	gS	000	10	3NP50	00	50	--	--	--
3NE1818-0	63	690	gS	000	16	3NP50	00	63	--	--	--
3NE1820-0	80	690	gS	000	25	3NP50	00	80	--	--	--
3NE3221	100	1000	aR	1	35	3NP52	1	95	3NP53	2	100
3NE3222	125	1000	aR	1	50	3NP52	1	110	3NP53	2	120
3NE3224	160	1000	aR	1	70	3NP52	1	140	3NP53	2	150
3NE3225	200	1000	aR	1	95	3NP52	1	175	3NP53	2	190
3NE3227	250	1000	aR	1	120	3NP52	1	210	3NP53	2	230
3NE3230-0B	315	1000	aR	1	185	3NP53	2	285	--	--	--
3NE3231	350	1000	aR	1	240	3NP53	2	310	--	--	--
3NE3232-0B	400	1000	aR	1	240	3NP53	2	330	--	--	--
3NE3233	450	1000	aR	1	2x 150	3NP53	2	360	--	--	--
3NE3332-0B	400	1000	aR	2	240	3NP54	3	360	--	--	--
3NE3333	450	1000	aR	2	2x 150	3NP54	3	400	--	--	--
3NE3334-0B	500	1000	aR	2	2x 150	3NP54	3	450	--	--	--
3NE3335	560	1000	aR	2	2x 185	3NP54	3	510	--	--	--
3NE3336	630	1000	aR	2	2x 185	3NP54	3	580	--	--	--
3NE3337-8	710	900	aR	2	2x (40x5)	3NP54	3	630	--	--	--
3NE3338-8	800	800	aR	2	2x 240	3NP54	3	630	--	--	--
3NE3340-8	900	690	aR	2	2x (40x8)	3NP54	3	630	--	--	--
3NE4101	32	1000	gR	0	6	3NP52	1	32	--	--	--
3NE4102	40	1000	gR	0	10	3NP52	1	40	--	--	--
3NE4117	50	1000	gR	0	10	3NP52	1	50	--	--	--
3NE4118	63	1000	aR	0	16	3NP52	1	63	--	--	--
3NE4120	80	1000	aR	0	25	3NP52	1	80	--	--	--
3NE4121	100	1000	aR	0	35	3NP52	1	95	--	--	--
3NE4122	125	1000	aR	0	50	3NP52	1	120	--	--	--
3NE4124	160	1000	aR	0	70	3NP52	1	150	--	--	--
3NE4327-0B	250	800	aR	2	150	3NP53	2	210	3NP54	3	220
3NE4330-0B	315	800	aR	2	240	3NP53	2	270	3NP54	3	285
3NE4333-0B	450	800	aR	2	2x (30x5)	3NP53	2	400	3NP54	3	420

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SITOR semiconductor fuse data						Permissible load currents of fuse when installed in 3NP5 for floor mounting					
						Type 3NP5			Alternative type 3NP5		
Type [1)2)]	Rated current I_n	Rated voltage [3)]	Operational class	Size	Required conductor cross-section Cu	Type	Size	Permissible load current [4)]	Type	Size	Permissible load current [4)]
	A	V AC			mm²			A			A
3NE4334-0B	500	800	aR	2	2x (30x5)	3NP54	3	450	--	--	--
3NE4337	710	800	aR	2	2x (50x5)	3NP54	3	600	--	--	--
3NE8015-1	25	690	gR	00	4	3NP50	00	25	--	--	--
3NE8003-1	35	690	gR	00	6	3NP50	00	33	--	--	--
3NE8017-1	50	690	gR	00	10	3NP50	00	45	--	--	--
3NE8018-1	63	690	gR	00	16	3NP50	00	54	--	--	--
3NE8020-1	80	690	aR	00	25	3NP50	00	68	--	--	--
3NE8021-1	100	690	aR	00	35	3NP50	00	89	--	--	--
3NE8022-1	125	690	aR	00	50	3NP50	00	106	--	--	--
3NE8024-1	160	690	aR	00	70	3NP50	00	130	--	--	--

1) Due to the mechanical stress on the relatively long fuse blades, SITOR 3NE41 semiconductor fuses should only be switched occasionally and only at zero current.

2) For permissible load currents for 3NE8…-0MK, see Configuration Manual "Fuse Systems", or on request

3) 3NP1 fuse switch disconnectors may be operated at up to 1000 V AC/DC with the following restrictions:
- Degree of pollution 2 (instead of 3)
- AC20 or DC20 – i.e. switching only without load.

4) In the case of cyclic loads, the currents may have to be further reduced (precise values on request).

5) The fuse can also be operated at a higher rated uninterrupted current than the 630 A current of the 3NP54. However, in this case, the 3NP54 must not be switched under load (utilization category AC-20).

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Introduction

Overview

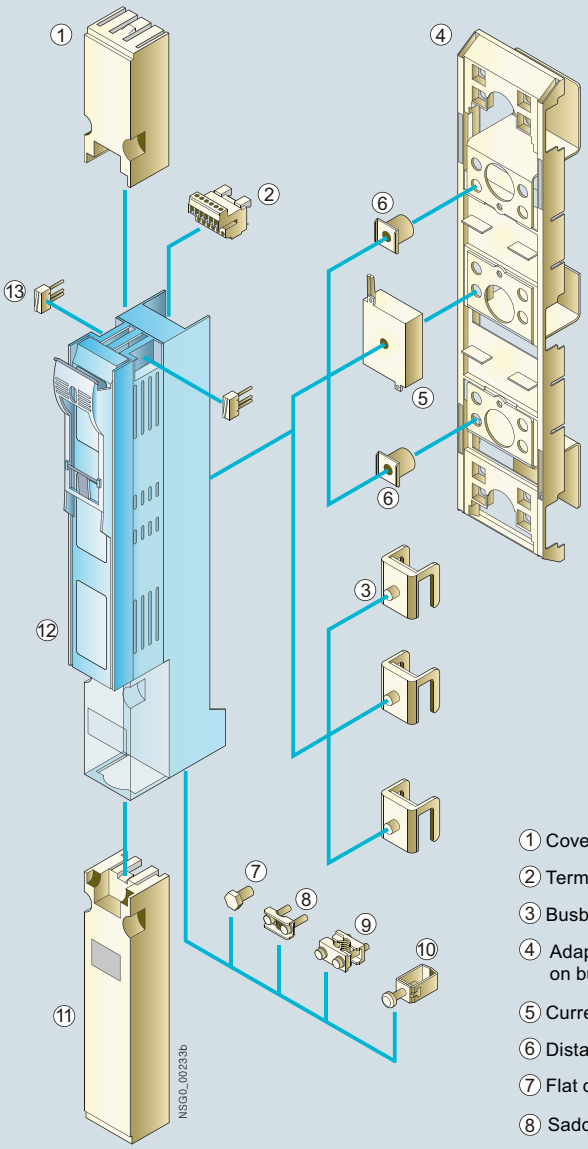
3NJ4/3NJ5 fuse switch disconnectors

All key product features at a glance

- Compliant with IEC/EN 60439-1, IEC/EN 60947-3
- Voltage levels up to 690 V AC
- Rated operational current from 160 A to 2000 A
- Fuse links according to IEC 60269 Part 1 can be used – nickel-plated fuse blades are not permissible due to the high transfer resistance
- In open position safe from touch by the back of the hand (exception 3NJ56: IP00)
- Parking position for maintenance
- 1-pole or 3-pole switchable
- Vertical and horizontal mounting position
- Climate-proof
- Degree of protection IP30 with closed fuse carriers, IP10 with open fuse carriers (exception 3NJ56: IP00)

7

Overview of all components and accessory parts: 3NJ4/3NJ5 in size 00



① Cover
② Terminal strip
③ Busbar terminal
④ Adapter for screw fixing on busbar systems
⑤ Current transformer
⑥ Distance compensation
⑦ Flat connector
⑧ Saddle terminal
⑨ Prism terminal
⑩ Box terminal
⑪ Cover
⑫ 3NJ4/5 fuse switch disconnector Basic device size 00
⑬ Auxiliary switch mounting kit

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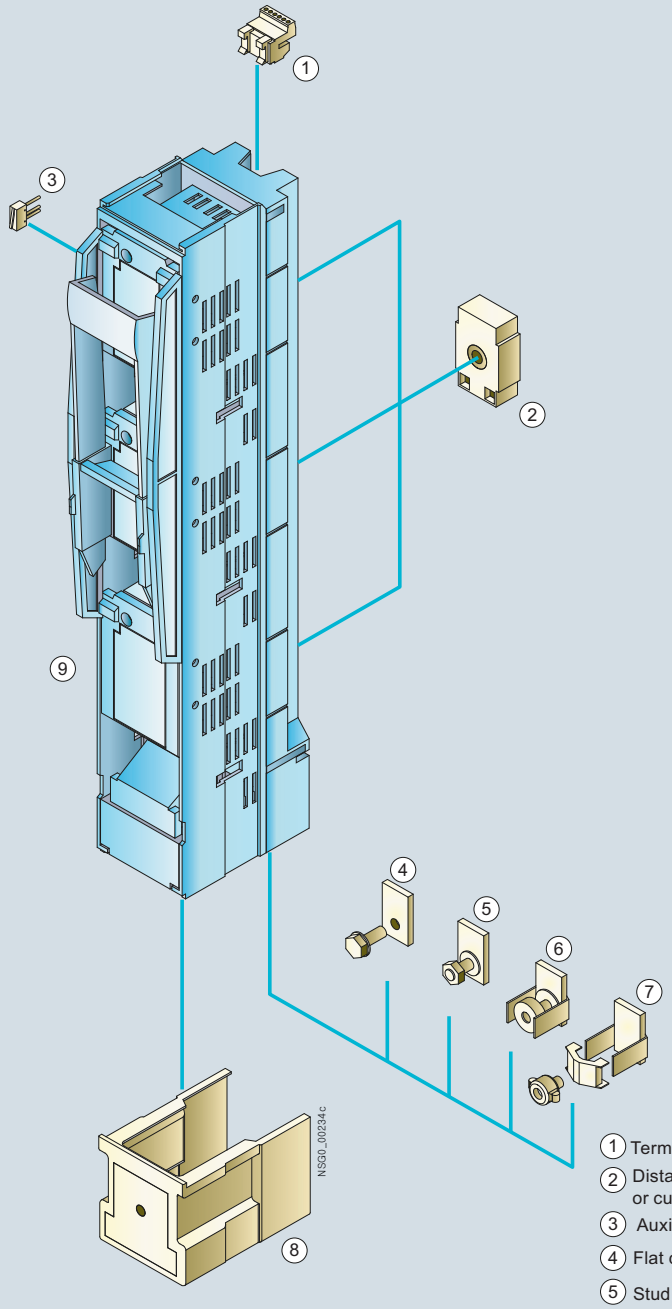
Overview of all components and accessory parts: 3NJ4/3NJ5 in sizes 1 to 3



1 Terminal strip
2 Distance compensation or current transformer
3 Auxiliary switch
4 Flat connector
5 Stud terminal
6 V terminal
7 Box terminal
8 Cover
9 3NJ4/5 fuse switch disconnector Basic device sizes 1/2/3

Benefits

Parking position

For maintenance, e.g. the fuse carriers of the 1-pole switchable in-line fuse switch disconnectors of sizes 1 to 3 and the 3-pole switchable in-line fuse switch disconnectors of size 00 can be mounted after being turned by 180° (fuse facing outwards).

This results in the following advantages:
- Visible disconnection point
- Depot for fuse links (parking position)
- No opportunity for mistakes when replacing the fuse links
- Additional touch protection in the vicinity of the lyre-shaped contacts

Application

3NJ41 and 3NJ56 1-pole and 3-pole in-line fuse switch disconnectors can be installed in low-voltage distribution boards, substations and cable distribution cubicles.

Note:

For 1-pole switchable fuse switch disconnectors the following applies acc. to EC/EN 60947-3: *These devices are intended for power distribution systems that may require the switching and/or disconnection of individual outer conductors. They should not be used for switching the primary circuits of 3-phase equipment.*

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Technical specifications

Standards			IEC 60947-1, IEC 60947-3, VDE 0660 Part 107								
Type			**3NJ410**	**3NJ412**	**3NJ413**	**3NJ414**	**3NJ56**	**3NJ415**	**3NJ418**	**3NJ416**	**3NJ417**
Conventional thermal current											
Free-air with gG fuses, I_{th}		A	160	250	400	630	1250	630	800	1260	1600
Free-air with isolating blade, I_{th}		A	--	--	--	800	--	1000	1250	1600	2000
Free-air with gTr fuses, I_{th}		A	--	--	--	--	1154	722	910	1154	1444
Rated apparent power of the transformer, S_n		kVA	--	--	--	--	800	500	630	800	1000
For fuse links and isolating blades		Size	00	1	2	3	4a	3	3	2 x 3	2 x 3
gG according to IEC 60269, I_n		A	160	250	400	630	1250	630	800	2 x 630	2 x 800
Free-air with isolating link, I_n		A	--	--	--	--	--	1000	1250	2 x 800	2 x 1000
gTr according to VDE 0636-2011, I_{rat}		A	--	--	--	--	1154	722	909	2 x 577	2 x 722
gTr according to VDE 0636-2011, S_n		kVA	--	--	--	--	800	500	630	2 x 400	2 x 500
Rated operational voltage U_e At 40 Hz ... 60 Hz AC		V	690	690	690	690	690	690	400	690	400
Rated insulation voltage U_i		V	800	1000	1000	1000	1000	1000	690	1000	690
Rated impulse withstand voltage U_{imp}		kV	8	12	12	12	12	12	8	12	8
Rated conditional short-circuit current with fuses, at 500 V AC											
With gG fuse (rms value)		kA	80/120	120	120	120	80	120	50	80	50
With gTr fuse (rms value)		kA	--	--	--	--	--	--	50	--	--
Max. permissible power loss per fuse link		W	12	32	45	48	110	51	61	48	51
Rated short-time withstand current I_{CW} rms value		kA	--	14.5	14.5	14.5	35	14.5	14.5	25	25
Rated making and breaking capacity											
Rated operational current I_e for gG fuses											
At AC-21B	400 V AC	A	160	250	400	630	1250	630	800	2 x 630	2 x 800
AC-22B	400 V AC	A	160	250	400	630	1250	630	800	2 x 630	2 x 800
AC-23B	400 V AC	A	--	250	400	--	--	--	--	--	--
AC-21B	500 V AC	A	160	250	400	630	1250	--	--	--	--
AC-22B	500 V AC	A	160	250	400	630	1250	--	--	--	--
AC-23B	500 V AC	A	--	--	--	--	--	--	--	--	--
AC-21B	690 V AC	A	100	250	400	630	1250	--	--	--	--
AC-22B	690 V AC	A	100	250	--	--	--	--	--	--	--
AC-23B	690 V AC	A	--	--	--	--	--	--	--	--	--
Rated operational current I_e for gTr fuses											
At AC-22B	400 V AC	A	--	--	--	--	--	722	910	2 x 577	2 x 722
Rated operational current I_e for isolating blades											
At AC-22B	400 V AC	A	--	--	--	--	--	1000	1250	2 x 800	2 x 1000
Capacitive switching capacity		kvar	--	105 ... 115	155 ... 185	250 ...300	--	--	--	--	--
Permissible ambient temperature		°C	-25 ... +55, > 35 °C with derating factors								
Mechanical endurance, operating cycles			1400	1400	800	800	500	800	500	500	500
Electrical endurance, operating cycles			200	200	200	200	100	100	100	100	100
Degree of protection											
With closed fuse carrier, with terminal cover and peripheral cover			IP30	IP30	IP30	IP30	IP10	IP30	IP30	IP30	IP30
With open fuse carrier			IP10	IP10	IP10	IP10	IP00	IP10	IP10	IP10	IP10
Power loss of the main current paths at I_{th}		W	18	23	54	115	190	275	155	350	375
Main conductor connections											
Terminal screws			M8	M10	M12	M12	M16	2 × M12	2 × M12	3 × M12	4 × M12
Flat bars		mm	20	30	30	30	80	80 x 10	80 x 10	--	--
Cable lug, max. conductor cross-section (stranded)		mm^2	95	240	240	240	2 × 300	2 × 300	2 × 300	3 × 300 4 x 185	4 × 300 4 x 185
Tightening torque		Nm	12 ... 15	30 ... 35	35 ... 40	35 ... 40	50 ... 60	35 ... 40	35 ... 40	35 ... 40	35 ... 40
Clamp/V terminals		mm^2	1.5 ... 70	25 ... 300	25 ... 300	25 ... 300	--	--	--	--	--
Fixing screws			M8	M12	M12	M12	M16	M12	M12	M12	M12
Required tightening torque for mounting on busbars		Nm	16 ... 18	35 ... 40	35 ... 40	35 ... 40	50 ... 60	35 ... 40	35 ... 40	35 ... 40	35 ... 40

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Selection and ordering data

	Rated operating current I_e	For fuse links acc. to IEC 60269-1	Busbar center-to-center spacing	Connection type (terminal screws/ clamp-type terminals included in the scope of supply)[1], optionally top or bottom (rotatable!)	For conductor material	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	Size	mm									kg
In-line fuse switch disconnectors, 1-pole switchable												
	160	00 and 000	185[2]	M8 flat connector	Cu/Al[3]		**3NJ4101-3BF01**		1	1 unit	1DL	2.060
	250	1	185	M10 flat connector	Cu/Al[3]		**3NJ4121-3BF01**		1	1 unit	1DL	5.040
	400	2 and 1	185	M12 flat connector	Cu/Al[3]		**3NJ4131-3BF01**		1	1 unit	1DL	5.363
	630	3 and 2	185	M12 flat connector	Cu/Al[3]		**3NJ4141-3BF01**		1	1 unit	1DL	5.867
	1250	4a	185	M16 × 60 stud terminal	Cu/Al[3]		**3NJ5643-0BB00**		1	1 unit	1DL	21.260

3NJ4101-3BF01

3NJ4121-3BF01

In-line fuse switch disconnectors, 1-pole switchable, for integratable current transformers												
	250	1	185	M10 flat connector	Cu/Al[3]		**3NJ4121-3BF11**		1	1 unit	1DL	4.890
	400	2 and 1	185	M12 flat connector	Cu/Al[3]		**3NJ4131-3BF11**		1	1 unit	1DL	5.120
	630	3 and 2	185	M12 flat connector	Cu/Al[3]		**3NJ4141-3BF11**		1	1 unit	1DL	5.880

3NJ4121-3BF11

1) Fixing screws for mounting on busbars must be ordered separately.

2) A 3NJ5930-3BB adapter is needed to compensate the height for joint fitting with device sizes NH1 to 3.

3) Cu/Al when using suitable cable lugs or terminals.

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3-pole switchable

Selection and ordering data

Rated operating current I_e	For fuse links acc. to IEC 60269-1	Busbar center-to-center spacing	Connection type (terminal screws/ clamp-type terminals included in the scope of supply)[1] optionally top or bottom (rotatable!)	For conductor material	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
A	Size	mm									kg
In-line fuse switch disconnectors, 3-pole switchable											
160	00 and 000	100	M8 flat connector	Cu/Al[2]	►	3NJ4103-3BF02		1	1 unit	1DL	1.144
			F70 box terminal	Cu		3NJ4103-3BR02		1	1 unit	1DL	1.118
160	00 and 000	185[3]	M8 flat connector	Cu/Al[2]		3NJ4103-3BF01		1	1 unit	1DL	2.180
250	1	185	M10 flat connector	Cu/Al[2]	►	3NJ4123-3BF01		1	1 unit	1DL	5.080
			M12 stud terminal	Cu/Al[2]		3NJ4123-3BJ01		1	1 unit	1DL	5.512
			V terminal	Cu/Al[2]		3NJ4123-3BT01		1	1 unit	1DL	5.475
400	2 and 1	185	M12 flat connector	Cu/Al[2]	►	3NJ4133-3BF01		1	1 unit	1DL	5.250
			M12 stud terminal	Cu/Al[2]		3NJ4133-3BJ01		1	1 unit	1DL	5.406
			V terminal	Cu/Al[2]		3NJ4133-3BT01		1	1 unit	1DL	5.500
630	3 and 2	185	M12 flat connector	Cu/Al[2]	►	3NJ4143-3BF01		1	1 unit	1DL	5.880
			M12 stud terminal	Cu/Al[2]		3NJ4143-3BJ01		1	1 unit	1DL	6.063
			V terminal	Cu/Al[2]		3NJ4143-3BT01		1	1 unit	1DL	6.675

Left: 3NJ4103-3BF01
Right: 3NJ4123-3BF01

In-line fuse switch disconnectors, 3-pole switchable, with electronic fuse monitoring (EFM)											
160	00 and 000	100	M8 flat connector	Cu/Al[2]		3NJ4103-3CF02		1	1 unit	1DL	1.557
250	1	185	M10 flat connector	Cu/Al[2]		3NJ4123-3CF01		1	1 unit	1DL	6.280
400	2 and 1	185	M12 flat connector	Cu/Al[2]		3NJ4133-3CF01		1	1 unit	1DL	6.350
630	3 and 2	185	M12 flat connector	Cu/Al[2]		3NJ4143-3CF01		1	1 unit	1DL	7.050

3NJ41.3-3CF..

In-line fuse switch disconnectors, 3-pole switchable, for integratable current transformers											
160	00 and 000	100	M8 flat connector	Cu/Al[2]	►	3NJ4103-3BF12		1	1 unit	1DL	1.110
250	1	185	M10 flat connector	Cu/Al[2]	►	3NJ4123-3BF11		1	1 unit	1DL	5.192
400	2 and 1	185	M12 flat connector	Cu/Al[2]	►	3NJ4133-3BF11		1	1 unit	1DL	5.239
630	3 and 2	185	M12 flat connector	Cu/Al[2]	►	3NJ4143-3BF11		1	1 unit	1DL	6.090
In-line fuse switch disconnectors, 3-pole switchable, for integratable current transformers, with electronic fuse monitoring (EFM)											
160	00 and 000	100	M8 flat connector	Cu/Al[2]		3NJ4103-3CF12		1	1 unit	1DL	1.538
250	1	185	M10 flat connector	Cu/Al[2]		3NJ4123-3CF11		1	1 unit	1DL	6.320
400	2 and 1	185	M12 flat connector	Cu/Al[2]		3NJ4133-3CF11		1	1 unit	1DL	6.420
630	3 and 2	185	M12 flat connector	Cu/Al[2]		3NJ4143-3CF11		1	1 unit	1DL	7.090

Transformer apparent power	Rated apparent power of the gTr fuses	Busbar center-to-center spacing	Rated current of gTr fuses	Rated operational current I_e with 3NJ4914-8BA00 isolating blade		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
kVA	kVA	mm	A	A								kg
In-line fuse switch disconnectors, 3-pole switchable, for secondary-side fusing of transformers and incoming block												
500	500	185	722	1000	Cu/Al[2]		3NJ4153-3BF01		1	1 unit	1DL	9.000
630	630	185	909	1250	Cu/Al[2]		3NJ4183-3BF01		1	1 unit	1DL	12.943
800	2 x 400	185	2 x 577	1600	Cu/Al[2]		3NJ4163-3BF01		1	1 unit	1DL	15.500
1000	2 x 500	185	2 x 722	2000	Cu/Al[2]		3NJ4173-3BF01		1	1 unit	1DL	25.520

3NJ4163-3BF01

1) Fixing screws for mounting on busbars must be ordered separately.
2) Cu/Al when using suitable cable lugs or terminals.
3) A 3NJ5930-3BB adapter is needed to compensate the height for joint fitting with device sizes NH1 to 3.

* You can order this quantity or a multiple thereof.

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Selection and ordering data

	Version	For in-line fuse switch disconn. or dimensions	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Covers								
3NJ4912-1FA01	Size 00, additional touch protection when using cable lugs and as spacer • 100 mm for bottom	3NJ4101-3BF01, 3NJ4103-3BF01		**3NJ4912-1FA01**		1	1 unit	1DL	0.080
3NJ4912-1FA00	Size 00, additional touch protection when using cable lugs and as spacer • 132 mm for top	3NJ4101-3BF01, 3NJ4103-3BF01		**3NJ4912-1FA00**		1	1 unit	1DL	0.080
33NJ4912-1AA01	**Covers**[1] Size 1 to 3 Additional touch protection with use of cable lugs or connection from above	3NJ412 to 3NJ414, 3NJ415, 3NJ418	►	**3NJ4912-1AA01**		1	1 unit	1DL	0.160
3NJ4912-1EA00	**Covers** Size 3 For double in-line disconnectors	3NJ414		**3NJ4912-1EA00**		1	1 unit	1DL	0.502
3NJ4912-1DA02	**Covers** Size 00 (can also be used as spacer) top and bottom to cover long cable lugs and compensate for combination of 3NJ4103 with terminals 3NJ412 to 3NJ414 (1 set = 2 units: short and long[2])	3NJ4103-3BF02		**3NJ4912-1DA02**		1	1 unit	1DL	0.156
3NJ4912-2AA00	**Blanking covers** For panel cutout 633 mm long	50 mm wide		**3NJ4912-2AA00**		1	1 unit	1DL	0.189
3NJ4912-2BA00	For panel cutout 633 mm long	100 mm wide		**3NJ4912-2BA00**		1	1 unit	1DL	0.215
3NJ4912-2CA00	For panel cutout 299 mm long	50 mm wide		**3NJ4912-2CA00**		1	1 unit	1DL	0.089

[1] With cable lugs and connection from above, the terminal cover can be extended by connecting two units together.

[2] Can be shortened (in exchange for short cover, included in the scope of supply of the in-line disconnector).

*** You can order this quantity or a multiple thereof.**

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Accessories

	Version	For in-line fuse switch disconn. or dimensions DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
3NJ4912-2DA00	**Lateral masking frame supports** for NH00 ... NH3, 3 clips with T profile	Length 665 mm	3NJ4912-2DA00		1	2 units	1DL	0.041
3NJ4918-0AAA00	**Fixing clips** 2 units per side, for fixing the cover of the control panel front (1 set = 4 units, including fixing accessories)	3NJ41	3NJ4918-0AA00		1	1 unit	1DL	0.130
① ② ③	**Unequipped section covers for busbars** To be fitted directly in the drilled holes of the busbars							
	① Busbar center-to-center spacing 185 mm	50 mm wide	3NJ4912-3AA00		1	1 unit	1DL	0.127
	② Busbar center-to-center spacing 185 mm	100 mm wide	3NJ4912-3BA01		1	1 unit	1DL	0.666
	③ Busbar center-to-center spacing 100 mm	50 mm wide	3NJ4912-3CA00		1	1 unit	1DL	0.101
	Also for covering a blank space on 3NJ4918-0DA02 or 3NJ5930-3BB							
3NJ4918-0DA02	**Adapters for screw fixing on busbar systems**							
	• For fitting two 100 mm fuse switch disconnectors onto the busbar system with 185 mm center-to-center spacing, including adaptation to sizes 1 to 3	3NJ4103-3BF02, 3NJ4103-3BR02, 3NJ4103-3CF02, 3NJ4103-3BF12, 3NJ4103-3CF12	3NJ4918-0DA02		1	1 unit	1DL	0.759
	• For fitting two 185 mm fuse switch disconnectors onto the busbar system with 185 mm center-to-center spacing, including adaptation to sizes 1 to 3	3NJ4103-3BF01, 3NJ4101-3BF01	3NJ5930-3BB		1	1 unit	1DL	0.705
	• For fitting two 100 mm fuse switch disconnectors onto the busbar system with 185 mm center-to-center spacing and **busbar terminal,** including adaptation to sizes 1 to 3	3NJ4103-3BF02 3NJ4103-3BR02 3NJ4103-3CF02 3NJ4103-3BF12 3NJ4103-3CF12	3NJ4918-0DB02		1	1 unit	1DL	1.239
3NJ4918-0EA00	• For fitting one fuse switch disconnector (= 3 separate brackets) onto the busbar system with 60 mm center-to-center spacing	3NJ4103-3BF02, 3NJ4103-3BR02, 3NJ4103-3CF02, 3NJ4103-3BF12, 3NJ4103-3CF12	3NJ4918-0EA00		1	1 unit	1DL	0.246
	Fixing screws For fitting 3NJ4103 switch disconnectors with integratable current transformers onto adapters (1 set = 3 units)	3NJ4103	3NJ4918-0DC02		1	1 unit	1DL	0.064

* You can order this quantity or a multiple thereof.

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	Version	For in-line fuse switch disconn. or dimensions	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
3NJ5974-0AB	**Busbar supports** For 100 mm and 185 mm center-to-center spacing, for screwing on of busbars	3NJ41 and 3NJ5	►	**3NJ5974-0AB**		1	1 unit	1DL	0.464
3NJ4910-1AA00	**Grounding kit with connecting cable 25 mm²**	3NJ414 to 3NJ418		**3NJ4910-1AA00**		1	1 unit	1DL	2.376
3NJ4911-3AA00	**Busbar terminals** For each fuse switch disconnector, 3 units are required; Not for devices with transformer installation	3NJ4103 3NJ4101	►	**3NJ4911-3AA00**		1	1 unit	1DL	0.155
3NJ4911-3BA01	For rapid mounting of the switch disconnectors onto the busbars (1 set = 3 units) Not for devices with transformer installation	3NJ412 to 3NJ414	►	**3NJ4911-3BA01**		1	1 unit	1DL	0.602
3NJ4911-4AA00	**Saddle terminals** Cu connector 1.5 ... 70 mm² (1 set = 3 units)	3NJ4103		**3NJ4911-4AA00**		1	1 unit	1DL	0.039
3NJ4911-1AA00	**Prism terminal assembly kits** Al/Cu connector 10 ... 70 mm² (1 set = 3 units)	3NJ4103 3NJ4101		**3NJ4911-1AA00**		1	1 unit	1DL	0.098
3NJ4911-2BQ00	**Box terminal assembly kits** Al/Cu connector 95 ... 240 mm² (for connection to version with flat connector) (1 set = 3 units)	3NJ412 to 3NJ414		**3NJ4911-2BQ00**		1	1 unit	1DL	0.965

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* You can order this quantity or a multiple thereof.

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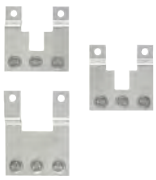
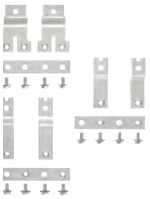
Accessories

	Version	For in-line fuse switch disconn. or dimensions	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Busbar connection assembly kits for NH 1, 2, 3 With flat connector								
 3NJ4911-5AA00	2 x 240 mm^2 With M12 screws	3NJ412 to 3NJ414		**3NJ4911-5AA00**		1	1 unit	1DL	0.245
 3NJ4911-5BA00	2 x 300 mm^2 / 3 x 120 mm^2 With M12 screws	3NJ412 to 3NJ414		**3NJ4911-5BA00**		1	1 unit	1DL	1.855
 3NJ4911-5CA00	1 x 400 mm^2 With M16 screws	3NJ412 to 3NJ414		**3NJ4911-5CA00**		1	1 unit	1DL	1.898
 3NJ4911-6AA00	**Busbar connection assembly kits for NH3 as double in-line disconnectors** 3 x 300 mm^2 / 4 x 185 mm^2	3NJ413, 3NJ414		**3NJ4911-6AA00**		1	1 unit	1DL	3.117
 3NJ4911-6BA00	Mechanical coupling of operating handles, required in addition for coupling two switch disconnectors	3NJ413 3NJ414		**3NJ4911-6CA00**		1	1 unit	1DL	0.053
 3NJ4911-6BA00	**Busbar connection assembly kits for NH3 as double in-line disconnectors** 4 x 240 mm^2	3NJ413, 3NJ414		**3NJ4911-6BA00**		1	1 unit	1DL	4.102
 3NJ4911-6BA00	Mechanical coupling of operating handles, required in addition for coupling two switch disconnectors	3NJ413 3NJ414		**3NJ4911-6CA00**		1	1 unit	1DL	0.053
 3NJ4913-6AA02	**Auxiliary switch mounting kit** For sizes 00 to 3 with connecting cables, 1 CO contact, for 3-pole switchable switch disconnectors only	3NJ41		**3NJ4913-1AA01**		1	1 unit	1DL	0.022
	Fuse 630 kVA 909 A **Size NH 3** Specially for the protection of transformers (minimum order quantity 3 units)	3NJ418		**3NJ4914-8AA00**		1	3 units	1DL	1.341

* You can order this quantity or a multiple thereof.

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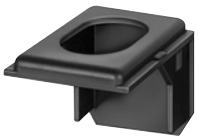
	Version	For in-line fuse switch disconn. or dimensions	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
3NJ4914-8BA00	**Isolating blades** Size NH3, 1250 A	3NJ4153, 3NJ4163, 3NJ4173, 3NJ4183		**3NJ4914-8BA00**		1	1 unit	1DL	0.902
 3NJ4918-1AA00	**Mounting hooks** (one per in-line disconnector required)	3NJ4121 to 3NJ4143		**3NJ4918-1AA00**		1	1 unit	1DL	0.125
3NJ4915-1BA00	**Distance compensation**	3NJ4103	►	**3NJ4915-1BA00**		1	1 unit	1DL	0.023
3NJ4915-2BA00	Distance compensation for fuse switch disconnectors with integratable current transformers if no current transformer is built in.	3NJ412 to 3NJ414	►	**3NJ4915-2BA00**		1	1 unit	1DL	0.097
3NJ4915-1CA00	**Terminal strips**	3NJ4103	►	**3NJ4915-1CA00**		1	1 unit	1DL	0.071
3NJ4915-2CA00		3NJ412 to 3NJ414	►	**3NJ4915-2CA00**		1	1 unit	1DL	0.110

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*** You can order this quantity or a multiple thereof.**

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Accessories

	Version	For in-line fuse switch disconn. or dimensions	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Current transformers .../1 A								
3NJ4915-1FB20	100/1 A, Cl. 0.5, 1.5 VA	3NJ4103		3NJ4915-1EA10		1	1 unit	1DL	0.252
	100/1 A, Cl. 1, 2.0 VA	3NJ4103		3NJ4915-1EA20		1	1 unit	1DL	0.247
	150/1 A, Cl. 0.5, 2.5 VA	3NJ4103		3NJ4915-1FA10		1	1 unit	1DL	0.250
	150/1 A, Cl. 0.5 calibrated, 2.5 VA	3NJ4103		3NJ4915-1FA11		1	1 unit	1DL	0.244
	150/1 A, Cl. 1, 3.0 VA	3NJ4103	►	3NJ4915-1FA20		1	1 unit	1DL	0.257
	75/1 A, Cl. 1, 1.5 VA	3NJ412 to 3NJ414		3NJ4915-2DA20		1	1 unit	1DL	0.216
	100/1 A, Cl. 0.5, 1.5 VA	3NJ412 to 3NJ414		3NJ4915-2EA10		1	1 unit	1DL	0.217
	100/1 A, Cl. 1, 2.0 VA	3NJ412 to 3NJ414		3NJ4915-2EA20		1	1 unit	1DL	0.204
	150/1 A, Cl. 0.5, 2.5 VA	3NJ412 to 3NJ414		3NJ4915-2FA10		1	1 unit	1DL	0.203
	150/1 A, Cl. 1, 2.5 VA	3NJ412 to 3NJ414		3NJ4915-2FA20		1	1 unit	1DL	0.204
	250/1 A, Cl. 0.5, 2.5 VA	3NJ412 to 3NJ414		3NJ4915-2GA10		1	1 unit	1DL	0.209
	250/1 A, Cl. 0.5 calibrated, 2.5 VA	3NJ412 to 3NJ414		3NJ4915-2GA11		1	1 unit	1DL	0.207
	250/1 A, Cl. 1, 5.0 VA	3NJ412 to 3NJ414	►	3NJ4915-2GA20		1	1 unit	1DL	0.223
3NJ4915-2HA20	400/1 A, Cl. 0.5, 2.5 VA	3NJ412 to 3NJ414		3NJ4915-2HA10		1	1 unit	1DL	0.204
	400/1 A, Cl. 0.5 calibrated, 2.5 VA	3NJ412 to 3NJ414		3NJ4915-2HA11		1	1 unit	1DL	0.202
	400/1 A, Cl. 1, 5.0 VA	3NJ412 to 3NJ414	►	3NJ4915-2HA20		1	1 unit	1DL	0.212
	500/1 A, Cl. 0.5, 2.5 VA	3NJ412 to 3NJ414		3NJ4915-2JA10		1	1 unit	1DL	0.180
	500/1 A, Cl. 1, 5.0 VA	3NJ412 to 3NJ414		3NJ4915-2JA20		1	1 unit	1DL	0.211
	600/1 A, Cl. 0.5, 2.5 VA	3NJ412 to 3NJ414		3NJ4915-2KA10		1	1 unit	1DL	0.195
	600/1 A, Cl. 0.5 calibrated, 2.5 VA	3NJ412 to 3NJ414		3NJ4915-2KA11		1	1 unit	1DL	0.203
	600/1 A, Cl. 1, 5.0 VA	3NJ412 to 3NJ414	►	3NJ4915-2KA20		1	1 unit	1DL	0.196
	Current transformers .../5 A								
3NJ4915-1FB20	100/5 A, Cl. 0.5, 1.0 VA	3NJ4103		3NJ4915-1EB10		1	1 unit	1DL	0.241
	100/5 A, Cl. 1, 1.5 VA	3NJ4103		3NJ4915-1EB20		1	1 unit	1DL	0.250
	150/5 A, Cl. 0.5, 1.5 VA	3NJ4103		3NJ4915-1FB10		1	1 unit	1DL	0.250
	150/5 A, Cl. 0.5 calibrated, 1.5 VA	3NJ4103		3NJ4915-1FB11		1	1 unit	1DL	0.247
	150/5 A, Cl. 1, 2.5 VA	3NJ4103	►	3NJ4915-1FB20		1	1 unit	1DL	0.257
	75/5 A, Cl. 1, 1.5 VA	3NJ412 to 3NJ414		3NJ4915-2DB20		1	1 unit	1DL	0.209
	100/5 A, Cl. 0.5, 1.0 VA	3NJ412 to 3NJ414		3NJ4915-2EB10		1	1 unit	1DL	0.208
	100/5 A, Cl. 1, 2.0 VA	3NJ412 to 3NJ414		3NJ4915-2EB20		1	1 unit	1DL	0.210
	150/5 A, Cl. 0.5, 1.5 VA	3NJ412 to 3NJ414		3NJ4915-2FB10		1	1 unit	1DL	0.218
	150/5 A, Cl. 1, 2.5 VA	3NJ412 to 3NJ414		3NJ4915-2FB20		1	1 unit	1DL	0.200
	250/5 A, Cl. 0.5, 2.5 VA	3NJ412 to 3NJ414		3NJ4915-2GB10		1	1 unit	1DL	0.203
	250/5 A, Cl. 0.5 calibrated, 2.5 VA	3NJ412 to 3NJ414		3NJ4915-2GB11		1	1 unit	1DL	0.203
	250/5 A, Cl. 1, 3.75 VA	3NJ412 to 3NJ414	►	3NJ4915-2GB20		1	1 unit	1DL	0.204
3NJ4915-2HB20	400/5 A, Cl. 0.5, 2.5 VA	3NJ412 to 3NJ414		3NJ4915-2HB10		1	1 unit	1DL	0.197
	400/5 A, Cl. 0.5 calibrated, 2.5 VA	3NJ412 to 3NJ414		3NJ4915-2HB11		1	1 unit	1DL	0.193
	400/5 A, Cl. 1, 5.0 VA	3NJ412 to 3NJ414	►	3NJ4915-2HB20		1	1 unit	1DL	0.195
	500/5 A, Cl. 0.5, 2.5 VA	3NJ412 to 3NJ414		3NJ4915-2JB10		1	1 unit	1DL	0.197
	500/5 A, Cl. 1, 5.0 VA	3NJ412 to 3NJ414		3NJ4915-2JB20		1	1 unit	1DL	0.204
	600/5 A, Cl. 0.5, 2.5 VA	3NJ412 to 3NJ414		3NJ4915-2KB10		1	1 unit	1DL	0.202
	600/5 A, Cl. 0.5 calibrated, 2.5 VA	3NJ412 to 3NJ414		3NJ4915-2KB11		1	1 unit	1DL	0.209
	600/5 A, Cl. 1, 5.0 VA	3NJ412 to 3NJ414	►	3NJ4915-2KB20		1	1 unit	1DL	0.203

Note

The current transformers can also be used with the 7KM PAC measuring devices, see chapter "Measuring Devices and Power Monitoring".

* You can order this quantity or a multiple thereof.

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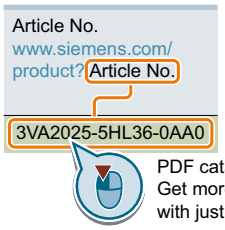
8/2	**Introduction**
8/5	**5TE8 control switches**
8/8	**5TE48 pushbuttons**
8/11	**5TE58 light indicators**
8/13	**5TE On/Off switches**
8/18	**5TL1 On/Off switches**
8/22	**5TE DC isolators**
8/24	**5ST busbars for modular installation devices**
8/26	**5TT4 remote control switches**
8/30	**5TT4 switching relays**
	5TT5 Insta contactors
8/32	5TT50 Insta contactors, AC/DC technology
8/35	5TT58 Insta contactors, AC technology
8/39	**5TT3 soft-starting devices**
	7LF, 5TT3 timers
8/40	7LF4 digital time switches
8/45	7LF5 mechanical time switches
8/48	7LF6 timers for buildings
8/51	5TT3 timers for industrial applications

NEW

Direct reference to the products in the Industry Mall from the selection and ordering data tables:



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For further technical product information:

Configuration Manual

Switching Devices
Article No.: 3ZW1012-5TT57-0AC1

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Introduction

Overview

Devices		Page	Application	Standards	Used in		
					Non-residential buildings	Residential buildings	Industry
	5TE8 control switches	8/5	For the switching of lighting and other electrical devices up to 20 A. For use in control cabinets for the logical linking of functions.	IEC/EN 60947-3, (VDE 0660-107); IEC/EN 60669-1, (VDE 0632-1); GB 14048.3 CCC	✓	✓	✓
	5TE48 pushbuttons	8/8	To be used as pushbuttons in control systems, e.g. to switch on seal-in circuits or as pushbuttons with maintained-contact function for manual use, as control switches or for the switching of loads up to 20 A.	IEC/EN 60947-3, (VDE 0660-107); IEC/EN 60669-1, (VDE 0632-1); GB 14048.3 CCC	✓	--	✓
	5TE58 light indicators	8/11	Light indicators for signaling switching states or faults in systems.	DIN VDE 0710-1-11	✓	--	✓
	5TE On/Off switches	8/13	For switching of lighting, motors and other electrical devices. 5TE81: 20 A 5TE82: 32 A.	20 A: IEC/EN 60947-3, (VDE 0660-107); IEC/EN 60669-1 32 A: IEC/EN 60947-3, (VDE 0660-107)	✓	✓	✓
	5TL1 On/Off switches	8/18	On/Off switches used for lighting control and for switching motors and other electric loads, for example.	32 A ... 125 A: IEC/EN 60947-3, (VDE 0660-107)	✓	✓	✓
	5TE DC isolators	8/22	The DC isolator is a special switch disconnector for switching DC loads.	IEC/EN 60947-3; IEC/EN 60669-1; GB 14048.3 CCC	✓	✓	✓
	5ST busbars for modular installation devices	8/24	For fast and safe connection.	IEC/EN 60439-1, (VDE 0660-500)	✓	--	✓

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Devices		Page	Application	Standards	Used in		
					Non-residential buildings	Residential buildings	Industry
	5TT4 remote control switches	8/26	For the switching of lighting up to 16 A in rooms using several pushbuttons and central On/Off switches.	IEC 60669-1; IEC 60669-2-2; EN 60669-1-1, (VDE 0632) EN 60669-2-2, (VDE 0632-2-2)	✓	✓	✓
	5TT4 switching relays	8/30	For the switching of small loads up to 16 A or as coupling devices in control systems.	EN 60947-5-1, (VDE 0660-200) EN 60947-1, (VDE 0660-100) GB 14048.5 CCC	✓	--	✓
5TT5 Insta contactors							
	5TT50 Insta contactors, AC/DC technology	8/32	Insta contactors 20 A, 25 A, 40 A and 63 A for the switching of heating, lighting, such as fluorescent lamps, incandescent lamps, ohmic or inductive loads.	IEC 60947-4-1; IEC 60947-5-1; IEC 61095; EN 60947-4-1; EN 60947-5-1; EN 61095; VDE 0660; UL 508; GB 14048.4 CCC	✓	✓	✓
	5TT58 Insta contactors, AC technology	8/35	Insta contactors 20 A, 25 A, 40 A and 63 A for the switching of heating, lighting, such as fluorescent lamps, incandescent lamps, ohmic or inductive loads.	IEC 60947-4-1; IEC 60947-5-1; IEC 61095; EN 60947-4-1; EN 60947-5-1; EN 61095; VDE 0660; NF C 61-480, (NF EN 61095)	✓	✓	✓
	5TT3 soft-starting devices	8/39	Protection of machines with transmission, belt or chain drives, conveyor belts, fans, pumps, compressors, packing machines or door operating mechanisms.	EN 60947-4-2, (VDE 0660-117)	--	--	✓

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Introduction

Devices		Page	Application	Standards	Used in		
					Non-residential buildings	Residential buildings	Industry
7LF, 5TT3 timers							
	7LF4 digital time switches	8/40	Minute-precise switching of devices and system components in day, week and year programs. Unique due to the wide variety of functions offered by the Mini and Top versions; for PC programming Astro, Profi and Expert.	IEC 60730-1 and IEC 60730-2-7; EN 60730-1 and EN 60730-2-7; VDE 0631-1 and -2-7	✓	✓	✓
	7LF5 mechanical time switches	8/45	Accurate and 15-minute switching accuracy. With automatic time setting during commissioning and automatic switching to daylight savings.	IEC 60730-1 and IEC 60730-2-7; EN 60730-1 and EN 60730-2-7; VDE 0631-1 and -2-7; UL 60730 UL 917	✓	✓	✓
	7LF6 timers for buildings	8/48	Lighting controls with stairwell lighting timers ensure the safe use of stairwells and save energy. Expanded applications for common rooms and garages, as well as the time switching of ventilators and fluorescent lamps.	IEC 60699; EN 60669, DIN 18015	✓	✓	--
	5TT3 timers for industrial applications	8/51	Multifunctional, delay, wiper, flashing and off-delay timers in control circuits expand the use of distribution boards in both small and large plants.	IEC 60255; EN 60255	--	--	✓

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Overview

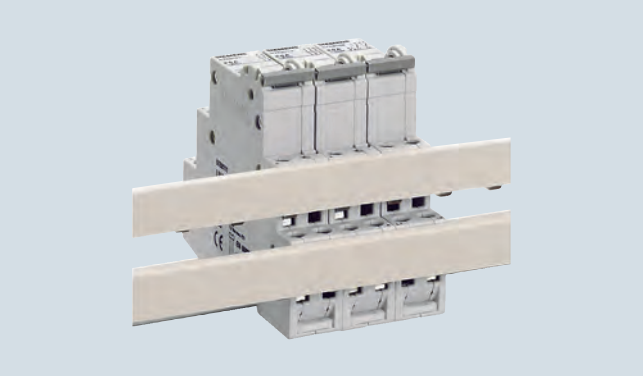
Two-way switches are used in control cabinets and distribution boards for switching small loads On/Off or over.

Group switches with center position permit the positions open/stop/closed, for example to control counter-clockwise rotation – Off – clockwise rotation.

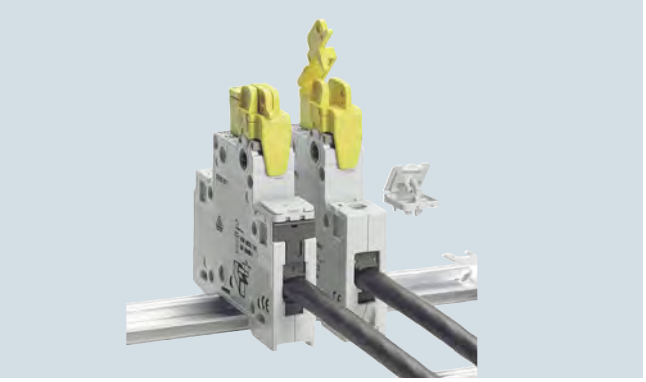
Control switches in a range of contact versions have an integral control lamp for the On setting.

The auxiliary switch (AS) signals the contact position of the switch. It has the same design as the auxiliary switch used for the miniature circuit breakers (see chapter "Miniature Circuit Breakers").

Benefits



- The control switches can be bus-mounted with each other or with 5TE48 pushbuttons, 5TE58 light indicators or 5TT41 remote control switches and 5TT42 switching relays
- For busbars, see from Page 8/24 onwards



- The handle locking device prevents undesired/inadvertent mechanical On/Off switching
- The handle locking device is a universal accessory for all switches and miniature circuit breakers

Technical specifications

			5TE81
Standards			IEC/EN 60947-3; IEC/EN 60669-1
Approvals			IEC/EN 60947-3 (VDE 0660-107) GB 14048.3-2008 CCC
Rated operational current I_e	Per conduct. path	A	20
Rated operational voltage U_e	1-pole Multi-pole	V AC V AC	230 400
Rated power dissipation P_v	Contact per pole	VA	0.7
Conventional free-air thermal current I_{the}		A	20
Rated breaking capacity	At p.f. = 0.65	A	60
Rated making capacity	At p.f. = 0.65	A	60
Short-circuit strength In conjunction with fuse of the same rated operational current	EN 60269 gL/gG	kA	10
Rated impulse withstand voltage U_{imp}		kV	> 5
Clearances	Open contacts Between the poles	mm mm	2 × > 2 > 7
Creepage distances		mm	> 7
Mechanical service life	Switching cycles		25000
Electrical service life	Switching cycles		10000
Minimum contact load		V; mA	10; 300
Rated short-time currents Per conducting path at p.f. = 0.7 (The respective rated surge current can be calculated by multiplying by a factor of 1.5).	 Up to 0.2 s Up to 0.5 s Up to 1 s Up to 3 s	 A A A A	 650 400 290 170
Terminals Max. tightening torque	± screw (Pozidriv)	 Nm	1 1.2
Conductor cross-sections	Rigid Flexible, with end sleeve	mm^2 mm^2	1.5 ... 6 1 ... 6
Permissible ambient temperature		°C	-5 ... +40
Resistance to climate At 95 % relative humidity	Acc. to DIN 50015	°C	45

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Selection and ordering data

	Version	I_e	U_e	Conductor cross-sections	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	V AC	Up to mm²	MW							kg
	Two-way switches (20 A)											
	With sealable switch position, separate handle locking device can be retrofitted											
	Retroffitable auxiliary switch											
	1 NO, 1 NC	20	400	6	1	►	**5TE8151**		1	1 unit	1BK	0.076
	Auxiliary switch cannot be retrofitted											
	2 NO, 2 NC	20	400	6	1		**5TE8152**		1	1 unit	1BK	0.095
	3 NO, 1 NC	20	400	6	1		**5TE8153**		1	1 unit	1BK	0.095
	1 CO	20	230	6	1	►	**5TE8161**		1	1 unit	1BK	0.073
	2 CO	20	400	6	1	►	**5TE8162**		1	1 unit	1BK	0.091
	Group switches with center position (20 A)											
	With sealable switch position, separate handle locking device can be retrofitted											
	Auxiliary switch cannot be retrofitted											
	1 CO	20	230	6	1	►	**5TE8141**		1	1 unit	1BK	0.065
	2 CO	20	400	6	1	►	**5TE8142**		1	1 unit	1BK	0.091
	Control switches (20 A)											
	With fixed mounted glow lamp 230 V or diode 48 V, with replaceable, white transparent luminescent cap, with sealable switch position, separate handle locking device can be retrofitted											
	Auxiliary switch cannot be retrofitted											
	1 NO	20	230	6	1	►	**5TE8101**		1	1 unit	1BK	0.071
		20	48	6	1		**5TE8101-3**		1	1 unit	1BK	0.071
	1 NO, for max. 150 m cable length											
		20	230	6	1		**5TE8105**		1	1 unit	1BK	0.071
	2 NO	20	400	6	1		**5TE8102**		1	1 unit	1BK	0.078
	3 NO	20	400	6	1		**5TE8103**		1	1 unit	1BK	0.096
	With mounted auxiliary switch (1 NO, 1 NC)											
	3 NO	20	400	6	1.5		**5TE8108**		1	1 unit	1BK	0.142

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	Version	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		MW							kg
	Auxiliary switches (AS) For right-hand-side retrofitting with factory-fitted brackets, for further technical specifications, see chapter "Miniature Circuit Breakers"								
	1 NO + 1 NC	0.5	►	**5ST3010**		1	1 unit	1AD	0.055
	2 NO	0.5		**5ST3011**		1	1 unit	1AD	0.066
	2 NC	0.5		**5ST3012**		1	1 unit	1AD	0.067
	Handle locking devices For all 5TE8 switches, can be sealed against undesired/inadvertent mechanical On/Off switching, for padlock with max. 3 mm shackle	--		**5ST3801**		1	1 unit	1AD	0.012
	Spacers Contour for modular devices with a mounting depth of 70 mm; can be snapped onto either side of the busbar, so that two spacers allow for convenient cable routing	0.5		**5TG8240**		1	2 units	1BK	0.017
	Cap sets For manual changing of the luminous plates for 5TE810 control switches Cap set comprising 1 red, green, yellow, white and blue plate each	--		**5TG8068**		1	1 set	1BK	0.001

For busbars for control switches, see page 8/24.

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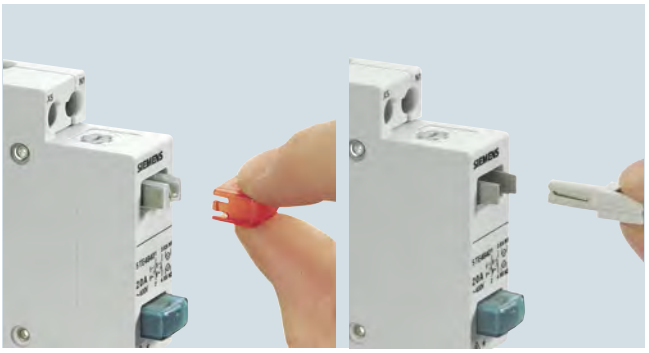
Overview

The pushbuttons are used in control systems, e.g. to switch on seal-in circuits or as pushbuttons with maintained-contact function for manual use, as control switches or for the switching of loads up to 20 A.

Benefits

- Pushbuttons with setting function for momentary-contact or maintained-contact operation can be changed over after installation and connection
- Pushbuttons and light indicators with separate infeed in one device. This means they can also be used for voltages other than the switching voltage
- In the case of devices with two pushbuttons and two lamps, each pushbutton must be set separately



- Pilot lights and caps can also be safely replaced during operation without the use of tools. Functionality is quickly restored
- A range of different-colored, transparent caps enable the signaling of plant states in compliance with IEC 60073. Three indications are possible for each device – this saves space

8

Technical specifications

			5TE48
Standards			IEC/EN 60947-3; IEC/EN 60669-1
Approvals			IEC/EN 60947-3 (VDE 0660-107)
Rated operational current I_e	Per conduct. path	A	20
Rated operational voltage U_e	1-pole Multi-pole	V AC V AC	230 400
Rated power dissipation P_v	Per pole	VA	0.6
Conventional free-air thermal current I_{the}		A	20
Rated breaking capacity	At p.f. = 0.65	A	60
Rated making capacity	At p.f. = 0.65	A	60
Rated impulse withstand voltage U_{imp}		kV	> 5
Clearances	Open contacts Between the poles	mm mm	2 × > 2 > 7
Creepage distances		mm	> 7
Mechanical service life	Switching cycles		25000
Minimum contact load		V; mA	10; 300
Rated short-time currents Per conducting path at p.f. = 0.7 (The respective rated surge current can be calculated by multiplying by a factor of 1.5).	 Up to 0.2 s Up to 0.5 s Up to 1 s Up to 3 s	 A A A A	 650 400 290 170
Terminals Max. tightening torque	± screw (Pozidriv)	 Nm	1 1.2
Conductor cross-sections	Rigid Flexible, with end sleeve	mm^2 mm^2	1.5 ... 6 1 ... 6
Permissible ambient temperature		°C	-5 ... +40
Resistance to climate At 95 % relative humidity	Acc. to DIN 50015	°C	45

Power loss of 5TG805.-. LEDs		**5TG805.-.**
Rated power dissipation P_v • LED	VA	0.4

Color	**Color coding according to IEC 60073**		
	Safety of people or environment	Process state	System state
Red	Danger	Emergency	Faulty
Yellow	Warning/Caution	Abnormal	
Green	Safety	Normal	
Blue	Stipulation		
White, Gray Black	No special significance assigned		

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Selection and ordering data

	Version	I_e	U_e	Conductor cross-sections	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	V AC	Up to mm²	MW							kg
	Pushbuttons without maintained-contact function											
	1 NO, 1 NC											
	1 gray pushbutton	20	400	6	1	►	5TE4800		1	1 unit	1BK	0.074
	1 red pushbutton	20	400	6	1		5TE4805		1	1 unit	1BK	0.074
	1 green pushbutton	20	400	6	1		5TE4806		1	1 unit	1BK	0.074
	1 yellow pushbutton	20	400	6	1		5TE4807		1	1 unit	1BK	0.074
	1 blue pushbutton	20	400	6	1		5TE4808		1	1 unit	1BK	0.074
	1 NO, 1 NO											
	1 green pushbutton, 1 blue pushbutton	20	400	6	1		5TE4804		1	1 unit	1BK	0.093
	Pushbuttons with maintained-contact function											
	1 NO, 1 NC											
	1 gray pushbutton	20	400	6	1		5TE4810		1	1 unit	1BK	0.073
	2 NO											
	1 gray pushbutton	20	400	6	1		5TE4811		1	1 unit	1BK	0.074
	3 NO + N											
	1 gray pushbutton	20	400	6	1		5TE4812		1	1 unit	1BK	0.092
	4 NC											
	1 gray pushbutton	20	400	6	1		5TE4813		1	1 unit	1BK	0.098
	2 CO											
	1 gray pushbutton	20	400	6	1		5TE4814		1	1 unit	1BK	0.087
	Control pushbuttons with maintained-contact function and/or momentary-contact function and lamp, 230 V For max. 5 m cable length											
	1 NO, 1 NC											
	1 red pushbutton	20	400	6	1	►	5TE4820		1	1 unit	1BK	0.084
	1 NO											
	1 red pushbutton	20	230	6	1	►	5TE4821		1	1 unit	1BK	0.073
	2 NO											
	1 red pushbutton	20	400	6	1		5TE4823		1	1 unit	1BK	0.084
	2 NC											
	1 red pushbutton	20	400	6	1		5TE4824		1	1 unit	1BK	0.085
	Control pushbuttons with maintained-contact function and/or momentary-contact function and lamp, 230 V For max. 150 m cable length											
	1 NO											
	1 red pushbutton	20	230	6	1		5TE4822		1	1 unit	1BK	0.074
	Double pushbuttons with maintained-contact function and/or momentary-contact function											
	1 NO and 1 NC, 1 green pushbutton, 1 red pushbutton	20	400	6	1		5TE4830		1	1 unit	1BK	0.078
	1 NO, 1 NC and 1 NO, 1 NC 1 green pushbutton, 1 red pushbutton	20	400	6	1		5TE4831		1	1 unit	1BK	0.097
	Double pushbutton with maintained-contact function and/or momentary-contact function and two lamps, 230 V For max. 5 m cable length											
	1 NO and 1 NO, 1 green pushbutton, 1 red pushbutton	20	400	6	1		5TE4840		1	1 unit	1BK	0.095
	1 NO and 1 NC, 1 green pushbutton, 1 red pushbutton	20	400	6	1		5TE4841		1	1 unit	1BK	0.095

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5TE48 pushbuttons

	Version	I_e	U_n	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mA	V							kg
	LEDs for manual replacement									
	White	0.4	12 ... 60 AC/DC		5TG8056-0		1	5 units	1BK	0.005
	Red				5TG8056-1		1	5 units	1BK	0.005
	Yellow				5TG8056-2		1	5 units	1BK	0.005
	Green				5TG8056-3		1	5 units	1BK	0.005
	Blue				5TG8056-4		1	5 units	1BK	0.003
	White	0.4	115 AC/DC		5TG8057-0		1	5 units	1BK	0.005
	Red				5TG8057-1		1	5 units	1BK	0.005
	Yellow				5TG8057-2		1	5 units	1BK	0.004
	Green				5TG8057-3		1	5 units	1BK	0.004
	Blue				5TG8057-4		1	5 units	1BK	0.004
	White	0.4	230 AC		5TG8058-0		1	5 units	1BK	0.005
	Red				5TG8058-1		1	5 units	1BK	0.005
	Yellow				5TG8058-2		1	5 units	1BK	0.005
	Green				5TG8058-3		1	5 units	1BK	0.005
	Blue				5TG8058-4		1	5 units	1BK	0.003
	Cap sets, manually replaceable with colored caps with or without lamps									
	Gray, non-transparent (1 set = 5 units)				5TG8060		1	1/10 sets	1BK	0.004
	Red, transparent (1 set = 5 units)				5TG8061		1	1/10 sets	1BK	0.004
	Green, transparent (1 set = 5 units)				5TG8062		1	1/10 sets	1BK	0.004
	Yellow, transparent (1 set = 5 units)				5TG8063		1	1/10 sets	1BK	0.004
	Blue, transparent (1 set = 5 units)				5TG8064		1	1/10 sets	1BK	0.003
	Black, non-transparent (1 set = 5 units)				5TG8065		1	1/10 sets	1BK	0.001
	White, transparent (1 set = 5 units)				5TG8066		1	1/10 sets	1BK	0.004
	Red and green (1 set contains 10 lamps per color) Yellow, blue and white (1 set contains 5 lamps per color)				5TG8067		1	1 set	1BK	0.011
	Red, green, yellow (1 set = 3 units)				5TG8070		1	1 set	1BK	0.003

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Overview

Light indicators are used to signal switching states or faults in systems.

They are available as single, double or triple light indicators.

Benefits

- Pilot lights and caps can also be safely replaced during operation without the use of tools
- A range of different-colored, transparent caps enable the signaling of plant states in compliance with IEC 60073. Three indications are possible for each device
- The lamps are mounted in a slotted base, which protects against polarity reversal. This ensures the correct polarization for all DC applications
- The devices have preferred positions for the N terminals, so that it is possible to bus-mount several devices. This ensures fast and simple installation
- A light indicator with three lamps enables three-phase signaling and "traffic-light signaling" in a single modular width

Technical specifications

			5TE58
Standards			DIN VDE 0710-1-11
Rated operational voltage U_e	Max.	V AC	230 (for different voltages, see 5TG8 lamps)
Rated power dissipation P_v		VA	See 5TG8 lamps
Clearances	Between the terminals	mm	> 7
Terminals Max. tightening torque	± screw (Pozidriv)	 Nm	1 1.2
Conductor cross-sections	Rigid Flexible, with end sleeve	mm^2 mm^2	1.5 ... 6 1 ... 6
Permissible ambient temperature		°C	-5 ... +40
Resistance to climate At 95 % relative humidity	Acc. to DIN 50015	°C	 45

		5TG805.
Rated power dissipation P_v • LED	VA	 0.4

Color coding according to IEC 60073

	Meaning		
Color	Safety of people and environment	Process state	System state
Red	Danger	Emergency	Faulty
Yellow	Warning/Caution	Abnormal	
Green	Safety	Normal	
Blue	Stipulation		
White	No special significance assigned		

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Selection and ordering data

	Version	U_e	Conductor cross-sections	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	Up to mm²	MW							kg
	Light indicators for a max. cable length of up to 5 m										
	With 1 red lamp	230	6	1	▶	5TE5800		1	1/12 units	1BK	0.054
	With 2 lamps, green and red				▶	5TE5801		1	1 unit	1BK	0.069
	With 3 green lamps				▶	5TE5802		1	1 unit	1BK	0.077
	With 3 lamps, red, yellow and green				▶	5TE5803		1	1 unit	1BK	0.077
	Light indicators for a max. cable length of up to 250 m										
	With 1 red lamp	230	6	1		5TE5804		1	1 unit	1BK	0.064

		I_e	U_e	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mA	V							kg
	LEDs for manual replacement									
	White	0.4	12 ... 60 AC/DC		5TG8056-0		1	5 units	1BK	0.005
	Red				5TG8056-1		1	5 units	1BK	0.005
	Yellow				5TG8056-2		1	5 units	1BK	0.005
	Green				5TG8056-3		1	5 units	1BK	0.005
	Blue				5TG8056-4		1	5 units	1BK	0.003
	White	0.4	115 AC/DC		5TG8057-0		1	5 units	1BK	0.005
	Red				5TG8057-1		1	5 units	1BK	0.005
	Yellow				5TG8057-2		1	5 units	1BK	0.004
	Green				5TG8057-3		1	5 units	1BK	0.004
	Blue				5TG8057-4		1	5 units	1BK	0.004
	White	0.4	230 AC		5TG8058-0		1	5 units	1BK	0.005
	Red				5TG8058-1		1	5 units	1BK	0.005
	Yellow				5TG8058-2		1	5 units	1BK	0.005
	Green				5TG8058-3		1	5 units	1BK	0.005
	Blue				5TG8058-4		1	5 units	1BK	0.003
	Cap sets for manual changing of colored caps									
	Red, transparent (1 set = 5 units)				5TG8061		1	1/10 sets	1BK	0.004
	Green, transparent (1 set = 5 units)				5TG8062		1	1/10 sets	1BK	0.004
	Yellow, transparent (1 set = 5 units)				5TG8063		1	1/10 sets	1BK	0.004
	Blue, transparent (1 set = 5 units)				5TG8064		1	1/10 sets	1BK	0.003
	White, transparent (1 set = 5 units)				5TG8066		1	1/10 sets	1BK	0.004
	Red and green (1 set = 10 lamps per color) Yellow, blue and white (1 set = 5 lamps per color)				5TG8067		1	1 set	1BK	0.011
	Red, green, yellow (1 set = 3 units)				5TG8070		1	1 set	1BK	0.003

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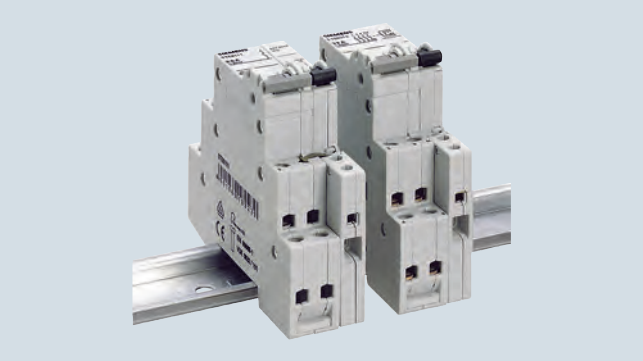
Overview

The devices are used for the switching of lighting, motors and other electrical devices.

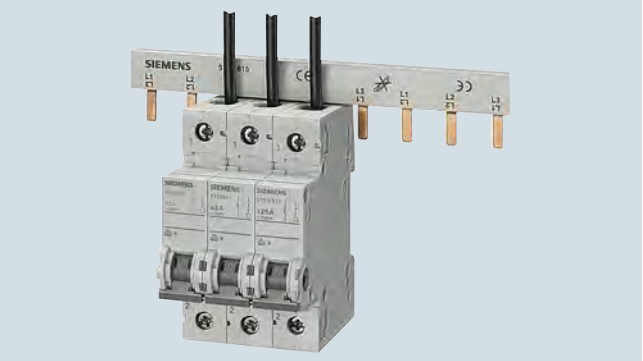
For rated currents of 20 A and 32 A, a compact series in a space-saving design is available with up to 4 NO contacts in one MW.

In addition, the 5TE2 device versions can be used as switch disconnectors according to EN 60947-1 and serve as main control switches for the disconnection or isolation of plants according to EN 60204-1.

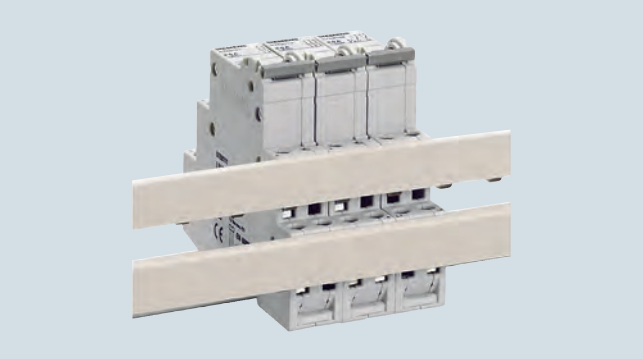
Benefits



- The switches can be retrofitted with auxiliary switches without the need for tools
- Uniform auxiliary switches for miniature circuit breakers and switches

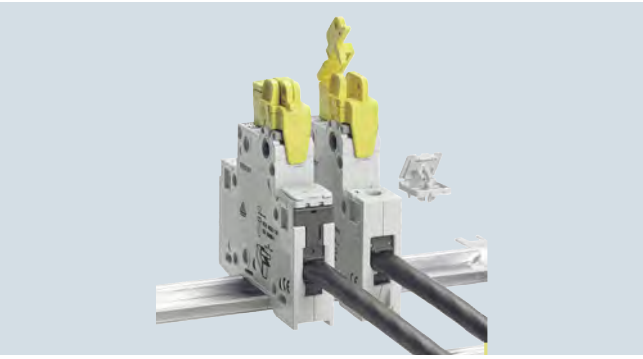


- Clear and visible conductor connection in front of the busbar for safe and easy mounting
- Optional top or bottom infeed as the terminals are identical



- The 20 A and 32 A switches can be bus-mounted with each other or with 5TE48 pushbuttons, 5TE58 light indicators or 5TT41 remote control switches and 5TT42 switching relays
- For busbars, see page 8/24

- Spacers can be used as compensating elements and have a width of 0.5 MW. They come with an integrated wiring duct for the insertion of conductors
- Two spacers installed on opposing side therefore offer space for large conductor cross-sections up to 15 mm in diameter



- The handle locking device prevents undesired/inadvertent mechanical On/Off switching

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Technical specifications

			5TE81	5TE82
Standards			IEC/EN 60947-3, (VDE 0660-107); IEC/EN 60669-1	IEC/EN 60947-3, (VDE 0660-107)
Approvals			IEC/EN 60947-3 (VDE 0660-107)	
Rated operational current I_e	Per conduct. path	A	20	32
Rated operational voltage U_e	1-pole Multi-pole	V AC V AC	230 400	
Rated power dissipation P_v	Per pole, max.	VA	0.7	
Rated thermal current I_{th}		A	20	32
Rated breaking capacity	At p.f. = 0.65	A	60	96
Rated making capacity	At p.f. = 0.65	A	60	96
Rated short-circuit making capacity I_{cm} In conjunction with fuse of the same rated operational current	EN 60269 gL/gG	kA	10	
Rated impulse withstand voltage U_{imp}		kV	> 5	
Clearances	Open contacts Between the poles	mm mm	2 × > 2 > 7	
Creepage distances		mm	> 7	
Mechanical service life		Switching cycles	25000	
Electrical service life		Switching cycles	10000	
Minimum contact load		V; mA	10; 300	
Rated short-time withstand current I_{cw} Per conducting path at p.f. = 0.7 (The corresponding rated surge current can be established by multiplying by factor 1.5.)	Up to 0.2 s Up to 0.5 s Up to 1 s Up to 3 s	A A A A	650 400 290 170	1000 630 450 250
Terminals Max. tightening torque	± screw (Pozidriv)	 Nm	1 1.2	
Conductor cross-sections	Rigid Flexible, with end sleeve	mm^2 mm^2	1.5 ... 6 1 ... 6	
Permissible ambient temperature		°C	-5 ... +40	
Resistance to climate At 95 % relative humidity	Acc. to DIN 50015	°C	45	

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			5TE24	5TE25	5TE28
Standards			IEC/EN 60947-3, EN 60947-3 and IEC 60669-1, EN 60669-1		IEC 60947-3, EN 60947-3
Rated operational current I_e	Per conduct. path	A	40	63	125
Rated operational voltage U_e	1-pole Multi-pole	V AC V AC	230 400	230 400	-- 400
Rated power dissipation P_v	Per pole, max.	VA	3.4	4.4	10.9
Rated thermal current I_{th}		A	40	63	125
Rated breaking capacity	At p.f. = 0.65	A	120	196	375
Rated making capacity	At p.f. = 0.65	A	120	196	375
Rated short-circuit making capacity I_{cm} In conjunction with fuse of the same rated operational current	EN 60269 gL/gG	kA	10		
Rated impulse withstand voltage U_{imp}		kV	> 5		
Clearances	Open contacts Between the poles	mm mm	> 7 > 7		
Creepage distances		mm	> 7		
Mechanical service life		Switching cycles	20000		
Electrical service life		Switching cycles	10000	5000	5000
Minimum contact load		V; mA	24; 300		
Rated power Switching of resistive loads including moderate overload AC-21	1-pole 2-pole 3-/4-pole	kW kW kW	6.5 11 15	10 18 30	16 28 48
Rated short-time withstand current I_{cw} Per conducting path at p.f. = 0.7 (The corresponding rated surge current can be established by multiplying by factor 1.5.)	Up to 0.2 s Up to 0.5 s Up to 1 s Up to 3 s	A A A A	950 630 500 350	1500 1000 800 560	3400 2100 1700 1000
Terminals Max. tightening torque	± screw (Pozidriv)	Nm	2 2.5 ... 3	2 2.5 ... 3	2 3 ... 3.5
Conductor cross-sections	Rigid Flexible, with end sleeve	mm^2 mm^2	0.75 ... 35 0.75 ... 25	0.75 ... 35 0.75 ... 25	0.75 ... 50 0.75 ... 35
Permissible ambient temperature		°C	-25 ... +45		
Resistance to climate At 95 % relative humidity	Acc. to DIN 50015	°C	45		

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Selection and ordering data

	Version	I_e	U_e	Conductor cross-sections	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	V AC	Up to mm²	MW							kg
	On/Off switches (20 A and 32 A)											
	With sealable switch position, separate handle locking device can be retrofitted											
	Retroffitable auxiliary switch											
	1 NO	20	230	6	1	▶	**5TE8111**		1	1/12 units	1BK	0.067
		32					**5TE8211**		1	1 unit	1BK	0.066
	2 NO	20	400	6	1	▶	**5TE8112**		1	1 unit	1BK	0.075
		32				▶	**5TE8212**		1	1 unit	1BK	0.075
	3 NO	20	400	6	1		**5TE8113**		1	1 unit	1BK	0.087
		32					**5TE8213**		1	1 unit	1BK	0.086
	Auxiliary switch cannot be retrofitted											
	3 NO + N	20	400	6	1		**5TE8114**		1	1 unit	1BK	0.095
		32				▶	**5TE8214**		1	1 unit	1BK	0.094
	With mounted auxiliary switch											
	3 NO + N	20	400	6	1.5		**5TE8118**		1	1 unit	1BK	0.150
		32					**5TE8218**		1	1 unit	1BK	0.148
	Auxiliary switches (AS)											
	For all 5TE8 switches, for right-hand-side retrofitting with factory-fitted brackets, for further technical specifications, see chapter "Miniature Circuit Breakers"											
	1 NO + 1 NC				0.5	▶	**5ST3010**		1	1 unit	1AD	0.055
	2 NO				0.5		**5ST3011**		1	1 unit	1AD	0.066
	2 NC				0.5		**5ST3012**		1	1 unit	1AD	0.067
	Auxiliary switches for low power											
	1 NO + 1 NC				0.5	▶	**5ST3013**		1	1 unit	1AD	0.064
	2 NO				0.5		**5ST3014**		1	1 unit	1AD	0.067
	2 NC				0.5		**5ST3015**		1	1 unit	1AD	0.064
	Handle locking devices											
	For all 5TE8 switches, can be sealed against undesired/inadvertent mechanical On/Off switching, for padlock with max. 3 mm shackle						**5ST3801**		1	1 unit	1AD	0.012
	Terminal covers											
	For all 5TE85 to 5TE88 switches, in 1 MW per pole version, for covering screw openings, sealable					▶	**5ST3800**		1	10 units	1AD	0.002
	Spacers											
	Contour for modular devices with a mounting depth of 70 mm; can be snapped onto either side of the busbar, so that two spacers allow for convenient cable routing				0.5		**5TG8240**		1	2 units	1BK	0.017

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	Version	I_e	U_e	Conductor cross-sections	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	V AC	Up to mm^2	MW							kg
	On/Off switches (40 A to 125 A)											
	Manual quick-assembly and disassembly systems, without the use of tools, separate switching position indication red/green, HS, FS, UR and ST can be retrofitted											
	1 NO	40	230		1		5TE2411-0		1	1 unit	1BK	0.123
		63					5TE2511-0		1	1 unit	1BK	0.138
	2 NO	40	400		2		5TE2412-0		1	1 unit	1BK	0.260
		63					5TE2512-0		1	1 unit	1BK	0.249
		125			3		5TE2812-0		1	1 unit	1BK	0.482
	3 NO	40	400		3		5TE2413-0		1	1 unit	1BK	0.382
		63					5TE2513-0		1	1 unit	1BK	0.373
		125			4.5		5TE2813-0		1	1 unit	1BK	0.721
	3 NO + N	40	400		4		5TE2414-0		1	1 unit	1BK	0.499
		63					5TE2514-0		1	1 unit	1BK	0.504
		125			6		5TE2814-0		1	1 unit	1BK	0.967

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* You can order this quantity or a multiple thereof.

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5TL1 On/Off switches

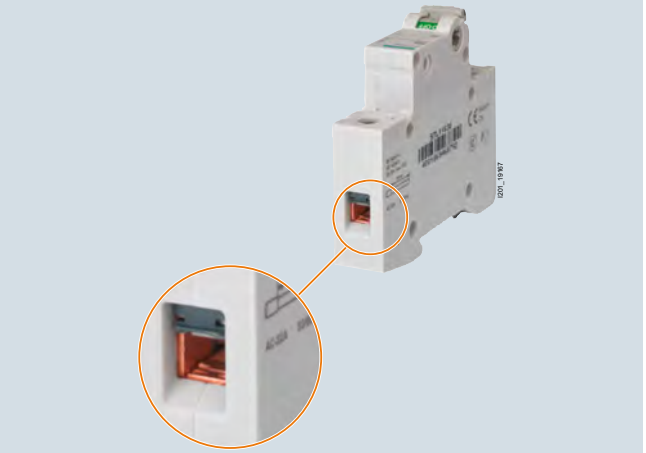
Overview

The new 5TL1 On/Off switches are used for the switching of lighting, motors and other electrical devices. Rated currents range between 32 A and 125 A. The new design of the 5TL1 On/Off switches allows them to be optically perfectly integrated in the series of RCCBs and MCBs.

In addition, the 5TL1 device versions can be used as switch disconnectors according to EN 60947-1 and can be used as main control switches for the disconnection or isolation of systems according to EN 60204-1.

Benefits

- Attractive design
- Easily recognizable, colored switch position indication integrated in the operating handle
- Actuating elements in gray
- Ergonomically shaped handle and enclosure contours for user-friendly switching



- Simplified insertion of conductors thanks to rectangular terminal design for accommodating pin busbars together with conductors from 0.75 to 25 mm^2

- Effective shock-hazard protection when grasping
- Manual operation of the snap slide with latch-down option

- Terminal for accommodating 2 conductors of the same cross-section (single-wire up to 2 x 10 mm^2, finely stranded with end sleeve up to 2 x 4 mm^2)

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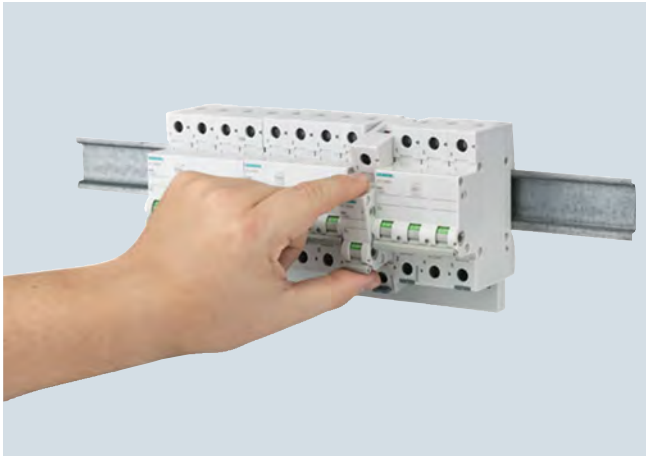

- Replacement of a device from the busbar-mounted assembly requires no tools

- The On/Off switches are ideal for quick and easy mounting of auxiliary switches

Technical specifications

			5TL1132 5TL1232 5TL1332 5TL1432 5TL1632	5TL1140 5TL1240 5TL1340 5TL1440 5TL1640	5TL1163 5TL1263 5TL1363 5TL1463 5TL1663	5TL1180 5TL1280 5TL1380 5TL1480 5TL1680	5TL1191 5TL1291 5TL1391 5TL1491 5TL1691	5TL1192 5TL1292 5TL1392 5TL1492 5TL1692
Standards			IEC/EN 60947-3 (VDE 0660-107)					
Approvals			EN 60669-1					
Rated operational current I_e	Per conduct. path	A	32	40	63	80	100	125
Rated operational voltage U_e	1-pole Multi-pole	V AC V AC	250 440					
Rated power dissipation P_v	Per pole, max.	VA	0.7	0.9	2.2	3.5	5.5	8.6
Rated thermal current I_{th}		A	32	40	63	80	100	125
Rated breaking capacity AC -22A	At p.f. = 0.65	A	96	120	196	240	300	375
Rated making capacity AC-22A	At p.f. = 0.65	A	96	120	196	240	300	375
Rated short-circuit making capacity I_{cm} In conjunction with fuse of the same rated operational current	EN 60269 gL/gG	kA	10					
Rated impulse withstand voltage U_{imp}		kV	>5					
Clearances	Open contacts Between the poles	mm mm	>7 >7					
Creepage distances		mm	>7					
Mechanical service life		Switching cycles	20000					
Electrical service life		Switching cycles	10000		5000	1000		
Minimum contact load		V; mA	24; 300					
Rated power Switching of resistive loads including moderate overload AC-21	1-pole 2-pole 3-/4-pole	kW kW kW	5 9 15	6.5 11 15	10 18 30	13 22 39	16 28 48	16 28 48
Rated short-time withstand current I_{cw} Per conducting path at p.f. = 0.7 (The corresponding rated surge current can be established by multiplying by factor 1.5)	Up to 0.2 s Up to 0.5 s Up to 1 s Up to 3 s	A A A A	760 500 400 280	950 630 500 350	1500 1000 800 560	2700 1650 1350 800	3400 2100 1700 1000	3400 2100 1700 1000
Terminals Max. tightening torque	± screw (Pozidriv)	 Nm	2 3.5					
Conductor cross-sections	Rigid Flexible, with end sleeve	mm^2 mm^2	1 ... 35 1 ... 25			2.5 ... 50 2.5 ... 50		
Permissible ambient temperature		°C	-5 ... +40					
Resistance to climate At 95 % relative humidity	Acc. to DIN 50015	°C	45					

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Selection and ordering data

	Version	I_e	U_e	Conductor cross-sections	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
			V AC	Up to mm²	MW							kg
	On/Off switches (32 A to 125 A) can be used as switch disconnectors according to EN 60947-1											
	With sealable switch position, separate handle locking device can be retrofitted, auxiliary switches can be retrofitted											
	1 NO, red handle	63	230	35	1		5TL1163-1		1	1 unit	1BK	0.115
		100		50			5TL1191-1		1	1 unit	1BK	0.125
	1 NO, gray handle	32		35			5TL1132-0		1	1 unit	1BK	0.115
		40					5TL1140-0		1	1 unit	1BK	0.115
		63					5TL1163-0		1	1 unit	1BK	0.109
		80		50			5TL1180-0		1	1 unit	1BK	0.115
		100					5TL1191-0		1	1 unit	1BK	0.125
		125					5TL1192-0		1	1 unit	1BK	0.125
	2 NO, red handle	63	400	35	2		5TL1263-1		1	1 unit	1BK	0.208
		100		50			5TL1291-1		1	1 unit	1BK	0.222
	2 NO, gray handle	32		35			5TL1232-0		1	1 unit	1BK	0.210
		40					5TL1240-0		1	1 unit	1BK	0.210
		63					5TL1263-0		1	1 unit	1BK	0.212
		80		50			5TL1280-0		1	1 unit	1BK	0.224
		100					5TL1291-0		1	1 unit	1BK	0.225
		125					5TL1292-0		1	1 unit	1BK	0.240
	3 NO, red handle	63	400	35	3		5TL1363-1		1	1 unit	1BK	0.330
		100		50			5TL1391-1		1	1 unit	1BK	0.360
	3 NO, gray handle	32		35			5TL1332-0		1	1 unit	1BK	0.308
		40					5TL1340-0		1	1 unit	1BK	0.325
		63					5TL1363-0		1	1 unit	1BK	0.310
		80		50			5TL1380-0		1	1 unit	1BK	0.332
		100					5TL1391-0		1	1 unit	1BK	0.322
		125					5TL1392-0		1	1 unit	1BK	0.330
	3 NO + N, red handle	63	400	35	4		5TL1663-1		1	1 unit	1BK	0.435
		100		50			5TL1691-1		1	1 unit	1BK	0.475
	3 NO + N, gray handle	32		35			5TL1632-0		1	1 unit	1BK	0.411
		40					5TL1640-0		1	1 unit	1BK	0.413
		63					5TL1663-0		1	1 unit	1BK	0.413
		80		50			5TL1680-0		1	1 unit	1BK	0.440
		100					5TL1691-0		1	1 unit	1BK	0.475
		125					5TL1692-0		1	1 unit	1BK	0.475
	4 NO, gray handle	32		35	4		5TL1432-0		1	1 unit	1BK	0.411
		40					5TL1440-0		1	1 unit	1BK	0.412
		63					5TL1463-0		1	1 unit	1BK	0.415
		80		50			5TL1480-0		1	1 unit	1BK	0.439
		100					5TL1491-0		1	1 unit	1BK	0.440
		125					5TL1492-0		1	1 unit	1BK	0.444
	Auxiliary switches (AS)											
	For all 5TL1 switches, for right-hand-side retrofitting with factory-fitted brackets, for further data, see chapter "Miniature Circuit Breakers"											
	1 NO + 1 NC				0.5	►	5ST3010		1	1 unit	1AD	0.055
	2 NO				0.5		5ST3011		1	1 unit	1AD	0.066
	2 NC				0.5		5ST3012		1	1 unit	1AD	0.067
	Auxiliary switches for low power											
	1 NO + 1 NC				0.5	►	5ST3013		1	1 unit	1AD	0.064
	2 NO				0.5		5ST3014		1	1 unit	1AD	0.067
	2 NC				0.5		5ST3015		1	1 unit	1AD	0.064

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* You can order this quantity or a multiple thereof.

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	Version	I_e	U_e	Conductor cross-sections	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	V AC	Up to mm^2	MW							kg
	Handle locking devices For all 5TL1 switches, can be sealed against undesired/inadvertent mechanical On/Off switching, for padlock with max. 3 mm shackle						5ST3806		1	5 units	1AD	0.003
	Terminal covers For all 5TL1 switches, in 1 MW per pole version, for covering screw openings, sealable					►	5ST3800		1	10 units	1AD	0.002
	Spacers Contour for modular devices with a mounting depth of 70 mm; can be snapped onto either side of the busbar, so that two spacers allow for convenient cable routing				0.5		5TG8240		1	2 units	1BK	0.017
	Phase connectors For easier wiring in various wiring versions and bus mountings or as a support terminal for conductors from 2.5 mm^2 to 50 mm^2											
	1P	125	230	50	1		5TL1192-4		1	1 unit	1BK	0.105
	N conductor connectors For easier wiring in various circuit versions and bus mountings or as a support terminal for N conductors from 2.5 mm^2 to 50 mm^2 with blue color marking											
	1P	125	230	50	1		5TL1192-3		1	1 unit	1BK	0.105

* You can order this quantity or a multiple thereof.

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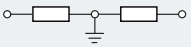
Benefits

- Compact DIN rail device for applications up to 1000 V DC
- Separate switching position indication for unambiguous indication of the switching state
- Compatible with all miniature circuit breaker accessories – reduced stock-keeping
- The effective touch protection when grasping the device considerably exceeds the requirements of BGV A3
- Manual snap-on fixing and release systems that require no tools enable fast assembly and disassembly of switch disconnectors
- Clear and visible conductor connection that can be easily checked in front of the busbar

Technical specifications

			5TE2515-1
Standards			IEC/EN 60947-3, IEC/EN 60669-1, GB14048.3 CCC
Rated operational current I_e		A	63
Rated operational voltage U_e	For 4 poles in series	V DC	880
Rated power dissipation P_v	Per pole, max.	W	4.4
Rated short-circuit strength I_{cw}	1000 V DC, 4-pole	A	760
Rated short-circuit making capacity I_{cm}	1000 V DC, 4-pole	A	500
Rated impulse withstand voltage U_{imp}		kV	> 4
Max. operational voltage U_{max}		V DC	1000
Overvoltage category			II at U = 880 V ... 440 V  I at U = 1000 V
Mechanical service life		Switching cycles	10000
Electrical service life		Switching cycles	5000
Utilization category			DC-21B
Minimum contact load		V; mA	24; 300
Terminals Max. tightening torque	± screw (Pozidriv)	Nm	PZ 2 2.5 ... 3
Conductor cross-sections	Rigid Flexible, with end sleeve	mm^2 mm^2	0.75 ... 35 0.75 ... 25
Permissible ambient temperature		°C	-25 ... +45
Resistance to climate At 95 % relative humidity	Acc. to DIN 50015	°C	45

Selection and ordering data

	Version	I_e	U_e	Conductor cross-sections	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	V AC	Up to mm^2	MW							kg
	DC isolators 1000 V DC, can be used as switch disconnectors according to EN 60947-3, with sealable switch position, separate handle locking device can be retrofitted, auxiliary switch can be retrofitted											
	4 NO	63	--	35	4		**5TE2515-1**		1	1 unit	1BK	0.645
	Auxiliary switches (AS) For all 5TE2 DC isolators, for right-hand-side retrofitting with factory-fitted brackets, for further technical specifications, see chapter "Miniature Circuit Breakers"											
	1 NO + 1 NC				0.5	►	**5ST3010**		1	1 unit	1AD	0.055
	2 NO				0.5		**5ST3011**		1	1 unit	1AD	0.066
	2 NC				0.5		**5ST3012**		1	1 unit	1AD	0.067
	Auxiliary switches for low power											
	1 NO + 1 NC				0.5	►	**5ST3013**		1	1 unit	1AD	0.064
	2 NO				0.5		**5ST3014**		1	1 unit	1AD	0.067
	2 NC				0.5		**5ST3015**		1	1 unit	1AD	0.064

* You can order this quantity or a multiple thereof.

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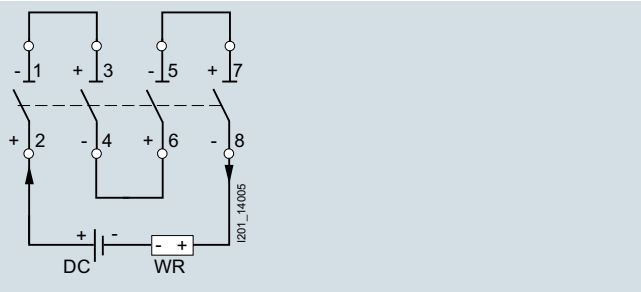
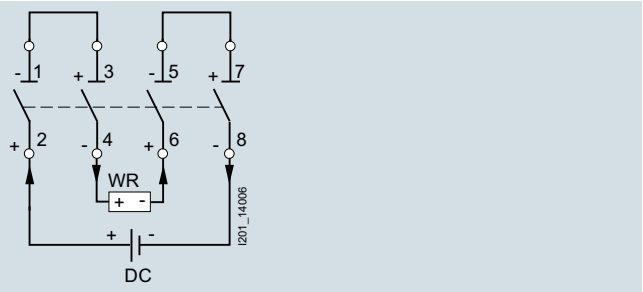
Configuration

For DC voltages up to 1000 V, the four poles need to be connected in series. In contrast to normal flush-mounting switches, these devices are also fitted with arcing chambers and permanent solenoids to aid the positive quenching of the electric arc in direct currents.

For this reason it is essential to comply with the polarity specifications of the switches when connecting the conductor. Suitable precautions should be taken during plant configuration to ensure there can be no polarity reversal in DC operation.





Legend:
WR: Inverter

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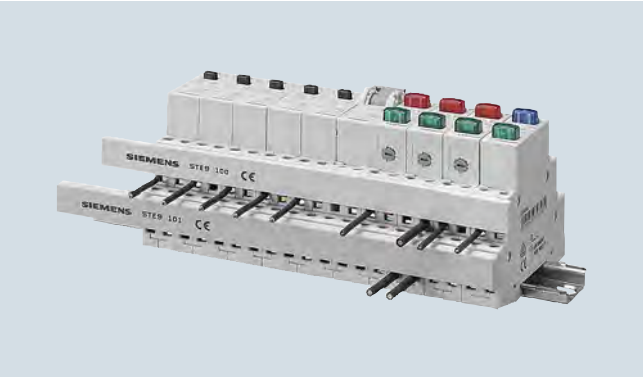
5ST busbars for modular installation devices

Overview

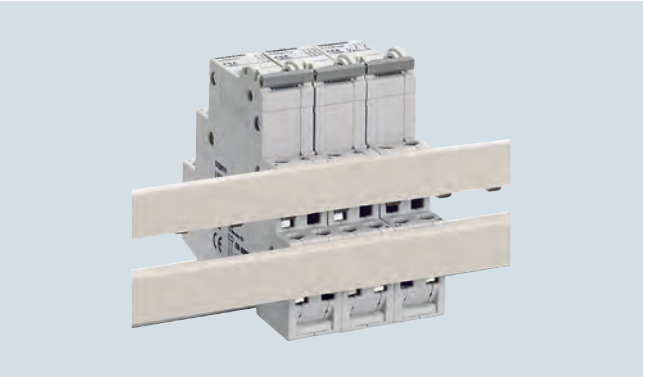
Siemens has developed a rail-mounting concept which makes the linking of switching devices just as easy as that of miniature circuit breakers.

The arrangement of the terminals on the devices is adapted to the bus mounting. With only two busbars, this saves considerable mounting time.

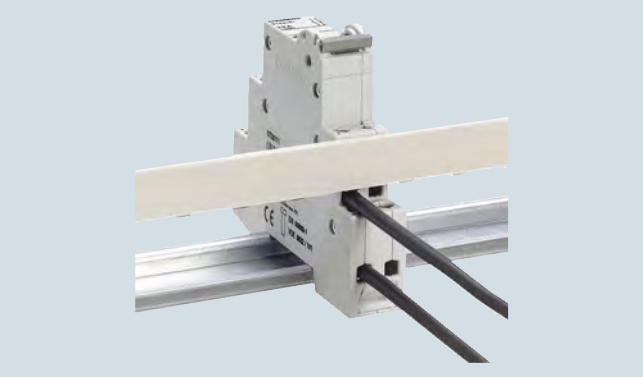
Benefits



- All 5TE8 switches (20 A and 32 A), 5TE48 pushbuttons, 5TE58 light indicators and 5TT41 remote control switches, 5TT42 switching relays and 5TL1 On/Off switches can be bus-mounted



- All 5TE8 switches (20 A and 32 A) in 1 MW can be fed via the single or two-phase busbars. Thus 2 two-phase busbars support a 4-pole infeed



- Infeed: The phase busbar is fed in at the tunnel terminal for conductors up to 6 mm^2 up to 32 A. No additional feeder terminals required

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Selection and ordering data

	Version	Length mm	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Single-phase busbars For all 5TE8, 20 A and 32 A switches In the 12 MW version for the cutting of unused terminal lugs to ensure insulation clearances if one device terminal is to be supplied separately despite being mounted on the bus, modular clearance = 1 MW Busbar infeed to unit terminal with conductor cross-section of 6 mm^2 up to 32 A Can be mounted top or bottom in the front or rear terminal area Note: An end cap is not required on single-phase busbars	210		**5TE9100**		1	10 units	1BK	0.041
	Two-phase busbars For all 5TE8, 20 A and 32 A switches In 12 MW version with 1 MW division, whereby the two busbars are offset by 0.5 MW Both copper conductors of the two-phase busbar are insulated together Busbar infeed to unit terminal with conductor cross-section of 6 mm^2 up to 32 A Can be mounted from top or bottom, or in the front or rear terminal area, thus allowing realization of a 4-conductor connection using 2 two-phase busbars	220		**5TE9101**		1	10 units	1BK	0.075
	End caps for two-phase busbars End caps for 5TE9101 two-phase busbars to maintain insulation clearances when the bar is being cut 1 set = 10 units	--		**5TE9102**		1	1 set	1BK	0.005
	5ST36 and 5ST37 busbar systems All busbars of the 5ST36 and 5ST37 busbar systems can also be used for all 5TE8 switches from 32 A to 125 A in 1 MW per pole versions (see chapter "Miniature Circuit Breakers").	--							

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* You can order this quantity or a multiple thereof.

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5TT4 remote control switches

Overview

Remote control switches are used in residential and non-residential buildings, as well as the switchboard engineering sector. They trip in the event of "current inrushes", i.e. pulses, and then electromechanically save the switching position, even in the event of a power failure.

All the devices have the VDE mark and can also be equipped with an additional auxiliary switch. All devices have a switching position indication and are operated manually. The switching noise is particularly quiet and meets the requirements of residential buildings.

Benefits

- Remote control switches with central/group switching support convenient and high feature applications
- High functional reliability due to electromechanical design without fault-prone electronics
- The devices have no standby losses
- All devices have a switching position indication and are operated manually
- The remote control switches can be bus-mounted on 5TE9100 and 5TE9101 busbars; e.g.: bus mounting of the N conductor and/or infeed
- All the remote control switches can be fitted with an additional auxiliary switch

Central switching functions

Versions with central On/Off function allow the central switching of all connected remote control switches. This type of central switching can also be actuated using a time switch. All remote control switches can be switched to the On or Off switching state, regardless of their current switching state.

Contact sequences

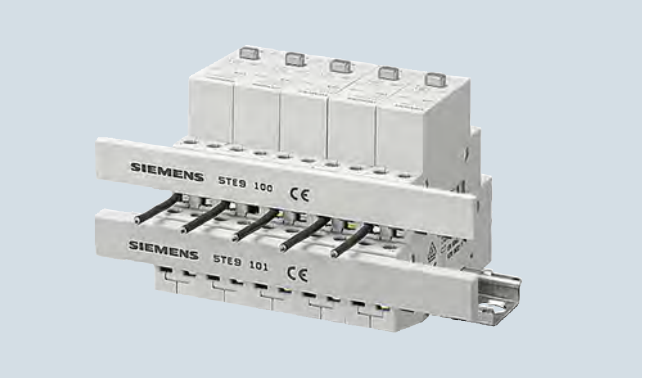
1 – 2 – 1+2 – 0 or **1 – 0 – 2 – 0** means:

0: No contact closed
1: Only contact 1 closed
2: Only contact 2 closed
1+2: Contact 1 and Contact 2 are closed

The contact positions are constantly changing with each pushbutton impulse.

Note:
Synchronous switching of the contacts cannot be guaranteed with parallel switching. Products with central/group switching must be used for the mutual control of several remote control switches.

Bus mounting



All 5TT41 remote control switches can be bus-mounted with each other.

Note:

For suitable busbars for the 5TT41 remote control switches, see page 8/24.

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Technical specifications

			Remote control switches				Auxiliary switches	
			5TT4101 5TT4102 5TT4105 5TT4111 5TT4112 5TT4114 5TT4115	**5TT4103 5TT4104**	**5TT412 5TT415**	**5TT413 5TT414**	**5TT4900**	**5TT4901**
Standards			IEC 60669-1, IEC 60669-2, IEC 60669-3, EN 60669 (VDE 0632), EN 60669-2-2, EN 60669-2-2/A1				EN 60947-1 (VDE 0660 Part 100) EN 60947-5-1 (VDE 0660 Part 200)	
Approvals			VDE					
Contact type			1 NO 2 NO 1 NO 1 NC	3 NO 4 NO	1 NO 2 NO 3 NO 1 NO 1 NC	Series Shutter/ blind	1 CO	1 CO
Manual operation			Yes				--	
Switching position indication			Yes			--		
Rated control voltage U_c		V AC V DC	8 ... 230 12 ... 110				-- --	
Primary operating range		× U_c	0.8 ... 1.1				--	
Rated frequency f_c (AC types)		Hz	50				--	
Rated impulse withstand voltage U_{imp}		kV	4				1	
Rated power dissipation P_v								
• Magnet coil, only pulse		W/VA	4.5/7	9/13	4.5/7		--	
• Per contact at 16 A		W	1.2				--	
Minimum contact load		V AC; mA	10; 100					5 AC/DC; 1
Rated operational current I_e at p.f. = 0.6 ... 1		A	16				5	0.1
Rated operational voltage U_e								
• 1 NO		V AC	250	--	250	--	250	30 AC/DC
• 2 NO		V AC	400	--	400	250	--	
• 3 NO		V AC	--	400	400	--	--	
• 4 NO		V AC	400	400	--	--	--	
• 1 NO + 1 NC		V AC	250	--	250	--	--	
Glow lamp load at 230 V		mA	5				--	
• With 1 5TT4920 compensator		mA	25				--	
• With 2 5TT4920 compensators		mA	45				--	
Incandescent lamp load[2]		W	1200				--	
Different phases between magnet coil/contact			Permissible				--	
Contact gap		mm	> 1.2				< 1.2	
Safe separation Creepage distances and clearances between magnet coil/ contact		mm	> 6					
Pushbutton malfunction Protected against continuous voltage, safe due to design			Yes	PTC	Yes[1]	Yes	--	
Minimum pulse duration		ms	50					
Electrical service life At I_e/U_e, p.f. = 0.6; incandescent lamp load 600 W		In switching cycles	50000					
Terminals ± screw (Pozidriv)			1					
Conductor cross-sections								
• Rigid		mm^2	1.5 ... 6				0.5 ... 4	
• Flexible, with end sleeve		mm^2	1 ... 6				0.75 ... 4	
Resistance to climate At 95 % relative humidity	Acc. to DIN 50015	°C	35					
Permissible ambient temperature		°C	-10 ... +40					
Degree of protection	Acc. to EN 60529		IP20, with connected conductors					
Mounting position			Any					

[1] For 2.5 MW 5TT4123-0 devices with PTC.

[2] For 15000 switching cycles.

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Selection and ordering data

	Contacts	U_e	I_e	U_c	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A AC	V AC	V DC	MW							kg
	Remote control switches, auxiliary switches can be retrofitted												
	1 NO	250	16	230		1	►	5TT4101-0		1	1/12 units	1BK	0.123
				115				5TT4101-1		1	1 unit	1BK	0.138
				24			►	5TT4101-2		1	1 unit	1BK	0.133
				12				5TT4101-3		1	1 unit	1BK	0.135
				8				5TT4101-4		1	1 unit	1BK	0.129
	2 NO	400	16	230		1	►	5TT4102-0		1	1 unit	1BK	0.142
				115				5TT4102-1		1	1 unit	1BK	0.150
				24			►	5TT4102-2		1	1 unit	1BK	0.143
				12				5TT4102-3		1	1 unit	1BK	0.148
				8				5TT4102-4		1	1 unit	1BK	0.141
	3 NO	400	16	230		2	►	5TT4103-0		1	1 unit	1BK	0.196
				24			►	5TT4103-2		1	1 unit	1BK	0.195
	4 NO	400	16	230		2	►	5TT4104-0		1	1 unit	1BK	0.206
				24			►	5TT4104-2		1	1 unit	1BK	0.206
	1 NO + 1 NC	250	16	230		1	►	5TT4105-0		1	1 unit	1BK	0.143
				115				5TT4105-1		1	1 unit	1BK	0.150
				24			►	5TT4105-2		1	1 unit	1BK	0.141
				12				5TT4105-3		1	1 unit	1BK	0.146
				8				5TT4105-4		1	1 unit	1BK	0.141
	Remote control switches DC applications												
	1 NO	250	16		110	1	►	5TT4111-1		1	1 unit	1BK	0.144
					24		►	5TT4111-2		1	1 unit	1BK	0.135
					12		►	5TT4111-3		1	1 unit	1BK	0.149
	2 NO	400	16		110	1	►	5TT4112-1		1	1 unit	1BK	0.150
					24		►	5TT4112-2		1	1 unit	1BK	0.145
					12		►	5TT4112-3		1	1 unit	1BK	0.130
	1 NO + 1 NC	250	16		110	1	►	5TT4115-1		1	1 unit	1BK	0.146
					24		►	5TT4115-2		1	1 unit	1BK	0.145
					12		►	5TT4115-3		1	1 unit	1BK	0.149
	4 NO	400	16		110	2	►	5TT4114-1		1	1 unit	1BK	0.215
					24		►	5TT4114-2		1	1 unit	1BK	0.207
	Remote control switches with central On/Off switching, auxiliary switch cannot be retrofitted												
	1 NO	250	16	230		1.5	►	5TT4121-0		1	1 unit	1BK	0.155
				24			►	5TT4121-2		1	1 unit	1BK	0.163
	2 NO	400	16	230		1.5	►	5TT4122-0		1	1 unit	1BK	0.166
				24			►	5TT4122-2		1	1 unit	1BK	0.174
	3 NO	400	16	230		2.5	►	5TT4123-0		1	1 unit	1BK	0.227
	1 NO + 1 NC	250	16	230		1.5	►	5TT4125-0		1	1 unit	1BK	0.165
	Remote control switches, with central and group On/Off switching, auxiliary switch cannot be retrofitted												
	1 NO	250	16	230		1.5	►	5TT4151-0		1	1 unit	1BK	0.157
				24		1.5	►	5TT4151-2		1	1 unit	1BK	0.144
	2 NO	400	16	230		1.5	►	5TT4152-0		1	1 unit	1BK	0.173
				24		1.5	►	5TT4152-2		1	1 unit	1BK	0.182
	Series remote control switches Contact sequence 1 - 2 - 1+2 - 0 auxiliary switch cannot be retrofitted												
	2 NO	250	16	230		1	►	5TT4132-0		1	1 unit	1BK	0.143
				12			►	5TT4132-3		1	1 unit	1BK	0.145

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* You can order this quantity or a multiple thereof.

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	Contacts	U_e	I_e	U_c	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A AC	V AC	V DC	MW							kg
	Blinds remote control switches **Contact sequence 1 – 0 – 2 – 0** **auxiliary switch cannot be retrofitted**												
	2 NO	250	16	230		1	▶	**5TT4142-0**		1	1 unit	1BK	0.143
				24				**5TT4142-2**		1	1 unit	1BK	0.146
				12				**5TT4142-3**		1	1 unit	1BK	0.146
	Auxiliary switches **One device can be retrofitted per remote control switch**												
	1 CO	250	5			0.5	▶	**5TT4900**		1	1 unit	1BK	0.051
	1 CO for small power	30 AC/DC	0.1			0.5	▶	**5TT4901**		1	1 unit	1BK	0.048
	Compensators **for increasing the glow lamp load by 20 mA**												
		250	--			1	▶	**5TT4920**		1	1 unit	1BK	0.073

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Overview

Switching relays are used in residential, non-residential and industrial buildings for the purpose of contact multiplication. They can be used with safe isolation between coil voltage and contact.

With the 5TE9100 and 5TE9101 busbars, the switching relays can be mounted quickly and safely, e.g. by bus mounting the N conductor and/or infeed.

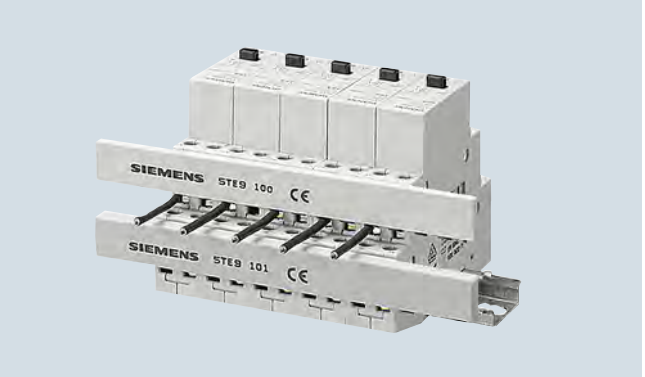
Note:

For suitable busbars for the 5TT42 switching relays, see page 8/24.

Benefits

- Easy installation due to busbar mounting
- Switching position indication when checking the plant for enhanced safety
- Manual intervention through manual operation

Bus mounting



All 5TT42 switching relays can be bus-mounted with each other.

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Technical specifications

			5TT4201-.	5TT4202-.	5TT4204-.	5TT4205-.	5TT4206-.	5TT4207-.	5TT4217-.
Standards			EN 60947-5-1, EN 60669-2-2						
Approvals			VDE, CCC						
Contact type			1 NO	2 NO	4 NO	1 NO + 1 NC	1 CO	2 CO	2 CO
Manual operation			Yes						
Rated control voltage U_c		V AC V DC	8 ... 230 --						-- 12 ... 110
Primary operating range		× U_c	0.8 ... 1.1						
Rated frequency f_c		Hz	50						
Rated impulse withstand voltage U_{imp}		kV	4						
Rated power dissipation P_v • Magnet coil • Per contact at 16 A		W/VA W	2.4/3.0 1.0	2.4/3.0	4.8/6.0	2.4/3.0	2.4/3.0	2.4/3.0	1.7
Minimum contact load		V AC; mA	10; 100						
Rated operational current I_e At p.f.φ = 0.6 ... 1		A	16						
Rated operational voltage U_e			250	400	400	400	250	400	400
Different phases Between magnet coil/contact			Permissible						
Contact gap		mm	> 1.2				< 1.2		
Safe separation		mm	> 6						
Electrical service life At I_e/U_e, p.f. = 0.6; incandescent lamp load 600 W		Switching cycles	50000						
Terminals	± screw (Pozidriv)		1						
Conductor cross-sections • Rigid • Flexible, with end sleeve		mm^2 mm^2	1.5 ... 6 1 ... 6						
Resistance to climate At 95 % relative humidity	Acc. to DIN 50015	°C	35						
Permissible ambient temperature		°C	-10 ... +40						
Degree of protection	Acc. to EN 60529		IP20, with connected conductors						
Mounting position			Any						

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Selection and ordering data

	Contacts	U_e	I_e	U_c	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A AC	V AC	V DC	MW							kg
	Switching relays for AC voltage												
	1 NO	250	16	230	--	1	►	5TT4201-0		1	1/12 units	1BK	0.114
				115				5TT4201-1		1	1 unit	1BK	0.126
				24			►	5TT4201-2		1	1 unit	1BK	0.130
				12			►	5TT4201-3		1	1 unit	1BK	0.129
				8			►	5TT4201-4		1	1 unit	1BK	0.130
	2 NO	400	16	230	--	1	►	5TT4202-0		1	1 unit	1BK	0.134
				115				5TT4202-1		1	1 unit	1BK	0.143
				24			►	5TT4202-2		1	1 unit	1BK	0.141
				12				5TT4202-3		1	1 unit	1BK	0.137
				8				5TT4202-4		1	1 unit	1BK	0.146
	4 NO	400	16	230	--	2	►	5TT4204-0		1	1 unit	1BK	0.251
				115				5TT4204-1		1	1 unit	1BK	0.256
				24			►	5TT4204-2		1	1 unit	1BK	0.263
				12				5TT4204-3		1	1 unit	1BK	0.250
				8				5TT4204-4		1	1 unit	1BK	0.268
	1 NO + 1 NC	400	16	230	--	1	►	5TT4205-0		1	1 unit	1BK	0.133
				115				5TT4205-1		1	1 unit	1BK	0.151
				24			►	5TT4205-2		1	1 unit	1BK	0.140
				12				5TT4205-3		1	1 unit	1BK	0.136
				8				5TT4205-4		1	1 unit	1BK	0.143
	1 CO	250	16	230	--	1	►	5TT4206-0		1	1 unit	1BK	0.126
				115				5TT4206-1		1	1 unit	1BK	0.129
				24			►	5TT4206-2		1	1 unit	1BK	0.133
				12				5TT4206-3		1	1 unit	1BK	0.129
				8				5TT4206-4		1	1 unit	1BK	0.138
	2 CO	400	16	230	--	1	►	5TT4207-0		1	1 unit	1BK	0.141
				115				5TT4207-1		1	1 unit	1BK	0.144
				24			►	5TT4207-2		1	1 unit	1BK	0.147
				12				5TT4207-3		1	1 unit	1BK	0.156
				8				5TT4207-4		1	1 unit	1BK	0.148
	Switching relays for direct voltage												
	2 CO	400	16	--	110	1	►	5TT4217-1		1	1 unit	1BK	0.149
					30		►	5TT4217-6		1	1 unit	1BK	0.142
					24		►	5TT4217-2		1	1 unit	1BK	0.149
					12		►	5TT4217-3		1	1 unit	1BK	0.151
	Spacers												
	In the case of higher ambient temperatures, we recommend placing a spacer after every second switching relay for better heat dissipation.					0.5		5TG8240		1	2 units	1BK	0.017

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* You can order this quantity or a multiple thereof.

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5TT50 Insta contactors, AC/DC technology

Overview

The Insta contactors are the ideal switching device for controlling AC/DC control voltage in industrial applications and infrastructure.

In addition to their basic function, they can also be used for the On/Off switching of single-phase and three-phase electrical motors. The 5TT50 Insta contactors meet the requirements of EN 60947 and are approved to UL 508.

The simultaneous switching of lamp loads at varying phases can be achieved with a single contactor, whereby it is essential to strive for/ensure a symmetrical load of the phases. Upstream short-circuit detection devices must disconnect at all poles or must be equipped with phase failure detection. Violations of the specified capacitor load limits may cause excessive inrush peak currents. The level of inrush peak currents is also affected by the following factors:

- Length and cross-section of the installed supply lines
- Type of electronic ballasts
- Brand/make of lamp

Benefits

- Insta contactors with O/I automatic function enable the testing of a plant via manual switch without the need to apply a control voltage

- Switching position indication for fast recognition of operating states offers greater safety when checking the plant

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Technical specifications

			5TT500 2-pole	5TT503 4-pole	5TT504 4-pole	5TT505 4-pole
Standards			EN 60947-4-1; EN 60947-5-1; EN 61095			
Approvals			UL 508; UL File No. E303328; CCC			
Rated frequency at AC f_n		Hz	50/60			
Rated control voltage U_c		V AC V DC	24, 230 24, 220	24, 115, 230 24, 110, 220	24, 230 24, 230	
Primary operating range		× U_c	0.85 ... 1.1			
Rated operational voltage U_e		V	230	400		
Rated operational current I_e		At V AC	Acc. to UL 480; acc. to IEC 440			
• AC-1/AC-7a, NO contacts		A	20	25	40	63
• AC-1/AC-7a, NC contacts		A	20	25	40	63
• AC-3/AC-7b, NO contacts		A	9	8.5	22	30
• AC-3/AC-7b, NC contacts		A	6	8.5	22	30
Rated power dissipation P_v						
• Pick-up power (without manual switch or manual switch in "I" position)		VA/W	2.1/2.1	2.6/2.6	5/5	5/5
• Pick-up power (with manual switch in "AUTO" position)		VA/W	2.1/4.1	2.6/2.6	5/5	5/5
• Holding power		VA/W	2.1/2.1	2.6/2.6	5/5	5/5
• Per contact AC-1/AC-7a		VA	1.7	2.2	4	8
Switching times						
• Closing (NO contacts)		ms	15 - 45	15 - 45	15 - 20	
• Opening (NO contacts)		ms	20 - 50	20 - 70	35 - 45	
Rated impulse withstand voltage U_{imp}		kV	≤ 4			
Contact gap (S contacts) min.		mm	3.6			
Electrical service life						
At I_e and load	AC-1/AC-7a	For switching cycles	200000		100000	
	AC-3/AC-7b	For switching cycles	300000	500000		150000
Mechanical service life		For switching cycles	3 million			
Maximum switching frequency						
At load	AC-1/AC-7a	Switching cycles/h	600			
	AC-3/AC-7b	Switching cycles/h	600			
Switching of resistive loads AC-1		V AC	230	400		
For rated operational power P_s (NO contacts)						
• Single-phase		kW	4	5.4	8.7	13.3
• Three-phase		kW	--	16	26	40
Switching of three-phase asynchronous motors AC-3		V AC	230	400		
For rated operational power P_s (NO contacts)						
• Single-phase		kW	1.3/0.75	1.3/1.3	3.7/3.7	5/5
• Three-phase		kW	--	4	11	15
Minimum switching capacity		V; mA	≥ 17; 50			
Overload withstand capability						
Per conducting path (NO contacts only)	At 10 s	A	72	68	176	240
Short-circuit protection, according to coordination type 1						
Back-up fuse characteristic gL/gG		A	20	25	63	80
Terminals	± screw (Pozidriv)					
• Coil connection			1	1		
• Main connection			1	2		
Tightening torques						
• Coil connection		Nm	0.6	0.6		
• Main connection		Nm	1.2	3.5		
Conductor cross-sections						
• Coil connection						
- Solid		mm^2	1.0 ... 2.5			
- Stranded, with end sleeve		mm^2	1.0 ... 2.5			
- AWG cables		AWG	16 ... 10			
Tightening torque		lbs/in.	8			
• Main connection						
- Solid		mm^2	1.0 ... 10	1.5 ... 25		
- Stranded, with end sleeve		mm^2	1.0 ... 6	1.5 ... 16		
- AWG cables		AWG	16 ... 8	16 ... 4		
Tightening torque		lbs/in.	9	20		
Permissible ambient temperature						
• For operation		°C	-15 ... +55[1)]			
• For storage		°C	-50 ... +80			
Degree of protection	Acc. to EN 60529		IP 20, with connected conductors			
Acc. to UL 508	I_n	A	20	25	40	63
UL 508 General Use 240 V/480 V	FLA	A	20	25	40	63
UL 508 AC discharge lamps		A	20	25	30	40
UL 508 motor load 240 V	Power	hp	1	3	7.5	10
UL 508 motor load 480 V	Power	hp	--	5	15	20
UL 508 short-circuit at 480 V	K5 fuses	A	20	25	60	70
		kA	5			

[1)] Contactors can be operated at ambient temperatures of between -25 °C and +70 °C, but only under special conditions. For more information, please contact Siemens Support. For questions concerning heat dissipation, please refer to the instructions in the Configuration Manual "Switching Devices".

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5TT50 Insta contactors, AC/DC technology

Selection and ordering data

	Contacts	U_e	I_e	U_c		Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A AC	V AC	V DC	MW							kg
5TT5000-0	**Insta contactors** For AC or DC continuous operation, with switching position indication, with DC magnetic system												
	2 NO	230	20	230	220	1		**5TT5000-0**		1	1 unit	1BK	0.144
				24	24			**5TT5000-2**		1	1 unit	1BK	0.141
	1 NO, 1 NC	230	20	230	220	1		**5TT5001-0**		1	1 unit	1BK	0.146
				24	24			**5TT5001-2**		1	1 unit	1BK	0.144
	2 NC	230	20	230	220	1		**5TT5002-0**		1	1 unit	1BK	0.145
				24	24			**5TT5002-2**		1	1 unit	1BK	0.145
	4 NO	400	25	230	220	2		**5TT5030-0**		1	1 unit	1BK	0.271
				115	110			**5TT5030-1**		1	1 unit	1BK	0.264
				24	24			**5TT5030-2**		1	1 unit	1BK	0.281
	3 NO, 1 NC	400	25	230	220	2		**5TT5031-0**		1	1 unit	1BK	0.256
				24	24			**5TT5031-2**		1	1 unit	1BK	0.280
	2 NO, 2 NC	400	25	230	220	2		**5TT5032-0**		1	1 unit	1BK	0.283
				24	24			**5TT5032-2**		1	1 unit	1BK	0.150
	4 NC	400	25	230	220	2		**5TT5033-0**		1	1 unit	1BK	0.290
				24	24			**5TT5033-2**		1	1 unit	1BK	0.301
	4 NO	400	40	230	220	3		**5TT5040-0**		1	1 unit	1BK	0.449
				24	24			**5TT5040-2**		1	1 unit	1BK	0.405
	3 NO, 1 NC	400	40	230	220	3		**5TT5041-0**		1	1 unit	1BK	0.444
				24	24			**5TT5041-2**		1	1 unit	1BK	0.150
	2 NO, 2 NC	400	40	230	220	3		**5TT5042-0**		1	1 unit	1BK	0.459
				24	24			**5TT5042-2**		1	1 unit	1BK	0.460
	4 NC	400	40	230	220	3		**5TT5043-0**		1	1 unit	1BK	0.466
				24	24			**5TT5043-2**		1	1 unit	1BK	0.440
	4 NO	400	63	230	220	3		**5TT5050-0**		1	1 unit	1BK	0.452
				24	24			**5TT5050-2**		1	1 unit	1BK	0.419
	3 NO, 1 NC	400	63	230	220	3		**5TT5051-0**		1	1 unit	1BK	0.463
				24	24			**5TT5051-2**		1	1 unit	1BK	0.150
	2 NO, 2 NC	400	63	230	220	3		**5TT5052-0**		1	1 unit	1BK	0.457
				24	24			**5TT5052-2**		1	1 unit	1BK	0.437
5TT5000-6	**Automatic Insta contactor** For AC or DC continuous operation, with switching position indication, with DC magnetic system												
	2 NO	230	20	230	220	1		**5TT5000-6**		1	1 unit	1BK	0.140
				24	24			**5TT5000-8**		1	1 unit	1BK	0.142
	1 NO, 1 NC	230	20	230	220	1		**5TT5001-6**		1	1 unit	1BK	0.147
				24	24			**5TT5001-8**		1	1 unit	1BK	0.143
	4 NO	400	25	230	220	2		**5TT5030-6**		1	1 unit	1BK	0.280
				24	24			**5TT5030-8**		1	1 unit	1BK	0.288
	3 NO, 1 NC	400	25	230	220	2		**5TT5031-6**		1	1 unit	1BK	0.285
				24	24			**5TT5031-8**		1	1 unit	1BK	0.284
5TT5910-0	**Auxiliary switches** For mounting on right-hand side Max. one auxiliary switch per Insta contactor												
	2 NO	230, AC-15	6	--	--	0.5	▶	**5TT5910-0**		1	1 unit	1BK	0.041
	1 NO, 1 NC	230, AC-15	6	--	--		▶	**5TT5910-1**		1	1 unit	1BK	0.046
	Sealable terminal covers												
	For Insta contactor 20 A					1		**5TT5910-5**		1	2 units	1BK	0.002
	For Insta contactor 25 A					2		**5TT5910-6**		1	2 units	1BK	0.003
	For Insta contactors 40 A and 63 A					3		**5TT5910-7**		1	2 units	1BK	0.007

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* You can order this quantity or a multiple thereof.

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Overview

The 5TT58 Insta contactors are equipped with an AC magnetic system and are ideal for use under harsh conditions. The auxiliary switches can be mounted without tools. When equipped with terminal covers, the devices can also be sealed.

Insta contactors without manual switch

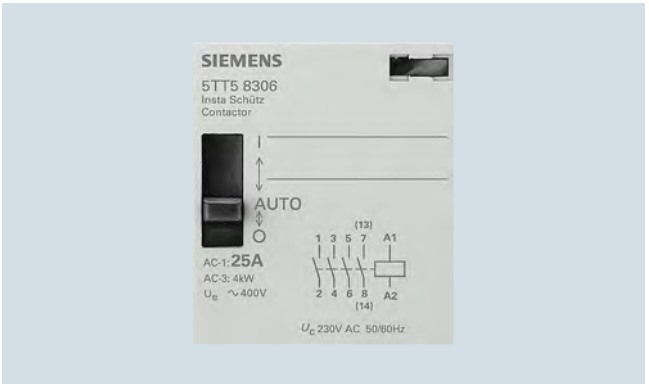
Insta contactors are ideal for a wide range of uses in industry, such as for motors where distribution technology plays a major role, e.g. in installations for heat pumps and air conditioning technology. In addition to their basic function, they can also be used for the On/Off switching of single-phase and three-phase electrical motors.

Insta contactors with manual switch

Insta contactors with manual operation can be switched on and off by hand.

Benefits

- Extremely long service life of 3 million switching cycles
- Safe cable routing through the cable entry funnel
- Insulated right through to the cable entry funnel
- Auxiliary switches can be retrofitted on all versions – even on the 20 A type



- Insta contactors with O/I/Automatic function enable the testing of a plant by manual switch without the need to apply a control voltage
- Switching position indication for fast recognition of operating states offers greater safety when checking the plant

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Technical specifications

			Insta contactors				Auxiliary switches
			5TT580.	**5TT582., 5TT583.**	**5TT584.**	**5TT585.**	**5TT5910**
Standards			IEC 60947-4-1, IEC 60947-5-1, IEC 61095; EN 60947-4-1, EN 60947-5-1, EN 61095				IEC 60947-5-1
Approvals			CCC				
Number of poles			2	4	4	4	2
Rated frequency at AC		Hz	50/60				
Rated control voltage U_c		V AC	24, 230	24, 115, 230	24, 230	24, 230	--
Primary operating range		× U_c	0.85 ... 1.1				--
Rated operational voltage U_e		V AC	230	400			230/400
Rated operational current I_e		A	20	25	40	63	6/4 (230/400 V)
Rated power dissipation P_v							
• Pick-up power (without manual switch or manual switch in "I" position)		VA/W	6/3.8	10/5	15.4/6		--
• Pick-up power (with manual switch in "AUTO" position)		VA/W	12/10	33/25	62/50		--
• Holding power		VA/W	2.8/1.2	5.5/1.6	7.7/3		--
• Per contact		VA	1.7	2.2	4	8	--
Switching times							
• Closing (NO contacts)		ms	15 ... 25	10 ... 20	15 ... 20		--
• Opening (NO contacts)		ms	20	20	10		--
• Closing (NC contacts)		ms	20 ... 30	20 ... 30	5 ... 10		--
• Opening (NC contacts)		ms	10	10	10 ... 15		--
Rated impulse withstand voltage U_{imp}		kV	4				
Rated insulation voltage U_i		V	440		500		
Contact gap, minimum		mm	3.6		3.4		4
Electrical service life							
At I_e and load							
• AC-1/AC-7a		For switching cycles	200000		100000		--
• AC-3/AC-7b			300000	500000	150000		--
Mechanical service life		For switching cycles	3 million				
Maximum switching frequency							
At load		In switching cycles/h	600				
Switching of resistive loads AC-1/AC-7a							
For rated operational power P_s							
• Single-phase 230 V		kW	4	5.4	8.7	13.3	--
• Three-phase 400 V		kW	--	16	26	40	--
Switching of three-phase asynchronous motors AC-3/AC-7b							
For rated operational power P_s							
• Single-phase 230 V		kW	1.3[1)]	1.3	3.7	5	--
• Three-phase 400 V		kW	--	4	11	15	--
Minimum switching capacity		V; mA	17; 50				12; 5
Overload withstand capability							
Per conducting path (NO contacts only)	At 10 s	A	72	68	176	240	--
Short-circuit protection, according to coordination type 1							
Back-up fuse characteristic gL/gG		A	20	25	63	80	6
Terminals	± screw (Pozidriv)						
• Coil connection			1		1.2		--
• Main connection			1		3.5		1
Tightening torques							
• Coil connection		Nm	0.6				--
• Main connection		Nm	1.2		2		0.8
Conductor cross-sections							
• Coil connection	Rigid	mm^2	1.0 ... 2.5				--
	Flexible, with end sleeve	mm^2	1.0 ... 2.5				--
• Main connection	Rigid	mm^2	1.0 ... 10		1 ... 25		1 ... 2.5
	Flexible, with end sleeve	mm^2	1.0 ... 6		1 ... 16		1 ... 2.5
Permissible ambient temperature[2)]							
• For operation		°C	-5 ... +55				
• For storage		°C	-30 ... +80				
Degree of protection	Acc. to EN 60529		IP20, with connected conductors				

[1)] For NO contacts only.

[2)] For questions concerning heat dissipation, please refer to the instructions in the Configuration Manual "Switching Devices".

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Selection and ordering data

	Version	U_e	I_e	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A AC	V AC	MW							kg
5TT5800-0	**Insta contactors without manual switch** For alternating current continuous operation, with switching position indication, with AC magnetic system											
	2 NO	230	20	230	1	▶	5TT5800-0		1	1 unit	1BK	0.138
				24		▶	5TT5800-2		1	1 unit	1BK	0.142
	1 NO, 1 NC	230	20	230		▶	5TT5801-0		1	1 unit	1BK	0.134
				24		▶	5TT5801-2		1	1 unit	1BK	0.145
	2 NC	230	20	230		▶	5TT5802-0		1	1 unit	1BK	0.141
				24		▶	5TT5802-2		1	1 unit	1BK	0.141
5TT5830-0	4 NO	400	25	230	2	▶	5TT5830-0		1	1 unit	1BK	0.257
				115			5TT5830-1		1	1 unit	1BK	0.256
				24		▶	5TT5830-2		1	1 unit	1BK	0.272
	3 NO, 1 NC	400	25	230		▶	5TT5831-0		1	1 unit	1BK	0.255
				115			5TT5831-1		1	1 unit	1BK	0.237
				24			5TT5831-2		1	1 unit	1BK	0.263
	4 NO For high capacitive loads up to 150 µF	400	25	230	2		5TT5820-0		1	1 unit	1BK	0.250
	2 NO, 2 NC	400	25	230		▶	5TT5832-0		1	1 unit	1BK	0.251
				24		▶	5TT5832-2		1	1 unit	1BK	0.262
	4 NC	400	25	230		▶	5TT5833-0		1	1 unit	1BK	0.266
				24			5TT5833-2		1	1 unit	1BK	0.271
5TT5840-0	4 NO	400	40	230	3	▶	5TT5840-0		1	1 unit	1BK	0.383
				24		▶	5TT5840-2		1	1 unit	1BK	0.395
	3 NO, 1 NC	400	40	230			5TT5841-0		1	1 unit	1BK	0.383
				24			5TT5841-2		1	1 unit	1BK	0.389
	2 NO, 2 NC	400	40	230			5TT5842-0		1	1 unit	1BK	0.392
				24			5TT5842-2		1	1 unit	1BK	0.402
	4 NC	400	40	230		▶	5TT5843-0		1	1 unit	1BK	0.389
				24			5TT5843-2		1	1 unit	1BK	0.376
	4 NO	400	63	230	3	▶	5TT5850-0		1	1 unit	1BK	0.378
				24		▶	5TT5850-2		1	1 unit	1BK	0.381
	3 NO, 1 NC	400	63	230		▶	5TT5851-0		1	1 unit	1BK	0.390
				24			5TT5851-2		1	1 unit	1BK	0.391
	2 NO, 2 NC	400	63	230			5TT5852-0		1	1 unit	1BK	0.397
				24			5TT5852-2		1	1 unit	1BK	0.409
	4 NC	400	63	230		▶	5TT5853-0		1	1 unit	1BK	0.410
				24			5TT5853-2		1	1 unit	1BK	0.400
5TT5910-0	**Auxiliary switches** For mounting on right-hand side Max. one auxiliary switch per Insta contactor											
	2 NO	230, AC-15	6	--	0.5	▶	5TT5910-0		1	1 unit	1BK	0.041
	1 NO, 1 NC	230, AC-15	6	--		▶	5TT5910-1		1	1 unit	1BK	0.046
	Sealable terminal covers											
	For Insta contactor 20 A				1		5TT5910-5		1	2 units	1BK	0.002
	For Insta contactor 25 A				2		5TT5910-6		1	2 units	1BK	0.003
	For Insta contactors 40 A and 63 A				3		5TT5910-7		1	2 units	1BK	0.007

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5TT58 Insta contactors, AC technology

	Version	U_e	I_e	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A AC	V AC	MW							kg
5TT5800-6	**Insta contactors with manual switch 0/I/Automatic** For alternating current continuous operation, with switching position indication, with AC magnetic system											
	2 NO	230	20	230	1	▶	**5TT5800-6**		1	1 unit	1BK	0.134
				24		▶	**5TT5800-8**		1	1 unit	1BK	0.143
	1 NO, 1 NC	230	20	230			**5TT5801-6**		1	1 unit	1BK	0.141
				24			**5TT5801-8**		1	1 unit	1BK	0.137
5TT5830-6	4 NO	400	25	230	2	▶	**5TT5830-6**		1	1 unit	1BK	0.253
				24		▶	**5TT5830-8**		1	1 unit	1BK	0.263
	3 NO, 1 NC	400	25	230		▶	**5TT5831-6**		1	1 unit	1BK	0.260
				24			**5TT5831-8**		1	1 unit	1BK	0.266
5TT5840-6	4 NO	400	40	230	3	▶	**5TT5840-6**		1	1 unit	1BK	0.388
				24			**5TT5840-8**		1	1 unit	1BK	0.371
	3 NO, 1 NC	400	40	230			**5TT5841-6**		1	1 unit	1BK	0.389
				24			**5TT5841-8**		1	1 unit	1BK	0.402
	4 NO	400	63	230		▶	**5TT5850-6**		1	1 unit	1BK	0.387
	Auxiliary switches For mounting on right-hand side Max. one auxiliary switch per Insta contactor											
	2 NO	230, AC-15	6	--	0.5	▶	**5TT5910-0**		1	1 unit	1BK	0.041
	1 NO, 1 NC	230, AC-15	6	--		▶	**5TT5910-1**		1	1 unit	1BK	0.046
	Sealable terminal covers											
	For Insta contactor 20 A				1		**5TT5910-5**		1	2 units	1BK	0.002
	For Insta contactor 25 A				2		**5TT5910-6**		1	2 units	1BK	0.003
	For Insta contactors 40 A and 63 A				3		**5TT5910-7**		1	2 units	1BK	0.007

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Overview

Soft-starting devices are rugged electronic control devices for soft starting of three-phase asynchronous machines. By means of phase-angle control, two of the motor's three phases are influenced in such a way that the current in these phases rises constantly. The motor torque behaves in the same way during start-up. This ensures that the drive can start without jolting. This rules out damage to drive elements because the starting torque does not rise abruptly on direct activation. This characteristic permits a low-cost design of the drive elements.

A clear reduction in starting noise can also be witnessed. On belt conveyor systems, sliding or tilting over of the goods conveyed is avoided. After starting, the power electronics is bypassed by means of an internal relay contact to minimize losses in the device.

Benefits

- Extends the service life of asynchronous motors and mechanical drive components.
- Separate possibility of setting the start-up time and the initial torque. Can be combined with motor brake devices.
- 2-phase motor control
- For motor power outputs up to 5.5 kW

Technical specifications

			5TT3440
Standards			EN 60947-4-2 (VDE 0660-117)
Supply/motor voltage		V AC	400
Primary operating range		× U_c	0.8 ... 1.1
Rated power		VA	3.5
Rated frequency		Hz	50/60
Rated power dissipation P_v	Coil/drive Contact[1] per pole		3.5 4.6
Rated output of motor - Max. - Min.	 At 400 V At 400 V	 VA VA	 5500 300
Startup voltage		%	30 ... 70
Starting ramp		s	0.1 ... 10
Recovery time		ms	100
Switching frequency 3 × I_N, T_{AN} = 10 s, ν_u = 20 % 3 × I_N, T_{AN} = 10 s, ν_u = 20 %		 Switching cycles/h Switching cycles/h	 36 (up to 3 kW) 20 (from 3...5.5 kW)
Semiconductor fuse	Quick-acting	A	35
Conductor cross-sections	Rigid Flexible, with end sleeve	max. mm² min. mm²	2 × 2.5 1 × 0.5
Permissible ambient temperature		°C	-20 ... +60
Resistance to climate	Acc. to EN 60068-1		20/60/4

1) For rated operational current.

Selection and ordering data

	Version	U_e	P_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	W	MW							kg
	Soft-starting devices, mounting depth 55 mm										
	Three-phase, 2-phase motor control	400	300 ... 5500	6		5TT3440		1	1 unit	1BK	0.444

* You can order this quantity or a multiple thereof.

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Overview

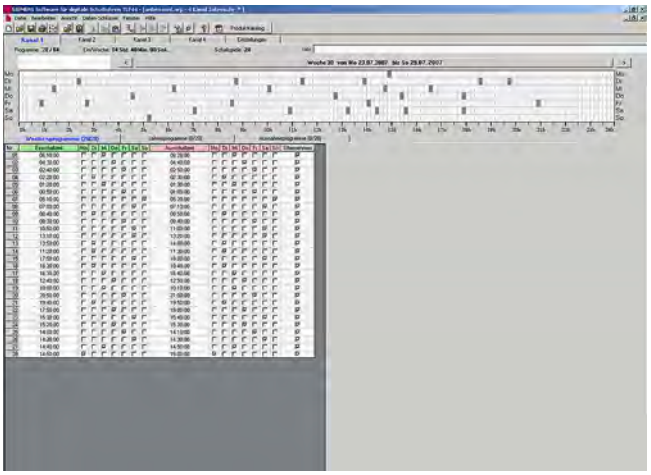
Top, Profi, Astro and Expert digital time switches

Text-assisted programming directly on the device.

The Profi, Astro and Expert digital time switches support plug-in data keys.

USB adapters

The Profi, Astro and Expert time switches are easy to program at the PC using the data key with the USB adapter and software.



- Clear data on the annual On time of the load enables a precise statement on the annual power consumption
- You can create switching programs conveniently at the PC, store it on the data key and transfer it locally to the time switch
- Time saving during program creation, commissioning and maintenance

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Technical specifications

			Mini 7LF4401-5	Top 7LF4511 7LF4512	Profi 7LF4521 7LF4522	Astro 7LF4531 7LF4532	Expert 7LF4444	Expert GPS 7LF4541 7LF4542
Standards			EN 60730-1, -2-7; VDE 0631-1, -2-7					
Approvals			--		UL File No. E301698		--	UL File No. E301698
Supply								
• Rated control supply voltage U_c		V AC V AC/DC	110 ... 240 --	230 --	230 24	230 --	120/230 24	230 --
- Primary operating range		× U_c	0.85 ... 1.1	0.85 ... 1.1	0.85 ... 1.1 [1]	0.85 ... 1.1	80 .. 253 V [1]	0.85 ... 1.1
- Frequency ranges		Hz	50 ... 60	50 ... 60	50 ... 60 [2]	50 ... 60	50 ... 60 [2]	50 ... 60
• Rated power dissipation P_v		VA	0.035	2	2	2	2.5/4 [3]	2
Channels/contacts								
• Switching channels			1	1 or 2			4	1 or 2
- Rated operational voltage U_e		V AC	250					
- Rated operational current I_e	At p.f. = 1	A	16					
	At p.f. = 0.6	A	10					
• Contacts			1 CO	1 or 2 CO			4 CO	7LF4541: 1 CO 7LF4542: 1 CO + 1 NO
- Mechanical switching cycles (in millions)			> 5	10				
- Electrical switching cycles	At p.f. = 1		6000 (20 A)	100000				
• Minimum contact load		V; mA	12; 100					
- Incandescent lamp load		A	5	8				
- Fluorescent lamp load		VA	58	60	600		58	600
	Uncorrected	VA	1400	2300	2000		1400	2000
- Energy-saving lamp load		W	100	60 VA	1000		100	1000
Safety								
• Different phases permissible between actuator/contact [7]			Yes					
• Rated impulse withstand voltage U_{imp}		kV	4.0					
- EMC: Burst	Acc. to IEC 61000-4-4	kV	> 4.4					
- EMC: Surge	Acc. to IEC 61000-4-5	kV	> 2.0					
- Electrostatic discharge	Acc. to IEC 61000-4-2	kV	> 8.0					
• Power reserve storage	Mains/battery	a	6/2	3	5			
- Battery type			Li primary cell					
• Program memory	Captive		--	No	Yes			
• Overvoltage category	Acc. to EN 61010-1		III					
Function								
• Minimum switching sequences			1 min		1 s			
• Make and break cycles			1 min		1 s			
• Clock errors per day	Typical	s/day	+0.3 ± 1	± 1.5	0.1	± 0.1	± 0.2	[5]
• Control input	Terminal S		--	No		Yes (only in the case of 1K clock)		[6]
• Memory spaces								
- Programs [4]			28	28 (2 × 14)	56 (2 × 28)	56 (2 × 28)	4 × 3 × 28	84 (3 x 28)
Connections								
• Terminals ± screw (Pozidriv)			PZ 1					
• Conductor cross-sections of main current paths								
- Rigid, max.		mm^2	4					
- Rigid, min.		mm^2	1.5					
- Flexible with end sleeve	Max.	mm^2	2.5					
Environmental conditions								
• Permissible ambient temperature		°C	-10 ... +55	-20 ... +55				
• Storage temperature		°C	-20 ... +60					
• Resistance to climate	Acc. to EN 60068-1		10/055/21	20/055/21				
• Degree of protection	Acc. to EN 60529		IP20, with connected conductors					
• Safety class	Acc. to EN 60730-1		II					

1) For 24 V devices (7LF4521-2, 7LF4522-2 and 7LF4444-2): Tolerance -10/+10 %; operating range 0.9 ... 1.1 × U_c.

2) For 24 V devices (7LF4521-2, 7LF4522-2 and 7LF4444-2): Frequency range 0 ... 60 Hz.

3) For 24 V device (7LF4444-2): P_v = 4 VA.

4) A program consists of an On time, an Off time and assigned On and Off days or day blocks.

5) DCF/ GPS atomic clock error, without antenna: +/- 0.1 s/day

6) Control input for connection of the time signal + local coordinates (GPS) from the antenna power supply module

7) The combination of line voltage (230 V) and SELV in combination with a 2K clock is not admissible. This requirement is, however, admissible in the case of 1K clocks and the Expert 4K.

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Selection and ordering data

	Contacts	U_e	I_e	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A AC	V AC	MW							kg
	Mini digital time switches											
	• Weekly program • 1 channel											
	1 CO	250	16	110 ... 240	1	►	**7LF4401-5**		1	1 unit	1BK	0.146
	Top digital time switches											
	• Weekly program • With text-assisted programming concept – language: English • Manual daylight-saving adjustment • 1 channel • 28 programs											
	1 CO	250	16	230	2		**7LF4511-0**		1	1 unit	1BK	0.153
	• 2 channels • 28 programs (14 per channel)											
	2 CO	250	16	230	2		**7LF4512-0**		1	1 unit	1BK	0.173
	Profi digital time switches											
	• Weekly program • With text-assisted programming concept languages: 15 languages • Simple program creation by means of PC using the software included with the 7LF4941-0 USB adapter • Vacation program • Random program • Operating hours counter, counting range: 65535 h • Synchronization 50/60 Hz (new) • Cycle function (new) • Expert mode (new) • Accurate to the second hh:mm:ss (new) • Automatic daylight-saving adjustment											
	• 1 channel • 56 programs											
	1 CO	250	16	230	2		**7LF4521-0**		1	1 unit	1BK	0.177
	1 CO	250	16	24 AC/DC	2		**7LF4521-2**		1	1 unit	1BK	0.169
	• 2 channels • 56 programs (28 per channel) • Channel changeover function (new)											
	2 CO	250	16	230	2		**7LF4522-0**		1	1 unit	1BK	0.199
	2 CO	250	16	24 AC/DC	2		**7LF4522-2**		1	1 unit	1BK	0.198
	Astro digital time switches											
	• Weekly program • Astro function • With text-assisted programming concept languages: 15 languages • Simple program creation by means of PC using the software included with the 7LF4941-0 USB adapter • Vacation program • 1 h test • Input disable via PIN code • Operating hours counter, counting range: 65535 h • Random program • Automatic daylight-saving adjustment • Daylight-saving adjustment half-year correction (new) • Expert mode (new) • Synchronization 50/60 Hz (new) • Accurate to the second hh:mm:ss (new)											
	• 1 channel • 56 programs • With control input, delay time 0 min ... 23 h 59 min											
	1 CO	250	16	230	2		**7LF4531-0**		1	1 unit	1BK	0.188
	• 2 channels • 56 programs (28 per channel) • Channel changeover function (new)											
	2 CO	250	16	230	2		**7LF4532-0**		1	1 unit	1BK	0.215

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	Contacts	U_e	I_e	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A AC	V AC	MW							kg
	Expert digital time switches											
	• Weekly program • Year program • 84 programs per channel • Exception program (priority program) • Astro function • Simple program creation by means of PC using the software included with the 7LF4941-0 USB adapter • Vacation function • 1 h test • Input disable via PIN code • Operating hours counter, counting range: 65535 h											
	• Expert GPS • Use Profi/Astro data key Article No. 7LF4941-1. • With text-assisted programming concept – languages: 15 languages • Cycle function can be chosen for channel 1 and channel 2 • Time synchronization possible in combination with GPS antenna 7LF4541-5 + power supply unit for GPS antenna 7LF4541-4.											
	• 1 channel											
	1 CO	250	16	230	2		**7LF4541-0**		1	1 unit	1BK	0.169
	• 2 channels (with channel change function)											
	1 CO, 1 NO	250	16	230	2		**7LF4542-0**		1	1 unit	1BK	0.234
	• Expert • Use Expert data key, Article No. 7LF4940-2. • With text-assisted programming concept – languages: German, English, French, Italian, Dutch, Spanish • Cycle function can be chosen for channel 1 only • 4 channels											
	4 CO	250	16	120/230	6	►	**7LF4444-0**		1	1 unit	1BK	0.484
	4 CO	250	16	24 AC/DC	6	►	**7LF4444-2**		1	1 unit	1BK	0.433
	Data keys for Profi and Astro digital time switches • Programming at the PC (7LF4941-0 USB adapter and software required) • Read-in of programs to the time switch • Writing of programs from the time switch • Transfer of programs - From PC to time switch and vice versa - From time switch to time switch						**7LF4941-1**		1	1 unit	1BK	0.021
	Data keys for Expert digital time switch • Programming at the PC (7LF4940-0 or 7LF4941-0 USB adapter and software required) • Read-in of programs to the time switch • Writing of programs from the time switch • Transfer of programs - From PC to time switch and vice versa - From time switch to time switch					►	**7LF4940-2**		1	1 unit	1BK	0.017
	USB adapter and software for Profi, Astro and Expert digital time switches • For the reading and writing of data keys at the PC • With programming software • With one Profi/Astro data key 7FL4941-1 • Compatible with Profi/Astro data key predecessor model 7LF4940-1 and Expert data key 7LF4940-2 • Can be connected over USB interface • System requirements: - Windows 7, Windows Vista, Windows 2000, Windows ME, Windows XP or Windows 98 Second Edition - USB connection - 40 MB free disk space						**7LF4941-0**		1	1 unit	1BK	0.123

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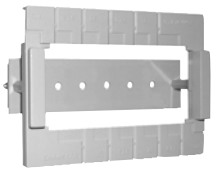
7LF4 digital time switches

	Contacts	U_e	I_e	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A AC	V AC	MW							kg
	Starter kits • For upgrading with already available USB adapter (7LF4940-0), thus establishing compatibility with new Profi/Astro 7LF4941-1 data keys • Compatible with Expert 7LF4940-2 data key and with predecessor model Profi/Astro 7LF4940-1 data key • Including Profi/Astro 7LF4941-1 data key + software						**7LF4941-3**		1	1 unit	1BK	0.049
	**Holders for front panel installation** • Universal application for devices from 1 MW to 6 MW • Cutout dimensions: - Height $45^{+0.5}$ mm - Width 23 mm, 41 mm, 59 mm, 77 mm, 95 mm or 113 mm						**7LF9006**		1	1 unit	1BK	0.070
	Power supply unit for GPS antenna • For connection between Expert GPS 7LF4541-0 or 7LF4542-0 and GPS antenna 7LF4941-5 • 230 V, 50/60 Hz • Up to 4 Expert GPS per power supply unit				1		**7LF4941-4**		1	1 unit	1BK	0.124
	GPS antenna • Accessories for 7LF4541-0 and 7LF4542-0 • Cable, max. 50 m • IP 65 • Only to be used in combination with the power supply unit for GPS antenna 7LF4941-4						**7LF4941-5**		1	1 unit	1BK	0.086

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Overview

Mechanical time switches with day disk

Mechanical time switches with week disk

Synchronous time switches without power reserve

The control gear is driven by a synchronous motor so it is dependent on the power supply frequency. If this frequency is unstable, the devices cannot be used. In the event of a power failure, the time switch will stop.

Quartz-clock time switches with power reserve

A quartz electronic circuit supplies the drive with a stabilized frequency so that the time switch is not dependent on the power supply frequency. In the event of a power failure, the time switch continues to operate on its power reserve.

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Technical specifications

		Synchronous time switches without power reserve				Quartz-clock time switches with power reserve					
		7LF5 300-1	**7LF5 300-5**	**7LF5 300-6**	**7LF5 301-0**	**7LF5 301-1**	**7LF5 301-4**	**7LF5 301-5**	**7LF5 301-6**	**7LF5 301-7**	**7LF5 305-0**
Standards		EN 60730-1, -2-7, UL 917, UL 917, CSA C22.2 No. 14 and 177									
Approvals		VDE, UL file: E301698									
Operating mode		Synchronous				Quartz					
• Time program		Day	Day	Week	Day	Day	Day	Week	Day	Week	Day
Supply											
• Rated control supply voltage U_c	V AC	230				230					
- Primary operating range	× U_c	0.85 ... 1.1				0.85 ... 1.1					
• Rated frequency	Hz	50				50					
- Frequency ranges	Hz	50				50/60					
• Rated power dissipation P_v	VA	1				1	0.2	0.2	1	1	1
Channels/contacts											
• Switching channels		1				1					
- Rated operational voltage U_e	V AC	250				250					
- Rated operational current I_e											
At p.f. = 1	A	16				16					
At p.f. = 0.6	A	4				4					
• Contacts		1 NO	1 CO	1 CO	1 CO	1 NO	1 CO	1 CO	1 CO	1 CO	1 CO
- Mechanical switching cycles	in millions	20				20					
- Electrical switching cycles at p.f. = 1		100000				100000					
• Minimum contact load	V; mA	4; 1				4; 1					
- Incandescent lamp load	A	5				5					
- Fluorescent lamps											
At 7 µA	VA	60				60					
Uncorrected	VA	1400				1400					
Safety											
• Different phases permissible between actuator/contact		Yes				Yes					
• Electrical isolation, creepage distances and clearances, actuator/contact	mm	8/6				8/6					
• Rated impulse withstand voltage U_{imp} drive/contact	kV	4				4					
- EMC: Burst acc. to IEC 61000-4-4	kV	> 4.4				> 4.4					
- EMC: Surge acc. to IEC 61000-4-5	kV	> 2.0				> 2.0					
- Electrostatic discharge according to IEC 61000-4-2	kV	> 8.0				> 8.0					
• Power reserve storage	a	--				100 h	6		100 h		
- Minimum loading time	h	--				48	--		48		
- Battery type		--				NiMH cell	Li primary cell		NiMH cell		
- Service life of battery											
At 20 °C	a	--				6	10		6		
At 40 °C	a	--				5					
• Overvoltage category acc. to EN 61010-1		III				III					
Function											
• Minimum switching sequences	min	30		240	30	30		240	30	240	30
• Make and break cycles	min	15		120	10	15		120	15	120	10
• Switching accuracy	min	± 5		± 30	± 5	± 5		± 30	± 5	± 30	± 5
• Clock errors per day		System-synchronized				± 2.5 s	± 60 s/year		± 2.5 s		
Connections											
• Terminals ± screw (Pozidriv)		PZ 1				PZ 1					
• Conductor cross-sections of main current paths											
- Rigid, max.	mm^2	4				4					
- Rigid, min.	mm^2	1.5				1.5					
- Flexible, with end sleeve	mm^2	2.5				2.5					
- Flexible, without end sleeve	mm^2	4				4					
Environmental conditions											
• Permissible ambient temperature	°C	-10 ... +55				-10 ... +55					
• Storage temperature	°C	-10 ... +60				-10 ... +60					
• Resistance to climate	Acc. to EN 60068-1	10/055/21				10/055/21					
• Degree of protection	Acc. to EN 60529	IP20, with connected conductors				IP20, with connected conductors					
• Safety class	Acc. to EN 61140	II				II					

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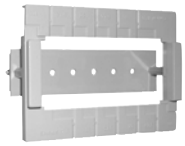
Selection and ordering data

	Contacts	U_e	I_e	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A AC	V AC	MW							kg
	Synchronous time switches without power reserve, 1 MW											
	• Day disk											
	1 NO	250	16	230	1	►	**7LF5300-1**		1	1 unit	1BK	0.084
	Synchronous time switches without power reserve, 3 MW											
	• Day disk											
	1 CO	250	16	230	3	►	**7LF5300-5**		1	1 unit	1BK	0.150
	• Week disk											
	1 CO	250	16	230	3	►	**7LF5300-6**		1	1 unit	1BK	0.150
	Synchronous time switches without power reserve, for wall mounting											
	• Day disk											
	1 CO	250	16	230	--	►	**7LF5301-0**		1	1 unit	1BK	0.197
	Quartz-clock time switches with power reserve											
	• Day disk											
	1 NO	250	16	230	1	►	**7LF5301-1**		1	1 unit	1BK	0.088
	Quartz-clock time switches with power reserve and automatic time setting for Central European time zone											
	• Time set automatically during commissioning • Automatic daylight savings • With quartz clock mechanism • Clock accuracy ± 0.2 s/day • 5-year power reserve (time buffer in the event of a power failure)											
	• Day disk											
	1 CO	250	16	230	3	►	**7LF5301-4**		1	1 unit	1BK	0.177
	• Week disk											
	1 CO	250	16	230	3	►	**7LF5301-5**		1	1 unit	1BK	0.179
	Quartz-clock time switches with power reserve											
	Clock accuracy ± 2.5 s/day											
	• Day disk											
	1 CO	250	16	230	3	►	**7LF5301-6**		1	1 unit	1BK	0.161
	• Week disk											
	1 CO	250	16	230	3	►	**7LF5301-7**		1	1 unit	1BK	0.163
	Quartz-clock time switches with power reserve, for wall mounting (surface mounting)											
	• Day disk											
	1 CO	250	16	230	--	►	**7LF5305-0**		1	1 unit	1BK	0.202
	**Holders for front panel installation**											
	Universal use for devices from 1 to 6 MW											
	Cutout dimensions: Height $45^{+0.5}$ mm Width 23 mm, 41 mm, 59 mm, 77 mm, 95 mm or 113 mm						**7LF9006**		1	1 unit	1BK	0.070

* You can order this quantity or a multiple thereof.

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7LF6 timers for buildings

Overview

Siemens stairwell lighting timers enable the required time to be set precisely without tools using the push-to-lock knurling wheel. The stairwell lighting timers in four-wire installations can be switched back on again at any time by simply pressing the switch. A maintained light switch prevents the need for repeated pressing, for example when moving house. The various types are also available with warning of impending switch-off.

Benefits

- Durable switching of different illuminants thanks to patented contact design
- Suitable for energy-saving lamps
- Quiet switching of stairwell lighting timers
- Warning of impending switch-off in accordance with DIN 18015-2 for stairwell lighting in apartment blocks

Technical specifications

			7LF6110	7LF6111	7LF6113	5TT1303	7LF6114	7LF6115
Standards			IEC 60669, EN 60669					
Supply								
• Rated control supply voltage U_c		V AC	230					
- Primary operating range	At 50/60 Hz	x U_c	0.9 ... 1.1					
• Rated power dissipation P_v		VA	Approx. 5					
Setting range		min	0.5 ... 10			1 ... 10	0.5 ... 10	3 ... 60
• Accuracy		s	± 30					
Manual switches	Automatic/permanent		Yes					
Minimum push duration		ms	30					
Voltage endurance	At pushbutton input (pushbutton malfunction)		Yes					
Short-circuit strength		A	700			--	700	
Channels/contacts								
• Switching channels								
- Rated operational voltage U_e		V AC	250					
- Rated operational current I_e	At p.f. = 1	A	16		--	10	16	
• Contact gap		mm	> 3			0.3	> 3	
• Minimum contact load		V; mA	10; 300					
Max. incandescent lamp load		W	2000			--	2000	
Max. energy-saving lamp load 14 W		Unit(s)	20			--	20	
Fluorescent lamp load 58 W								
- Uncorrected		Unit(s)	20			--	20	
- DUO circuit		Unit(s)	2 × 20			--	2 × 20	
- Siemens ECG	1 lamp	Unit(s)	10			6	10	
	2 lamps	Unit(s)	2 × 5			3	2 × 5	
Glow lamp load		mA	50			10	50	
Max. fan load		VA	--					
Connections								
• Terminals ± screw (Pozidriv)			PZ 1					
• Conductor cross-sections of main current paths								
- Rigid		mm^2	1.5 ... 6					
- Flexible, with end sleeve	Min.	mm^2	1					
Environmental conditions								
• Resistance to climate	Acc. to EN 60068-1	°C	-20 ... +50					
• Degree of protection	Acc. to EN 60529		IP20, with connected conductors					

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Selection and ordering data

	U_e	I_e	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V AC	A AC	V AC	MW							kg
	Stairwell lighting timers										
	With switch for continuous light and push-to-lock knurling wheel setting, setting range 0.5 ... 10 minutes										
	For 3-wire circuit, L-momentary contact, not resettable										
	250	16	230	1	►	**7LF6110**		1	1 unit	1BK	0.078
	For 4-wire circuit, L-momentary contact, resettable, or 3-wire circuit, N-momentary contact, resettable										
	250	16	230	1	►	**7LF6111**		1	1 unit	1BK	0.084
	With warning by flashing prior to switching off, for 4-wire circuit, L-momentary contact, resettable, or 3-wire circuit, N-momentary contact, resettable										
	250	16	230	1	►	**7LF6113**		1	1 unit	1BK	0.081
	Lighting timers										
	With switch for continuous light and push-to-lock knurling wheel setting, with warning by flashing prior to switch-off, setting range 0.5 ... 10 minutes, 4-fold extension of runtime by pressing the pushbutton for 1 second, for 4-wire circuit, L-momentary contact, or 3-wire circuit, N-momentary contact										
	250	16	230	1	►	**7LF6114**		1	1 unit	1BK	0.081
	Energy-saving timers										
	With switches for continuous light and push-to-lock knurling wheel setting, with warning by flashing prior to switch-off, setting range 3 ... 60 minutes, switch off by pressing pushbutton second time as with remote control switch, for 4-wire circuit, L-momentary contact, resettable, or 3-wire circuit, N-momentary contact, resettable										
	250	16	230	1	►	**7LF6115**		1	1 unit	1BK	0.081

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* You can order this quantity or a multiple thereof.

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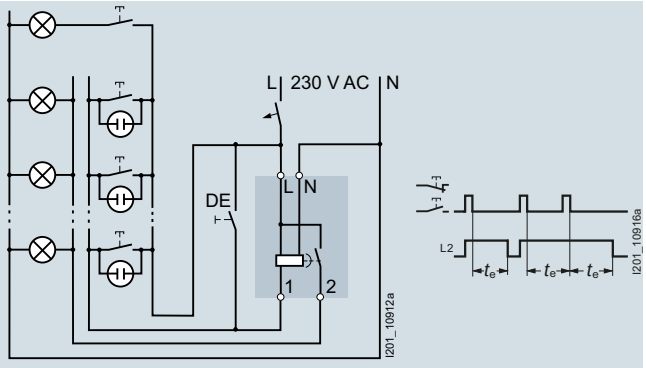
Circuit diagrams

Circuit example for 7LF6111 timer in 4-wire circuit, L-momentary, resettable

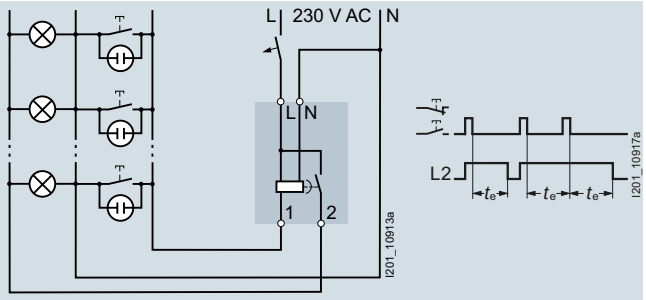
Usual circuit for new installation with separate cable routing for pushbuttons and lights. The additional DI switch allows external switching to continuous light or a time switch can also be used for this purpose. An additional attic circuit is also available, which operates independently of the timer, but on the same electrical circuit. The timer can be restarted before the set time expires.



t_e = Runtime

Circuit example for 7LF6111 timer in 3-wire circuit, N-momentary, resettable

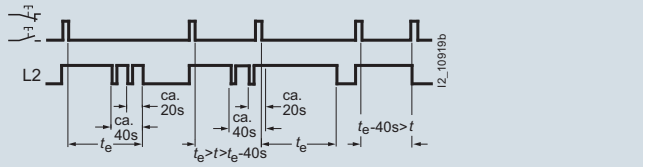
Can only be used with a limited number of wires. The timer can be restarted before the set time expires. While this 3-wire circuit with N-momentary contact is technically possible, it does not comply with DIN VDE 0100-460. However, it is used in old systems for replacement purposes.



t_e = Runtime

Circuit example for 7LF6115 energy-saving timer with prewarning

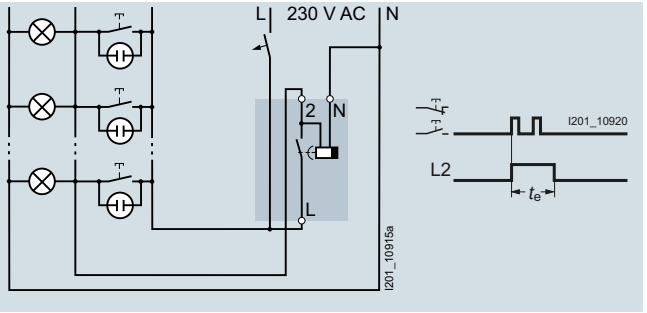
The timer is connected in the same way as the 7LF6111 timer in a 4-wire or 3-wire circuit. The energy-saving timer switches on if pressed once and switches off when it is pressed again. If it is not switched off manually, it is automatically switched off after the set time, max. 60 minutes. 20 and 40 seconds before expiry, the light flashes briefly twice (50 ms) to warn of the impending tripping. This allows time to reset the switch while the light is still on. Prior to the warning time, a push of the button ends the timing interval.



t_e = Runtime

Circuit example for 7LF6110 timer in 3-wire circuit, L-momentary contact, not resettable

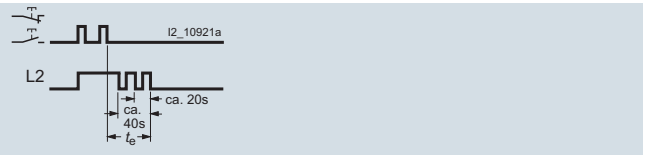
Circuit for new installation with shared cable routing for pushbuttons and lights. The timer can only be restarted after the set time expires.



t_e = Runtime

Circuit example for 7LF6113 energy-saving timer with advance warning

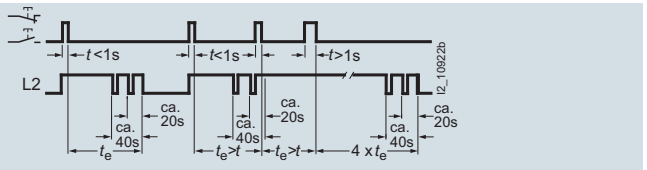
The timer is connected in the same way as the 7LF6111 timer in a 4-wire or 3-wire circuit. 20 and 40 seconds before expiry, the light flashes briefly twice (50 ms) to warn of the impending tripping. This allows time to reset the switch while the light is still on.



t_e = Runtime

Circuit example for 7LF6114 energy-saving timer with advance warning

The timer is connected in the same way as the 7LF6111 timer in a 4-wire or 3-wire circuit. When pressed, the lighting timer switches on for the set runtime, up to 10 minutes. If the switch is pressed for more than one second, the light is switched on for four times the set time, i.e. up to 40 minutes. The last press of the pushbutton is definitive. 20 and 40 seconds before expiry, the light flashes briefly twice (50 ms) to warn of the impending tripping. This allows time to reset the switch while the light is still on. The timing interval restarts each time the button is pressed.



t_e = Runtime

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Overview

Time relays are primarily used in series applications where the use of PLC controls is too labor and cost-intensive. Multifunction relays with a range of functionalities and clear and intuitive operation are now market standard.

Benefits

- Suitable for universal use because the devices can be operated with 12 - 240 V AC/DC and work across a broad range from seconds to hours
- An off-delay without auxiliary power supports expanded application

Technical specifications

			5TT3185	5TT3181
Standards			EN 60255; DIN VDE 0435-110	
Supply				
• Rated control supply voltage U_c		V AC V DC	12 ... 240 12 ... 240	220 ... 240 --
- Primary operating range		x U_c	0.8 ... 1.1	
• Rated frequency f_n		Hz	45 ... 400	50/60
• Rated power dissipation P_v		VA	Approx. 1.5	Approx. 5
Setting ranges			See setting ranges, timing intervals	
Recovery time		ms	15 ... 80	Approx. 40
Contacts				
• Switching channels				
- Rated operational voltage U_e		V AC	250	
- Rated operational current I_e		A	4	8
• Contact gap		mm	µ contact	
- Minimum contact load		V; mA	10; 300	
Rated impulse withstand voltage U_{imp}	Input/output	kV	> 4	
Electrical service life	In switching cycles At AC-15	1 A	1.5×10^5 --	-- 1.5×10^5
Connections				
• Terminals ± screw (Pozidriv)			2	
• Conductor cross-sections of main current paths				
- Rigid, max.		mm^2	2×2.5	
- Flexible, with end sleeve, min.		mm^2	2×1.5	
Environmental conditions				
• Permissible ambient temperature		°C	-40 ... +60	
• Resistance to climate	Acc. to EN 60068-1		40/60/4	

Selection and ordering data

	Contacts	U_e	I_e	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A AC	V	MW							kg
	Multifunction timers											
	Programmable for: response delay; passing make contact function; delayed pulse generator; clock generator starting with impulse; off-delay; pulse converter; passing break contact function; response/off-delay											
	1 CO	250	4	12 ... 240 DC 12 ... 240 AC	1	►	**5TT3185**		1	1 unit	1BK	0.083
	Delay timers											
	1 CO	250	8	220 ... 240 AC	1	►	**5TT3181**		1	1 unit	1BK	0.087

* You can order this quantity or a multiple thereof.

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More information

5TT3185 multifunction timers

Setting aids

The period of the flashing of the green LED 1 when set for a timing interval is 1 s ± 4 %, which can therefore be used as a setting aid. This is particularly useful in the lower time setting range and for long delay times because of the accuracy of the multiplication factors between the individual time ranges.

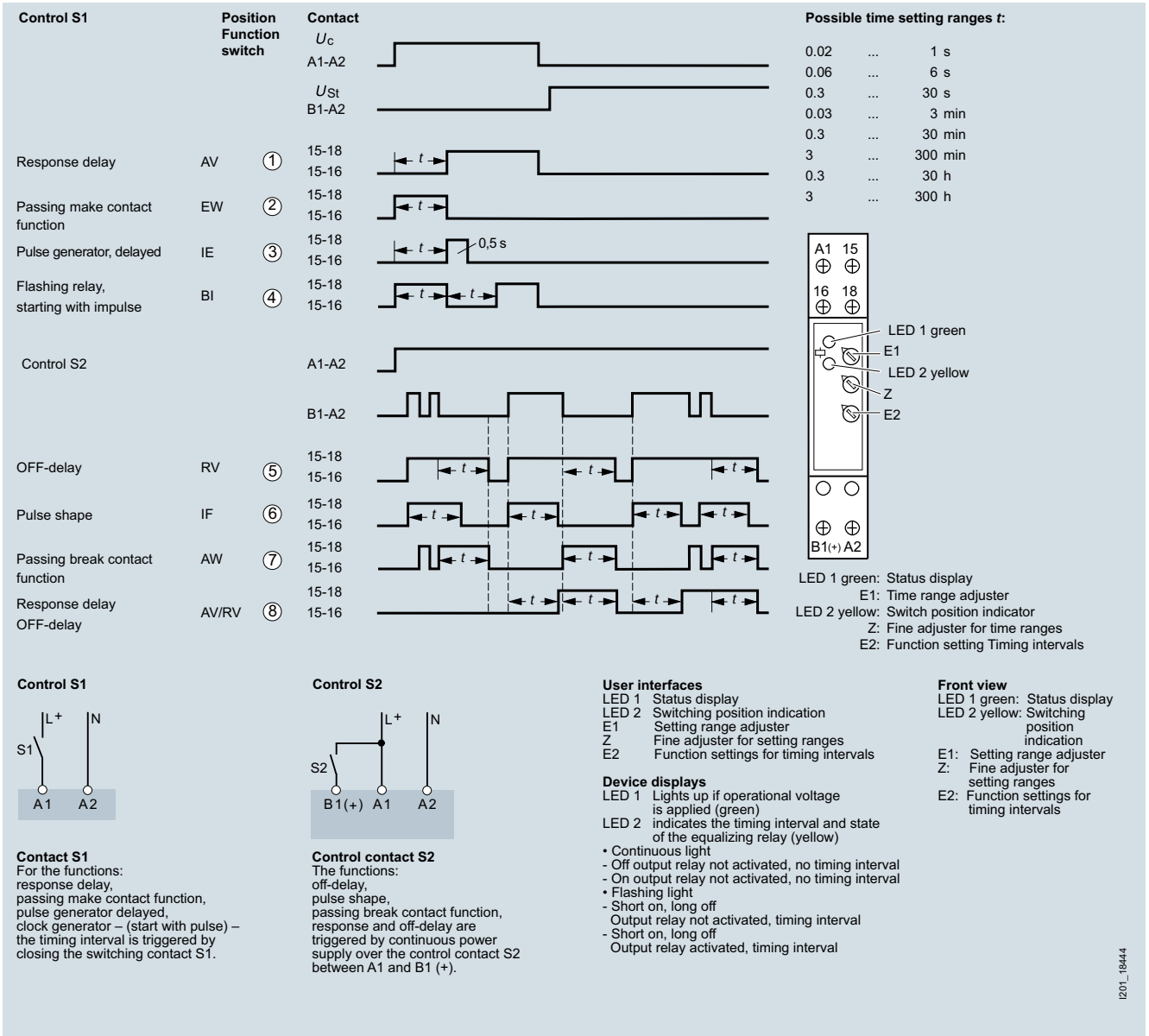
Example:
Delay time to be set: 40 min.
Using the fine setting, this delay time can be set within the setting range 3 ... 300 min. However, in this case it takes a long time to check the time and requires several operational sequences in realtime. To speed up the setting process, the setting range is switched to 0.03 ... 3 min. In this case, the required value corresponds to a delay time 0.4 min (= 24 s). The timing interval is triggered and the potentiometer is set to 24 flashing periods of the yellow LED 2. The device is then set back to the setting range 3 ... 300 min and the setting process is completed.

Time operation interruption/time addition

For the functions AV, EW, IE, BI, the timing interval can be interrupted at any time by activating B1 (+) and continued again by removing the control voltage (time addition).

Control input B1

The functions RV, IF, AW, AV/RV can be controlled using the control input B1 (+) with potential against terminal A2. The auxiliary voltage of terminal A1 – or any other voltage within the range 12 ... 240 V AC/DC – can be used for this purpose. The operation of parallel loads (e.g. contactors) from B1 (+) to A2 is also permissible.
If voltage is simultaneously applied to the control input B1 (+) and A1 for the IF function, an output pulse is triggered with the set time interval t_1.



Control S1

Contact S1
For the functions:
response delay,
passing make contact function,
pulse generator delayed,
clock generator – (start with pulse) –
the timing interval is triggered by
closing the switching contact S1.

Control S2

Control contact S2
The functions:
off-delay,
pulse shape,
passing break contact function,
response and off-delay are
triggered by continuous power
supply over the control contact S2
between A1 and B1 (+).

User interfaces
LED 1 Status display
LED 2 Switching position indication
E1 Setting range adjuster
Z Fine adjuster for setting ranges
E2 Function settings for timing intervals

Device displays
LED 1 Lights up if operational voltage is applied (green)
LED 2 indicates the timing interval and state of the equalizing relay (yellow)
• Continuous light
- Off output relay not activated, no timing interval
- On output relay not activated, no timing interval
• Flashing light
- Short on, long off
Output relay not activated, timing interval
- Short on, long off
Output relay activated, timing interval

Front view
LED 1 green: Status display
LED 2 yellow: Switching position indication
E1: Setting range adjuster
Z: Fine adjuster for setting ranges
E2: Function settings for timing intervals

I201_18444

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9/2 **Introduction**
9/3 **4AC3 bell transformers**
9/4 **4AC3 safety transformers**
9/5 **4AC2 power supply units**
9/6 **5TE6 REG socket outlets**

NEW

Direct reference to the products in the Industry Mall from the selection and ordering data tables:

Article No.
www.siemens.com/product?Article No.
3VA2025-5HL36-0AA0

Paper catalog:
To get more product information enter the Web address plus Article No.

PDF catalog:
Get more product information with just a mouse click.

For further technical product information:

Configuration Manual

Transformers, Power Supply Units and Socket Outlets
Article No.: 3ZW1012-4AC32-0AC1

Siemens Industry Online Support:

www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
Download
FAQ
Manual
Product note
Software archive
Technical data

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Introduction

Overview

Devices		Page	Application	Standards	Used in		
					Non-residential buildings	Residential buildings	Industry
	4AC3 bell transformers	9/3	Power supply up to 18 VA as safety extra-low voltage (SELV) in residential buildings for the supply of gongs, buzzers, bells, door openers and remote control switches	EN 61558-1 EN 61558-2-8	✓	✓	--
	4AC3 safety transformers	9/4	Power supply up to 63 VA as safety extra-low voltage (SELV) for the supply of control circuits, switching relays and Insta contactors	EN 61558-1 EN 61558-2-6	✓	--	✓
	4AC2 power supply units	9/5	Direct voltage power supply up to 24 V DC and 2 A as safety extra-low voltage (SELV) for the supply of gongs, buzzers, bells, door openers, switching relays and Insta contactors	EN 61558-2-6	✓	✓	✓
	5TE6 REG socket outlets	9/6	For power supply during maintenance in distribution boards in DIN VDE, CEE 7, CEI 23-50 and UL 489 versions	DIN VDE 0620-1, CEE 7 standard sheet V, CEI 23-50, UL 498	✓	✓	✓

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Overview

A typical application for these bell transformers is short-time use, as occurs with bells, gongs, door openers or remote control switches in residential buildings.

Siemens bell transformers are protected against short-circuit or moderate overload by a PTC resistor. After a short circuit, the primary current must be briefly disconnected from the mains before restarting.

Higher output voltages will occur in the event of low-load or no-load operation.

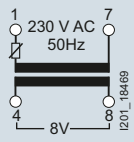
Technical specifications

			4AC3208-0	4AC3208-1	4AC3214-0	4AC3218-0
Standards			EN 61558-1:2005, EN 61558-2-8:2010			
Rated operational power P_s		VA	8	8	14	18
Rated operational voltage U_e		V AC	230			
Operating range at 50 Hz		$\times U_e$	1.04			
Rated frequency		Hz	50			
Rated secondary voltage U_{sec}						
		V AC	--	--	--	4
		V AC	8	8	8	8
		V AC	--	12	12	12
		V AC	--	--	24	--
Rated secondary current I_{sec}						
• At 4 V		A AC	--	--	--	2.0
• At 8 V		A AC	1.0	1.0	2.0	2.0
• At 12 V		A AC	--	0.6	1.3	1.5
• At 24 V		A AC	--	--	0.6	--
Rated power dissipation P_V						
• In no-load operation		W	1.2	1.2	1.3	1.3
• At a rated voltage of 4 V		W	--	--	--	5.5
• At a rated voltage of 8 V		W	5.7	5.7	10.5	8.1
• At a rated voltage of 12 V		W	--	3.8	7.4	8.4
• At a rated voltage of 24 V		W	--	--	4.2	--
Safe separation						
• Creepage distances and clearances		mm	> 6			
Insulation class			E			
Test voltage, 50 Hz, 1 second						
• Primary against secondary winding		kV	4			
Conductor cross-sections						
• Rigid		mm^2	1 x 4 or 2 x 2.5			
• Flexible, with end sleeve		mm^2	1 x 2.5 or 2 x 1.5			
Permissible ambient temperature		°C	40	35	40	40
Permissible humidity		%	91			
Degree of protection	Acc. to EN 60629		IP20			
Safety class	Acc. to EN 61140 (VDE 0140-1)		II			

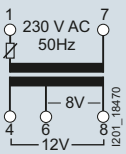
Selection and ordering data

	U_e	U_{sec}	I_{sec}	P_s	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V AC	V AC	A AC	VA	MW							kg
	Bell transformers											
	230	8	1.0	8	2		**4AC3208-0**		1	1 ST	1BK	0.235
		8/12	1.0/0.6	8	2		**4AC3208-1**		1	1 ST	1BK	0.273
		8/12/24	2.0/1.3/0.6	14	2		**4AC3214-0**		1	1 ST	1BK	0.397
		4/8/12	2.0/2.0/1.5	18	2		**4AC3218-0**		1	1 ST	1BK	0.355

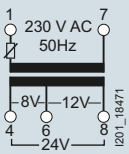
Circuit diagrams



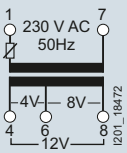
4AC3208-0



4AC3208-1



4AC3214-0



4AC3218-0

* You can order this quantity or a multiple thereof.

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4AC3 safety transformers

Overview

These transformers up to 63 VA provide a safety extra-low voltage for supplying control circuits, switching relays or Insta contactors in continuous operation as alternating voltage power supply for 8 V, 12 V, 16 V, 24 V and 32 V AC.

Higher output voltages will occur in the event of low-load or no-load operation. Siemens safety transformers are protected against short circuit or moderate overload by a PTC resistor. After a short circuit, the primary current must be briefly disconnected from the mains before restarting.

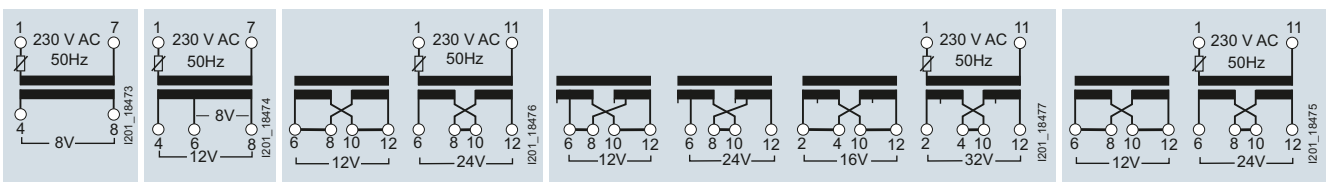
Technical specifications

			4AC3716-0	4AC3724-0	4AC3740-0	4AC3740-1	4AC3763-0
Standards			EN 61558-1:2005, EN 61558-2-6:2009				
Rated operational power P_s		VA	16	24	40	40	63
Rated operational voltage U_e		V AC	230				
Operating range at 50 Hz		$\times U_e$	1.04				
Rated frequency		Hz	50				
Rated secondary voltage U_{sec}							
		V AC	8	8	--	--	--
		V AC	--	--	12	12	2 × 12
		V AC	--	12	--	--	--
		V AC	--	--	--	16	--
		V AC	--	--	24	24	24
		V AC	--	--	--	32	--
Rated secondary current I_{sec}							
• At 8 V		A AC	2.0	2.0	--	--	--
• At 12 V		A AC	--	2.0	3.3	3.3	5.2
• At 16 V		A AC	--	--	--	2.5	--
• At 24 V		A AC	--	--	1.6	1.6	2.6
• At 32 V		A AC	--	--	--	1.2	--
Rated power dissipation P_V							
• In no-load operation		W	1.1	1.1	3.5	3.9	3.9
• At a rated voltage of 8 V		W	6.8	4.6	--	--	--
• At a rated voltage of 12 V		W	--	7.6	7.1	7.5	13.2
• at a rated voltage of 16 V		W	--	--	--	7.7	--
• At a rated voltage of 24 V		W	--	--	7.7	8.1	13.5
• at a rated voltage of 32 V		W	--	--	--	7.6	--
Safe separation							
• Creepage distances and clearances		mm	> 6				
Insulation class			E		F		
Test voltage, 50 Hz, 1 second							
• Primary against secondary winding		kV	4				
Conductor cross-sections							
• Rigid		mm^2	1 x 4 or 2 x 2.5				
• Flexible, with end sleeve		mm^2	1 x 2.5 or 2 x 1.5				
Permissible ambient temperature		°C	25				
Permissible humidity		%	91				
Degree of protection	Acc. to EN 60529		IP20				
Safety class	Acc. to EN 61140 (VDE 0140-1)		II				

Selection and ordering data

	U_e	U_{sec}	I_{sec}	P_s	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V AC	V AC	A AC	VA	MW							kg
	Safety transformers											
		8	2.0	16	2		4AC3716-0		1	1 ST	1BK	0.425
		8/12	2.02.0	24	3		4AC3724-0		1	1 ST	1BK	0.622
	230	12/16/24/32	3.3/2.5/1.6/1.2	40	5		4AC3740-1		1	1 ST	1BK	1.214
		12/24	3.3/1.6	40	5		4AC3740-0		1	1 ST	1BK	1.185
		2 x 12/24	5.2/2.6	63	5		4AC3763-0		1	1 ST	1BK	1.306

Circuit diagrams



4AC3716-0 4AC3724-0 4AC3740-0 4AC3740-1 4AC3763-0

* You can order this quantity or a multiple thereof.

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Overview

The electronic power supply unit provides a 24 V DC supply to systems with an operational voltage of 85 to 265 V AC or 85 to 300 V DC. The device operates in the lower class for minimum power supply with a safety extra-low voltage (SELV).

The electronic power supply unit is suitable for supplying the 5TT71 GSM alarm modules within a supply voltage range of 150 to 230 V AC.

Technical specifications

			4AC2402
Standards			EN 60068-2, EN 61558-1, EN 61000-4
Approvals			--
Rated operational power P_s		W	8.4
Rated operational voltage U_e		V AC V DC	85 ... 265 85 ... 300
Permissible operational voltage For the 5TT71 GSM alarm modules		V AC/DC	150 ... 265
Primary operating range	At 50/60 Hz	× U_e	--
Rated frequency		Hz	50/60
Operating frequency range		Hz	--
Rated secondary voltage U_{sec}		V DC	24 ± 5 %
Rated secondary current I_{sec}		A DC	0.35
Current limitation			Electronic overload protection
Residual ripple		mV	< 100
Rated power dissipation P_v	In no-load operation At rated load	W W	-- --
Hum-free	Core molded		--
Safe separation	Creepage distances and clearances	mm	> 5.5
Insulation class			--
Test voltage Primary against secondary winding	50 Hz, 1 min	kV	--
Insulation resistance		kV	4
Rated impulse withstand voltage/ degree of pollution	Acc. to IEC 60664-1		6 kV/2
Static discharge	Acc. to IEC/EN 61000-4-2	kV	8
RF irradiation	Acc. to IEC/EN 61000-4-3	V/m	10
Transient overvoltage (burst)	Acc. to IEC/EN 61000-4-4	kV	4
Transient overvoltage (surge) Acc. to IEC/EN 61000-4-5 • Supply lines A1, A2 • A1/A2 and ground		 kV kV	 1 2
RF, conducted disturbance	Acc. to IEC/EN 61000-4-6	V	10
Interference suppression to lower limit class	Acc. to EN 61000-6-3		Complied with
Terminals • Screw (slotted-head) • ± screw (Pozidriv)			 M2.5 --
Conductor cross-sections • Rigid • Flexible, with end sleeve, min.		 mm^2 mm^2	 0.5 ... 2.5 0.5 ... 1.5
Permissible ambient temperature		°C	-20 ... +60
Resistance to climate	Acc. to IEC/EN 60068-1		20/045/04
Resistance to vibrations Frequency 10 ... 55 Hz	Acc. to IEC/EN 60068-2-6	mm	0.35 amplitude
Degree of protection	Acc. to EN 60529		IP20, with connected conductors
Safety class	Acc. to EN 61140		II

Selection and ordering data

	U_e		U_{sec}	I_{sec}	P_s	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V AC	V DC	V DC	A DC	W	MW							kg
	Electronic power supply unit SELV, short-circuit resistant												
	85 ... 265	85 ... 300	24 ± 5 %	0.35	8.4	2		**4AC2402**		1	1 ST	1BK	0.096

* You can order this quantity or a multiple thereof.

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5TE6 REG socket outlets

Overview

The socket outlets for mounting in distribution boards to DIN 43880 and on standard mounting rails to DIN 60715 have since become standard in modern switchgear assemblies/ distribution boards. The socket outlet range complies with a number of different standards and is available according to the standards of the following countries: VDE for Germany, CEE7 for Belgium/ France, CEI for Italy and UL for USA.

In distribution boards with 55 mm mounting depth the socket outlet can only be used without the hinged lid. The lids can be retrofitted on all devices. In system components where equipment is still live even after the main switch has been disconnected, this must be indicated according to DIN EN 50110-1 (VDE 0105-1) and IEC/EN 60204-1/VDE 0113-1. Yellow socket outlets are used for these applications.

Technical specifications

		5TE6800	5TE6801	5TE6810	5TE6802	5TE6803	5TE6804
Standards		**VDE 0620-1**	**VDE 0620-1**	**VDE 0620-1**	**CEI 23-50**	**CEE 7 standard sheet V**	**UL 498**
Approvals		VDE 0620-1			--		UL File No. E258598/ CSA C22.2 No. 182.3M
Rated operational voltage U_e	V AC	230					125
Rated operational current I_e	A AC	16					15
Terminals ± screw (Pozidriv)		PZ1					
Terminal tightening torque, max.	N	1.2					
Stripped length	mm	10					
Conductor cross-sections							
• Rigid	mm^2	1.5 ... 6					
• Flexible, with end sleeve	mm^2	0.5 ... 4					
• Rigid	AWG	10 ... 14					
• Flexible	AWG	14					
Permissible ambient temperature	°C	-10 ... +55					
Degree of protection Acc. to EN 60529		IP20, with connected conductors					
Mounting position		Without cover: any, with cover: Vertical or horizontal					

Selection and ordering data

	U_e	I_e	Conductor cross-section	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V AC	A	mm^2	MW							kg
	SCHUKO® socket outlets according to DIN VDE 0620-1										
	• Without hinged lid 230	16	6	2.5	►	**5TE6800**		1	1 ST	1BK	0.081
	SCHUKO® socket outlets according to DIN VDE 0620-1										
	• With hinged lid 230	16	6	2.5	►	**5TE6801**		1	1 ST	1BK	0.091

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	U_e	I_e	Conductor cross-section	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V AC	A	mm^2	MW							kg
	SCHUKO® socket outlets according to DIN VDE 0620-1										
	• Without hinged lid, yellow RAL 1018										
	230	16	6	2.5	▶	**5TE6810**		1	1 ST	1BK	0.086
	Socket outlets according to CEI 23-50										
	• With hinged lid										
	230	16	6	2.5	▶	**5TE6802**		1	1 ST	1BK	0.092
	Socket outlets according to CEE 7 Standard sheet V										
	• Without hinged lid, with grounding pin										
	230	16	6	2.5	▶	**5TE6803**		1	1 ST	1BK	0.086
	UL 498 socket outlets										
	• Without hinged lid										
	125	15	6	2.5	▶	**5TE6804**		1	1 ST	1BK	0.088
	Hinged lids for 5TE6 socket outlets			2.5		**5TE9120**		1	1 ST	1BK	0.020

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Notes

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10/2 **Introduction**
10/2 System overview
10/4 General data
10/8 UL applications

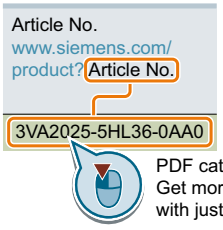
8US 40 mm busbar systems up to 400 A
10/11 Introduction
10/12 Basic assemblies

8US 60 mm busbar systems up to 360 A NEW
10/13 Introduction
10/14 Basic assemblies
10/15 Infeeds and connection methods
10/32 Device adapters and device holders
10/18 Accessories

8US 60 mm busbar systems up to 1600 A
10/19 Introduction
10/20 Basic assemblies up to 630 A
10/23 Basic assemblies up to 1600 A
10/24 Infeeds and connection methods
10/27 Built-in components
10/32 Device adapters and device holders
10/38 Accessories

NEW

Direct reference to the products in the Industry Mall from the selection and ordering data tables:



Paper catalog:
To get more product information enter the Web address plus Article No.

PDF catalog:
Get more product information with just a mouse click.

For further technical product information:

Configuration Manual

8US Busbar Systems
Article No.: 3ZW1012-8US10-0AC1

Siemens Industry Online Support:

www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
Download
FAQ
Manual
Product note
Software archive
Technical data

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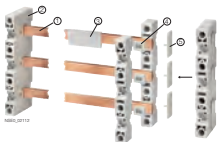
System overview

Overview

Devices		Page	Application	Standards	Used in		
					Non-residential buildings	Residential buildings	Industry
	8US 40-mm busbar systems up to 400 A	10/11	Basic assemblies up to 400 A, busbar supports, busbars, touch protection covers	EN 13601 IEC 61439-1, IEC 61439-2	✓	--	✓
	Basic assemblies	10/12	Basic assemblies up to 400 A, busbar supports, busbars, touch protection covers	EN 13601 IEC 61439-1, IEC 61439-2	✓	--	✓
	60-mm compact busbar systems up to 360 A NEW	10/13		EN 13601 IEC 61439-1, IEC 61439-2 UL 508 A	✓	--	✓
	Basic assemblies	10/14	Basic assemblies up to 360 A, busbar supports, busbars, touch protection covers	EN 13601 IEC 61439-1, IEC 61439-2 UL 508 A	✓	--	✓
	Infeeds and connection methods	10/15	Infeed for busbar systems, terminals	EN 13601 IEC 61439-1, IEC 61439-2 UL 508 A	✓	--	✓
	Device adapters and device holders	10/16	Busbar device adapters and device holders for the assembly of 3RV2/3RT2 load feeders	EN 13601 IEC 61439-1, IEC 61439-2 UL 508 A	✓	--	✓

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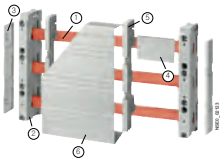
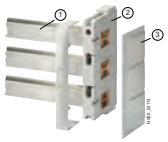
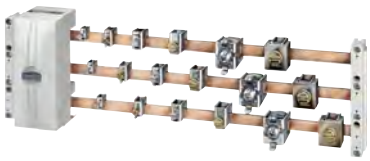
Devices		Page	Application	Standards	Used in		
					Non-residential buildings	Residential buildings	Industry
	8US 60 mm busbar systems up to 1600 A	10/19		EN 13601 IEC 61439-1, IEC 61439-2 UL 508 A	✓	--	✓
	Basic assemblies up to 630 A	10/20	Basic assemblies up to 630 A, busbar supports, busbars, touch protection covers	EN 13601 IEC 61439-1, IEC 61439-2 UL 508 A	✓	--	✓
	Basic assemblies up to 1600 A	10/23	Basic assemblies up to 1600 A, busbar supports, busbars, touch protection covers	EN 13601 IEC 61439-1, IEC 61439-2 UL 508 A	✓	--	✓
	Infeeds and connection methods	10/24	Infeed for busbar systems, terminals ...	EN 13601 IEC 61439-1, IEC 61439-2 UL 508 A	✓	--	✓
	Built-in components	10/27	3-pole NEOZED bus-mounting bases or DIAZED bus-mounting bases, NEOZED bus-mounting switch disconnectors, fuse switch disconnectors and busbar device adapters	IEC 60947-3, EN 60947-3 (VDE 0660) IEC 60269, EN 60269 (VDE 0636)	✓	--	✓
	Device adapters and device holders	10/32	Busbar device adapters and device holders for the assembly of 3RV2/3RT2 load feeders	EN 13601 IEC 61439-1, IEC 61439-2 UL 508 A	✓	--	✓

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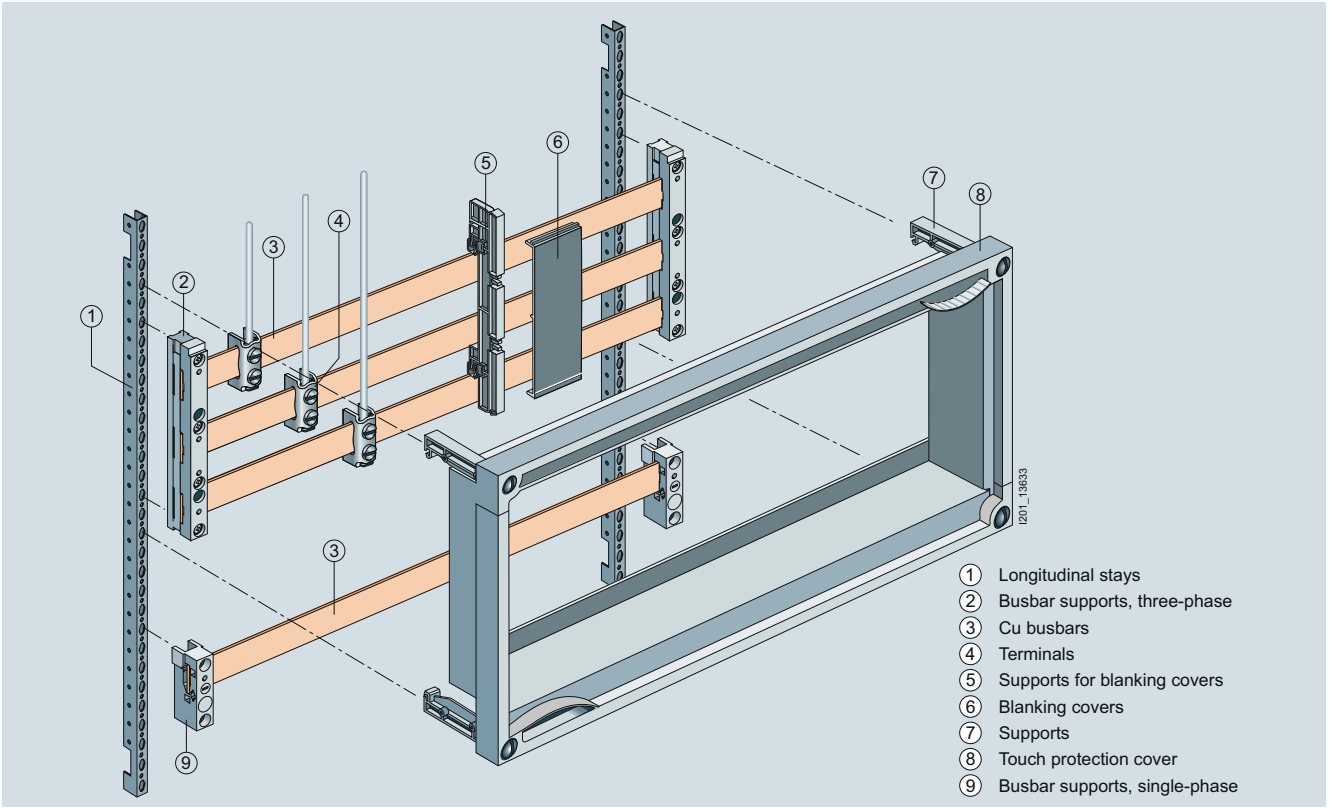
General data

Overview

The use of busbar systems with their versatile rail-adaptable connection, switching and installation devices is an ideal and cost-effective electrotechnical enhancement of modern distribution boards thanks to their small footprint, compact design and quick assembly contacts. Mounting is implemented on longitudinal stays. The standard busbar spacing is 60 mm. However, 40 mm, 100 mm and 185 mm systems are also in use.



Benefits

Notable cost reduction compared to conventional installation in switchgear and control cabinets due to the following reasons:

- Mechanical fixing and electrical contacting in a single step
- No access wiring and fewer busbar terminals used
- Double use of the busbar space
- Clear arrangement
- Straightforward replacement of individual devices or whole combinations
- High operational safety through finger-safe cover of the adapters and device holders

All the above advantages are felt especially in cases where many tap-off units of the same performance range are required.

Application

8US busbar systems are used for the direct busbar-mounting of current-limiting devices (protective devices) such as fuse switch disconnectors and circuit breakers as well as complete load feeders.

8US busbar systems are designed for horizontal mounting of the busbars.

Design

8US busbar systems with 60 mm busbar center-to-center spacing as well as flat copper profiles have become firmly established on the world market.

The permissible busbar temperature is decisive when dimensioning the busbars. The busbar temperature is dependent on the current and the current distribution, on the busbar cross-section and the busbar surface, on the position of the busbars, convection and the ambient temperature. The values stated in the following table can only be considered as guide values because the conditions vary with each location. The values are based on continuous current over the whole busbar length.

The busbar runs prove most advantageous when the infeed is centrally located and the load is distributed symmetrically on both sides.

Function

Short-circuit strength

The short-circuit strength of the busbar system is dependent on the distance of the busbar supports and on the busbar cross-section.

The short-circuit strength of the whole system is dependent on the short-circuit strength of the busbars and of the adapters with circuit breakers or switch disconnectors. If one of these values is lower than the prospective short-circuit current at the installation site, a current-limiting protective device has to be mounted upstream of the 8US busbar system. This may also be mounted as a feeder circuit breaker on the busbar system itself.

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Technical specifications

Continuous current for busbars, E-Cu bare, at 35 °C ambient temperature according to DIN 43671

Bar dimensions	System	Continuous current at a busbar temperature of		
		65 °C	85 °C	105 °C
mm	mm	A	A	A
12 × 5 15 × 5	40 + 60 40 + 60	188 222	248 293	295 349
20 × 5 25 × 5 30 × 5	60 60 60	274 327 379	362 432 500	430 513 595
12 × 10 20 × 10 30 × 10	40 + 60 60 60	302 427 573	398 564 756	474 670 900
Special profile up to 1600 A	60	1020	1020	1600

General technical specifications

Rated insulation voltage U_i	V AC	1000
Short-circuit strength		
Of 8US1 busbar device adapter		Current limitation due to associated motor starter protectors/circuit breakers/load feeders up to 50 kA
Of the busbar systems		See "Characteristic curves as a function of rated peak withstand current"
Material of the 8US1 busbar supports, busbar device adapters and device holders		Glass-fiber reinforced polyamide
Color		RAL 7035, light gray
Thermal stability (minimum values)		
Busbar supports, busbar device adapters, device holders, infeed and caps	°C	120
AWG connecting cables	°C	105 / 150
Cover profiles	°C	110
Bases, partitions, edge profiles and blanking covers	°C	70
Machining of plastic profiles		Take care when machining that no cracks are formed. A cross-cut circular saw with the following characteristic values has proven successful in cutting cover profiles for busbars: • D = 300 mm, B = 2.2 mm, • T = 120 R (5° negative replaceable tooth at a cutting rate of 50 ... 60 m/s) • Tooth feed 0.05 ... 0.1 mm The plastic parts have to be secured so that vibration is ruled out.
Approvals		
Busbar supports, busbar device adapters, device holders and terminals		UR, CSA, c^{UL}us-Listed

Technical specifications of the system components

Infeed, connection modules, three-phase		5SH3538	5SH3535	8US1921-1BA00	8US1921-1AA00
Busbar center-to-center spacing	mm	60	60	60	60
Current carrying capacity of the terminal points The specified current carrying capacities reflect the thermal load capability of the terminal points under favorable conditions (with the largest conductors it is possible to connect). This does not invalidate the assignment of conductor cross-sections and current carrying capacities as defined in national and international specifications.	A	80	560	300	440
Tightening torque	Nm	--	30	8 ... 10	12 ... 15
Clamping space W × H	mm	--	--	10 × 15	15 × 15
Conductors that can be used	mm^2	1.5 ... 16 Cu, re, rm, f, f+AE (reduction of the maximum conductor cross-sections may be required)	150 ... 300 Cu, Al (connections with aluminum conductors are not maintenance free), rm, sm, f	6 ... 50 (70) Cu, rm, f, f+AE (reduction of the maximum conductor cross-sections may be required), Cu 6 × 9 × 0.8	35 ... 120 Cu, rm, f, f+AE (reduction of the maximum conductor cross-sections may be required), Cu 6/10 × 15.5 × 0.8

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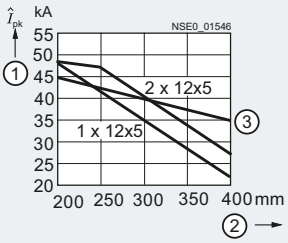
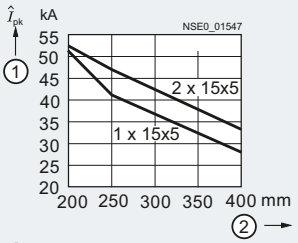
Characteristic curves

Characteristic curves as a function of rated peak withstand current

40 mm busbar systems

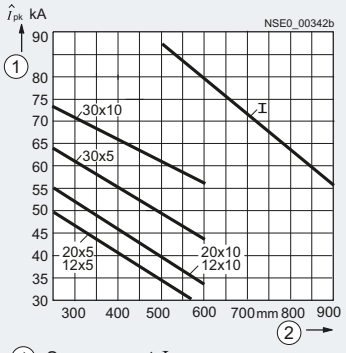


① Surge current I_{pk}
② Spacing of busbar supports
③ 5-pole busbar supports



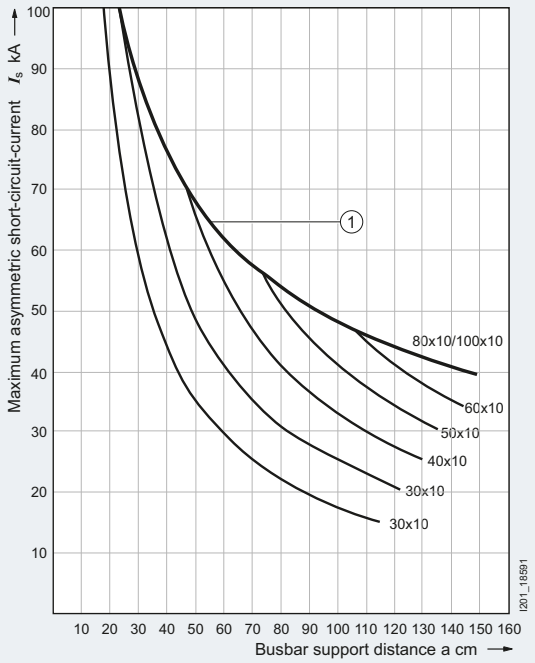
① Surge current I_{pk}
② Spacing of busbar supports

60 mm busbar systems



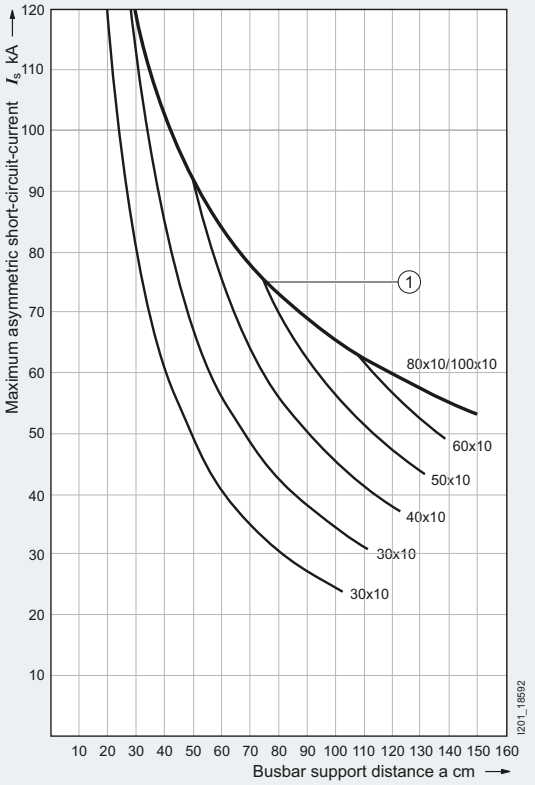
① Surge current I_{pk}
② Spacing of busbar supports

100 mm busbar system for 3NJ4/3NJ5



① Maximum limit load on busbar system

185 mm busbar system for 3NJ4/3NJ5



① Maximum limit load on busbar system

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Current-carrying capacity values for flat bars acc. to DIN 43671

According to DIN 43671, current-carrying capacity values for flat bars are defined as 35 °C ambient temperature and 65 °C busbar temperature.

If a higher busbar temperature than 65 °C is possible, the busbars can be operated with higher current values according to the following formula: $I = I_n \times k_2$

Example

Under normal operating conditions (35 °C ambient temperature and 65 °C busbar temperature), a 30 x 10 mm busbar can handle loads up to 630 A. However, you want the busbar to handle a higher current, at the expense of an increased busbar temperature of max. 85 °C.

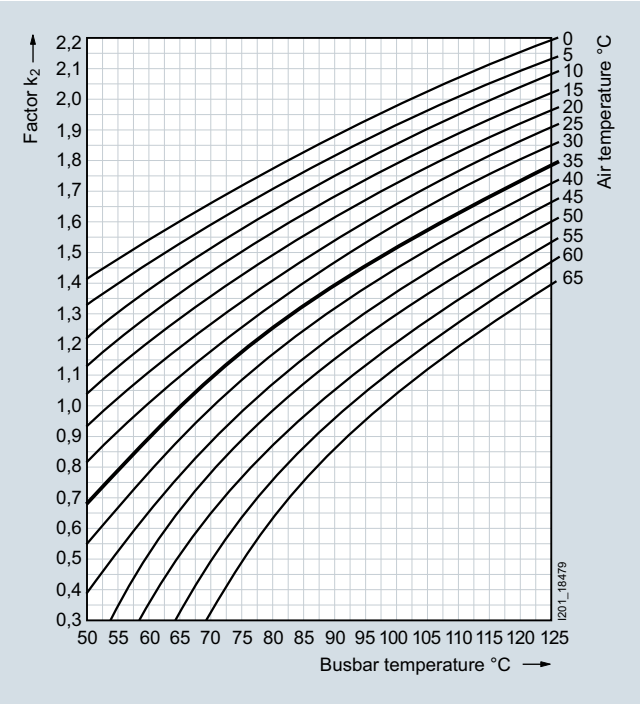
The following applies:

- Bar type: Busbar
- Busbar size: 30 x 10 mm
- Max. bar temperature: 85 °C
- Ambient temperature: 35 °C

The figure on the right shows the correction factor k_2 = 1.3 for the current-carrying capacity.

This results in a higher value of 630 A x 1.3 = 819 A.

If the 30 x 10 mm busbar is to be operated with a bar temperature of 85 °C, it may be loaded with maximum 819 A.



Current-carrying capacity values for 30 x 10 mm flat bars acc. to DIN 43671, depending on ambient and bar temperature

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UL applications

Overview

Short-circuit strength

The short-circuit strength of the busbar system is dependent on the distance of the busbar supports and on the busbar cross-section.

The short-circuit strength of the whole system is dependent on the short-circuit strength of the busbars and of the adapters with circuit breakers or switch disconnectors. If one of these values is lower than the prospective short-circuit current at the installation site, a current-limiting protective device has to be mounted upstream of the 8US busbar system. This may also be mounted as a feeder circuit breaker on the busbar system itself. The table below provides a selection aid for this purpose.

Selection aid for UL applications

Components used		**Short-circuit current rating (SCCR) Total**	**Ambient conditions**					
Article No.	Description		Max. rated current I_e	Rated voltage U_e	Busbar dimensions	Rated current of the fuse used I_e	Fuse type used	Max. spacing of busbar supports
		kA	A	V		A		mm
8US1921-1AA00	Connection terminal plate with cover, conductor cross-section 35 … 120 mm²	10	--	600	--	--	--	533
8US1921-1AA00		65	400	480	--	400	3VL-UL; 3RV.7; 3RV.8	800
8US1921-1AA00		50	600	480	--	600	3VL-UL; 3RV.7; 3RV.8	800
8US1921-1AA00		35	400	600	--	400	3VL-UL; 3RV.7; 3RV.8	800
8US1921-1AA00		35	600	600	--	600	3VL-UL; 3RV.7; 3RV.8	800
8US1921-1AA00		100	600	480	--	600	J or T	800
8US1921-1AA00		100	500	600	--	500	J or T	800
8US1921-1AA00		100	400	480	--	400	RK1	800
8US1921-1AA00		100	400	600	--	400	RK1	800
8US1922-2AA00	Cover profiles for busbars	--	--	--	--	--	--	--
8US1922-2BA00	Cover profiles for busbars	--	--	--	--	--	--	--
8US1922-2DA00	Cover profiles for flat copper profile	--	--	--	--	--	--	--
8US1923-3UA01	End and intermediate holders for flat copper profiles	18	150	600	12x5	--	--	250
8US1923-3UA01		18	150	600	12x5	--	--	400
8US1923-3UA01		65	150	480	12x5	250	3VL-UL; 3RV.7; 3RV.8	800
8US1923-3UA01		25	150	600	12x5	250	3VL-UL; 3RV.7; 3RV.8	800
8US1923-3UA01		100	150	480	12x5	400	RK1, J or T	800
8US1923-3UA01		100	150	600	12x5	175	J or T	800
8US1923-3UA01		100	150	600	12x5	100	RK1	800
8US1923-3UA01		18	150	600	12x10	--	-	250
8US1923-3UA01		18	150	600	12x10	--	-	400
8US1923-3UA01		65	150	480	12x10	250	3VL-UL; 3RV.7; 3RV.8	800
8US1923-3UA01		25	150	600	12x10	250	3VL-UL; 3RV.7; 3RV.8	800
8US1923-3UA01		100	150	480	12x10	400	RK1, J or T	800
8US1923-3UA01		100	150	600	12x10	175	J or T	800
8US1923-3UA01		100	150	600	12x10	100	RK1	800
8US1923-3UA01		18	362	600	20x5	--	-	250
8US1923-3UA01		18	362	600	20x5	--	-	400
8US1923-3UA01		65	362	480	20x5	400	3VL-UL; 3RV.7; 3RV.8	800
8US1923-3UA01		35	362	600	20x5	400	3VL-UL; 3RV.7; 3RV.8	800
8US1923-3UA01		100	362	480	20x5	500	J or T	800
8US1923-3UA01		100	362	600	20x5	400	J or T	800
8US1923-3UA01		100	362	480	20x5	400	RK1	800
8US1923-3UA01		100	362	600	20x5	200	RK1	800
8US1923-3UA01		18	564	600	20x10	--	-	250
8US1923-3UA01		18	564	600	20x10	--	-	400
8US1923-3UA01		65	564	480	20x10	400	3VL-UL; 3RV.7; 3RV.8	800
8US1923-3UA01		35	564	600	20x10	400	3VL-UL; 3RV.7; 3RV.8	800
8US1923-3UA01		100	564	480	20x10	500	J or T	800
8US1923-3UA01		100	564	600	20x10	400	J or T	800
8US1923-3UA01		100	564	480	20x10	400	RK1	800
8US1923-3UA01		100	564	600	20x10	200	RK1	800
8US1923-3UA01		25	500	600	30x5	--	-	250
8US1923-3UA01		22	500	600	30x5	--	-	400
8US1923-3UA01		65	500	480	30x5	400	3VL-UL; 3RV.7; 3RV.8	800
8US1923-3UA01		35	500	600	30x5	600	3VL-UL; 3RV.7; 3RV.8	800

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Components used		Short-circuit current rating (SCCR) Total	Ambient conditions					
Article No.	Description		Max. rated current I_e	Rated voltage U_e	Busbar dimensions	Rated current of the fuse used I_e	Fuse type used	Max. spacing of busbar supports
		kA	A	V		A		mm
8US1923-3UA01	End and intermediate holders for flat copper profiles	100	500	480	30x5	500	J or T	800
8US1923-3UA01		100	500	600	30x5	500	J or T	800
8US1923-3UA01		100	500	480	30x5	400	RK1	800
8US1923-3UA01		100	500	600	30x5	400	RK1	800
8US1923-3UA01		25	756	600	30x10	--	--	250
8US1923-3UA01		22	756	600	30x10	--	--	400
8US1923-3UA01		65	756	480	30x10	400	3VL-UL; 3RV.7; 3RV.8	800
8US1923-3UA01		35	756	600	30x10	400	3VL-UL; 3RV.7; 3RV.8	800
8US1923-3UA01		50	756	480	30x10	600	3VL-UL; 3RV.7; 3RV.8	800
8US1923-3UA01		25	756	600	30x10	600	3VL-UL; 3RV.7; 3RV.8	800
8US1923-3UA01		100	756	480	30x10	600	J or T	800
8US1923-3UA01		100	756	600	30x10	450	J or T	800
8US1923-3UA01		100	756	480	30x10	400	RK1	800
8US1923-3UA01		100	756	600	30x10	400	RK1	800
8US1923-3UA01		65	--	480	--	400	3VL-UL; 3RV.7; 3RV.8	800
8US1923-3UA01		50	--	480	--	600	3VL-UL; 3RV.7; 3RV.8	800
8US1923-3UA01		35	--	600	--	600	3VL-UL; 3RV.7; 3RV.8	800
8US1923-3UA01		100	--	480	--	600	J or T	800
8US1923-3UA01		100	--	600	--	500	J or T	800
8US1923-3UA01		100	--	480	--	400	RK1	800
8US1923-3UA01		100	--	600	--	400	RK1	800
8US1213-4AH00	Device adapters for 3VL UL molded-case circuit breakers	65	630	480	--	600	--	400
8US1213-4AH00		50	630	600	--	600	--	400
8US1213-4AH00		65	630	480	--	400	3VL-UL; 3RV.7; 3RV.8	800
8US1213-4AH00		35	630	600	--	400	3VL-UL; 3RV.7; 3RV.8	800
8US1213-4AH00		50	630	480	--	600	3VL-UL; 3RV.7; 3RV.8	800
8US1213-4AH00		25	630	600	--	600	3VL-UL; 3RV.7; 3RV.8	800
8US1211-4TR00	Busbar adapter 45 mm / 72 mm	10	80	600	--	--	--	400
8US1213-4AQ01	Busbar adapters for 3VL UL molded-case circuit breakers	65	250	480	--	250	--	400
8US1213-4AQ01		50	250	600	--	250	--	400
8US1213-4AQ01		65	250	480	--	250	3VL-UL; 3RV.7; 3RV.8	800
8US1213-4AQ01		25	250	600	--	250	3VL-UL; 3RV.7; 3RV.8	800
8US1948-2AA00	Flat copper profiles	103	1400	600	--	1600	Class L	N/A
8US1943-3AA00	Busbar supports, 3-pole, double-T profile	30	1200	600	--	--	--	400
8US1943-3AA00		25	1200	600	--	--	--	700
8US1943-3AA00		65	1200	480	--	800	3VL-UL; 3RV.7; 3RV.8	800
8US1943-3AA00		30	1200	600	--	800	3VL-UL; 3RV.7; 3RV.8	800
8US1943-3AA00		100	1200	480	--	800	Class T	800
8US1943-3AA00		100	1200	600	--	600	J or T	800
8US1943-3AA00		100	1200	480	--	600	Class RK1	800
8US1943-3AA00		100	1200	600	--	400	Class RK1	800
8US1943-3AA00		30	1400	600	--	--	--	400
8US1943-3AA00		25	1400	600	--	--	--	700
8US1943-3AA00		65	1400	480	--	800	3VL-UL; 3RV.7; 3RV.8	800
8US1943-3AA00		30	1400	600	--	800	3VL-UL; 3RV.7; 3RV.8	800
8US1943-3AA00		100	1400	480	--	800	T	800
8US1943-3AA00		100	1400	600	--	600	J or T	800
8US1943-3AA00		100	1400	480	--	600	RK1	800
8US1943-3AA00		100	1400	600	--	400	RK1	800
8US1943-3AA00		65	--	480	--	800	3VL-UL; 3RV.7; 3RV.8	800
8US1943-3AA00		30	--	600	--	800	3VL-UL; 3RV.7; 3RV.8	800
8US1943-3AA00		100	--	480	--	800	T	800
8US1943-3AA00		100	--	600	--	600	J or T	800
8US1943-3AA00		100	--	480	--	600	RK1	800
8US1943-3AA00		100	--	600	--	400	RK1	800
8US1922-1GC00	Covers for connection terminal set	--	--	--	--	--	--	--

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UL applications

Components used		Short-circuit current rating (SCCR) Total	Ambient conditions					
Article No.	Description		Max. rated current I_e	Rated voltage U_e	Busbar dimen-sions	Rated current of the fuse used I_e	Fuse type used	Max. spacing of busbar supports
		kA	A	V		A		mm
8US1941-2AA03	Connection terminals, 3-pole	65	400	480	--	400	3VL-UL; 3RV.7; 3RV.8	800
8US1941-2AA03		35	400	600	--	400	3VL-UL; 3RV.7; 3RV.8	800
8US1941-2AA03		100	500	480	--	500	J or T	800
8US1941-2AA03		100	300	600	--	300	J or T	800
8US1941-2AA03		100	400	480	--	400	RK1	800
8US1941-2AA03		100	200	600	--	200	RK1	800
8US1211-1NS10 / 8US1251-5DS10 / 8US1251-5DT11 / 8US1251-5DT10	Busbar device adapters and device holders	5	32	600	--	12.5	3RV20 + 3RV2928-1K	400
8US1211-1NS10 / 8US1251-5DS10 / 8US1251-5DT11 / 8US1251-5DT10	Busbar device adapters and device holders	5	32	480	--	32	3RV20 + 3RV2928-1K	400
8US1211-1NS10 / 8US1251-5DS10 / 8US1251-5DT11 / 8US1251-5DT10	Busbar device adapters and device holders	30	32	600	--	12.5	3RV20 + 3RV2928-1K	400
8US1211-1NS10 / 8US1251-5DS10 / 8US1251-5DT11 / 8US1251-5DT10	Busbar device adapters and device holders	65	32	480	--	16	3RV20	400
8US1211-1NS10 / 8US1251-5DS10 / 8US1251-5DT11 / 8US1251-5DT10	Busbar device adapters and device holders	65	32	600	--	25	3RV20 + 3RV2928-1K	400
8US1211-1NS10 / 8US1251-5DS10 / 8US1251-5DT11 / 8US1251-5DT10	Busbar device adapters and device holders	50	32	480	--	32	3RV20 + 3RV2928-1K	400
8US1211-1NS10 / 8US1251-5DS10 / 8US1251-5DT11 / 8US1251-5DT10	Busbar device adapters and device holders	5	25	600	--	--	--	400
8US1211-1NS10 / 8US1251-5DS10 / 8US1251-5DT11 / 8US1251-5DT10	Busbar device adapters and device holders	5	32	600	--	--	--	400
8US1211-1NS10 / 8US1251-5DS10 / 8US1251-5DT11 / 8US1251-5DT10	Busbar device adapters and device holders	5	25	600	--	--	--	400
8US1211-1NS10 / 8US1251-5DS10 / 8US1251-5DT11 / 8US1251-5DT10	Busbar device adapters and device holders	5	32	600	--	--	--	400
8US1211-1NS10 / 8US1251-5DS10 / 8US1251-5DT11 / 8US1251-5DT10	Busbar device adapters and device holders	5	25	600	--	--	--	400
8US1211-1NS10 / 8US1251-5DS10 / 8US1251-5DT11 / 8US1251-5DT10	Busbar device adapters and device holders	5	32	600	--	--	--	400
8US1251-5NT10	Busbar adapters for devices of size S0	5	30	600	--	--	--	400
8US1250-1AA10	Device holders for SIRIUS 3RA6	--	--	--	--	--	--	--
8US1250-5AT10	Device holders for devices of width 45 mm	--	--	--	--	--	--	--
8US1250-5AS10		--	--	--	--	--	--	--

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Overview

The 40 mm busbar system for the lower performance range up to 400 A Terminals and covers for infeed and connection methods

The 40 mm busbar system is used in machine engineering and distribution boards, in meter cabinets and in power distribution systems of the low performance range up to 400 A.

The busbar cross-sections are adapted to the rated currents and are available in the sizes 12 x 5 mm, 12 x 10 mm, 15 x 5 mm and 15 x 10 mm. The basic system is configured without covers. If touch protection is required, this is possible with busbar covers.

Terminals round off the product range of the 40 mm busbar system.

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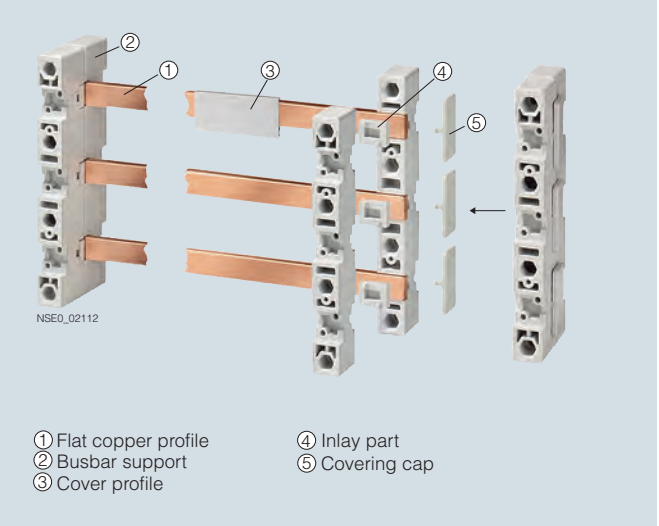
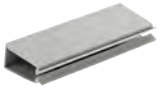
Basic assemblies

Overview



40 mm busbar system: Basic assembly up to 400 A

Selection and ordering data

	Description		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	②④⑤ Busbar supports								
	End and intermediate holders for flat copper profiles								
8US1903-3AB00	12 x 5 mm, 12 x 10 mm, 15 x 5 mm, 15 x 10 mm 3-pole, with inside fixing (PU = 2 busbar supports including inlay parts for bar thickness 5 mm and lateral finger-safe covers)			8US1903-3AB00		1	1 unit	1CU	0.177
8US1903-5AA00	5-pole, 12 x 5 mm and 12 x 10 mm with inside fixing	L1–L3 + N + PE/N		8US1903-5AA00		1	1 unit	1CU	0.122
	① Flat copper profiles (flat profile, approx. 2.4 m long, bare, according to EN 12167)								
8WC5	12 × 5 mm			8WC5123		1	1 unit	1CU	1.287
	15 × 5 mm			8WC5121		1	1 unit	1CU	1.620
	③ Cover profiles for busbars								
 8US1922-2CA00	12 × 5 mm	1000 mm long		8US1922-2CA00		1	10 units	1CU	0.061
	15 × 5 mm	1000 mm long		8US1922-2AA00		1	10 units	1CU	0.150

* You can order this quantity or a multiple thereof.

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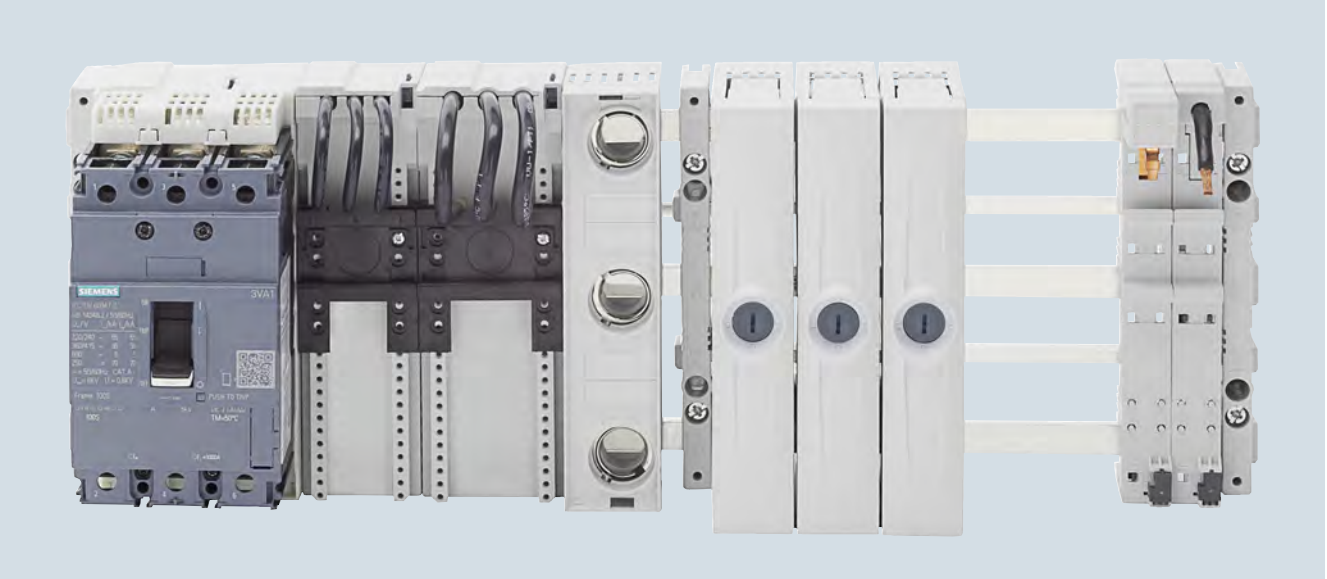
Overview



The 60 mm compact busbar system for the lower performance range up to 360 A

The 60 mm compact busbar system is used especially as a space-saving solution in distribution boards up to 360 A.

Thanks to its maximum height of 160 mm, it offers significant space benefits over other assemblies, and with the comparable dimensions of a 40 mm busbar system it offers an ideal alternative with the benefits of a 60 mm busbar system.

Another important benefit is provided by the option of combining with devices from the basic assemblies up to 400 A.

In addition, most components of the system in the 3-pole version meet the requirement regarding clearances in accordance with UL 508.

Another benefit is expansion to a 5-pole system with the same mounting height of 160 mm. The N and PE conductors are each arranged between the phases. The busbar supports are already prepared for a 5-pole system.

Benefits

- Significant space advantage compared to other assemblies
- Combination option with devices from the basic assemblies up to 400 A
- Comply with the clearances stipulated by UL 508
- Expansion to a 5-pole system possible

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Overview

The 60 mm compact busbar system for the lower performance range up to 360 A

Selection and ordering data

Mounting arrangement of 60 mm compact busbar system 3-pole/5-pole

	Description	Size	Stan-dard	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm								kg
	Busbar supports, 3P+N+PE, with end cover • Rated voltage U_e: - 690 V AC for IEC applications - 600 V AC for UL 508 • SCCR for UL 508 - 5-pole: 22 kA - 3-pole: 36 kA • Minimum order quantity 10 units	12 x 160 x 45	UL 508		8US1923-5CA02		1	1 unit	1CU	0.680
	UL spacers, height 18 mm • For use under 8US1923-5CA02 busbar support • Minimum order quantity 10 units	12 x 160 x18			8US1922-1CA02		1	1 unit	1CU	0.520
	Stabilizing modules • For protecting the N and PE busbars against bending. • Minimum order quantity 10 units	2 x 160 x 47			8US1928-5CA02		1	1 unit	1CU	0.150
	Cover profiles • Minimum order quantity 2 units	700 x 160 x 63			8US1922-2CB02		1	1 unit	1CU	0.840
	Holders • For 8US1922-2CB02 cover profile • Minimum order quantity 10 units	5 x 156 x 55			8US1922-2CA02		1	1 unit	1CU	0.180

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* You can order this quantity or a multiple thereof.

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Overview

Mounting arrangement of 60 mm compact busbar system 3-pole

	Description	Size	Standard	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm								kg
	Infeed system 3-pole for busbar 12 x 5 mm, 12 x 10 mm									
	Connection modules 16 mm², 3-pole with spring terminal 1.5 ...16 mm² • Rated current I_e: - 80 A for IEC applications • Rated voltage U_e: - 690 V AC for IEC applications • Minimum order quantity 6 units	20 x 160 x 91			8US1921-1BA02		1	1 unit	1CU	0.960
	Connecting terminal plates, 3-pole • Terminals 6 ... 50 mm² • Rated current I_e: - 300 A for IEC applications • Rated voltage U_e: - 690 V AC for IEC applications - 600 V AC for UL 508	54 x 160 x 115	UL 508		8US1921-1CB02		1	1 unit	1CU	0.206
	Connecting terminal plates, 3-pole • Terminals 35 - 150 mm² • Rated current I_e: - 480 A for IEC applications • Rated voltage U_e: - 690 V AC for IEC applications	90 x 160 x 115			8US1921-1CC02		1	1 unit	1CU	0.575

Mounting arrangement of 60 mm compact busbar system 5-pole

	Description	Size	Standard	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm								kg
	Infeed system 5-pole for busbar 12 x 5 mm									
	Connecting terminal plates, 3-pole • 10 ... 120 mm² • Rated current I_e: - 250 A for IEC applications • Rated voltage U_e: - 690 V AC for IEC applications - 600 V AC for UL 508	90 x 160 x 80			8US1921-1CD02		1	1 unit	1CU	0.600
	N connection modules • Terminals 10 ... 120 mm² • Rated voltage U_e: - 690 V AC for IEC applications	30 x 160 x 80			8US1921-1CE02		1	1 unit	1CU	0.215
	PE connection modules • Terminals 10 ... 120 mm² • Rated voltage U_e: - 690 V AC for IEC applications	30 x 160 x 80			8US1921-1CF02		1	1 unit	1CU	0.215

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* You can order this quantity or a multiple thereof.

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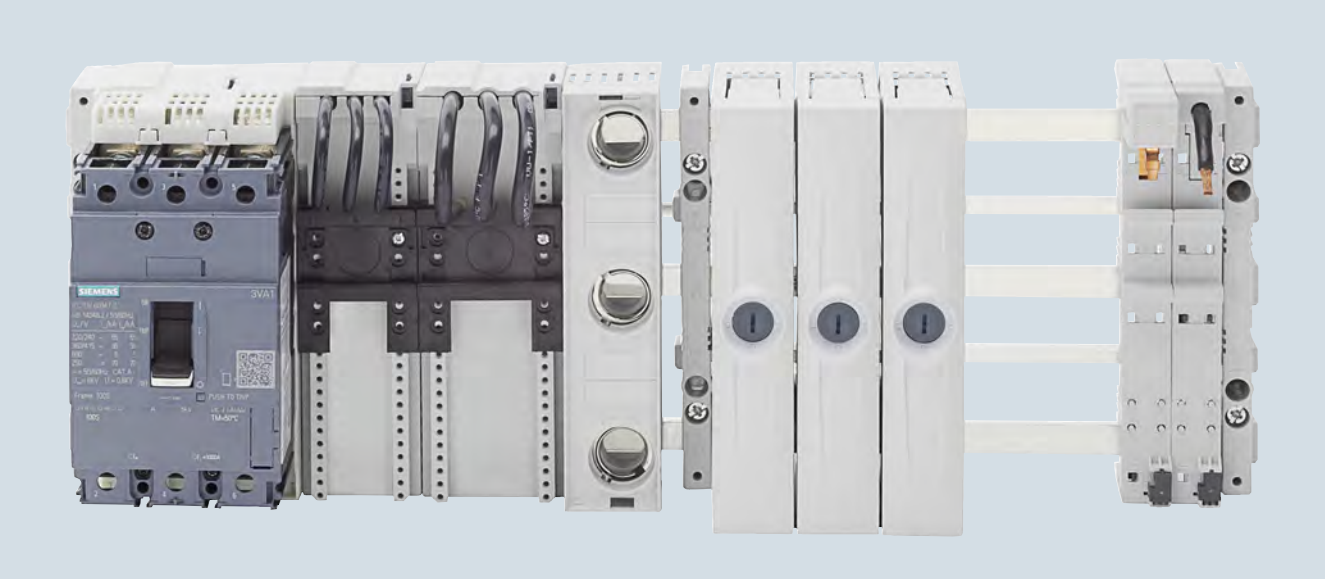
Overview



The 60 mm compact busbar system for the lower performance range up to 360 A: Device adapters and device holders

Mounting arrangement of 60 mm compact busbar system 3-pole

	Description	Size	Stan-dard	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm								kg
	Adapters									
8US1651-5DK02	Adapters 32 A, 1 support rail • Rated current I_e: - 32 A for IEC applications - 25 A for UL 508 • Rated voltage U_e: - 690 V AC for IEC applications - 600 V AC for UL 508 • Minimum order quantity 4 units	45 x 160 x 63	UL 508		8US1651-5DK02		1	1 unit	1CU	0.792
8US1651-5FK02	Adapters 63 A, 1 support rail • Rated current I_e: - 63 A for IEC applications - 65 A for UL 508 • Rated voltage U_e: - 690 V AC for IEC applications - 600 V AC for UL 508 • Minimum order quantity 4 units	54 x 160 x 63	UL 508		8US1661-5FK02		1	1 unit	1CU	0.872
	Device holders									
8US1613-4AU01	Adapters for molded case circuit breakers • With latching function • For rails 12 x 5 mm, 12 x 10 mm • Rated current I_e: - 144 A for IEC applications • Rated voltage U_e: - 690 V AC for IEC applications	77 x 160			8US1613-4AU01		1	1 unit	1CU	999.000

* You can order this quantity or a multiple thereof.

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Mounting arrangement of 60 mm compact busbar system 5-pole

	Description	Size	Stan-dard	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm								kg
	Adapters for 5-pole compact busbar system									
8US1621-2NJ02	Adapters, single-pole, 32 A • Standard version • Rated current I_e: - 32 A for IEC applications • Rated voltage U_e: - 690 V AC for IEC applications • Minimum order quantity 12 units	18 x 160 x 73			**8US1621-2NJ02**		1	1 unit	1CU	0.720
8US1621-2FK02	Adapters, single-pole, 63 A • Standard version • Rated current I_e: - 63 A for IEC applications • Rated voltage U_e: - 690 V AC for IEC applications • Minimum order quantity 12 units	18 x 160 x 73			**8US1621-2FK02**		1	1 unit	1CU	0.792
8US1624-2FK02	Adapters, single-pole, 63 A • For 5SL, 5SY miniature circuit breakers • Rated current I_e: - 63 A for IEC applications • Rated voltage U_e: - 690 V AC for IEC applications • Minimum order quantity 12 units	18 x 160 x 82			**8US1624-2FK02**		1	1 unit	1CU	0.840

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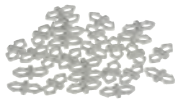
Accessories

Overview

For 12 x 5 mm busbars

	Description	Size	Stan-dard	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm								kg
8US1600-0RE02	N modules • Terminals 1.5 ... 16 mm^2 • Rated voltage U_e: - 690 V AC for IEC applications • Minimum order quantity 12 units	9 x 160 x 114			**8US1600-0RE02**		1	1 unit	1CU	0.528
8US1600-0RF02	PE modules • Terminals 1.5 ... 16 mm^2 • Rated voltage U_e: - 690 V AC for IEC applications • Minimum order quantity 12 units	9 x 160 x 114			**8US1600-0RF02**		1	1 unit	1CU	0.528
8US1620-5AK02	Support modules • Minimum order quantity 6 units	18 x 160 x 54			**8US1620-5AK02**		1	1 unit	1CU	0.198
8US1998-2BH02	Lateral modules • Minimum order quantity 12 units	9 x 160 x 47			**8US1998-2BH02**		1	1 unit	1CU	0.144
 8US1998-1AA02	Set of connectors • For connecting adapters	--			**8US1998-1AA02**		1	1 unit	1CU	0.020

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Overview

The 60 mm busbar system for the medium and top performance range up to 1600 A, here for example with the 3NP1 switch disconnector, size 3

The 60 mm busbar system is used preferably in control cabinet installation, in motor control centers and in power distribution systems of the medium power range (630 A) and top performance range (1600 A, special profile).

The 60 mm busbar system can be configured as a basic system without covers. The busbar cross-sections are available in the sizes 12 x 5 mm to 30 x 10 mm and as a special profile.

Busbar adapters for SIRIUS devices, 3VL circuit breakers, 3KA and 3KL switch disconnectors, and 3NP1 and 3NP5 fuse switch disconnectors offer numerous options for configuring this busbar system. Infeed units, terminals and other accessories open up a large range of applications.

Busbars with a special profile are suitable for applications up to 1600 A. All components of the 60 mm busbar system can be fitted.

SIRIUS motor starter combinations

SIRIUS motor starter combinations can be configured with and without fuses.

The compact 3NW7 ... -1 cylindrical fuse holders for IEC fuses, size 10 x 38 mm, or 3NW7... -1HG cylindrical fuse holders for Class CC UL fuses are suitable for use with fused motor starter combinations.

With a width of 45 mm, SIRIUS motor starter combinations are the same width as the majority of contactors.

For further information and accessories, see chapter "Fuse Systems" → Cylindrical fuse systems
→ Fuse holders in size 10 x 38 mm and Class CC

Installation configuration of a cylindrical fuse holder and a SIRIUS contactor on busbar device adapter for the 60 mm busbar system

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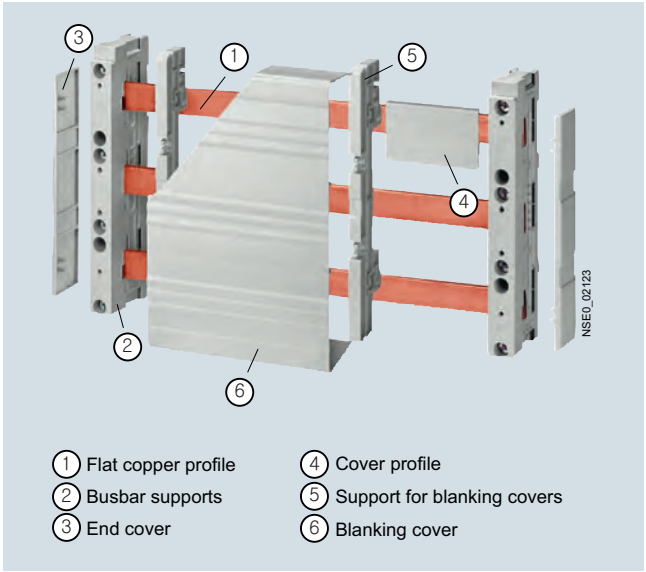
Overview



60 mm busbar system: Basic assemblies up to 630 A

Selection and ordering data

Busbar support and end cover

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	Description	Connections	Standard	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	② Busbar supports									
	End and intermediate holders for flat copper profiles 12, 15, 20, 25, 30 x 5, 10 mm									
	3-pole, with outside fixing	L1–L3			**8US1923-2AA01**		1	10 units	1CU	0.161
8US1923-3AA01	3-pole, with inner fixing	L1–L3			**8US1923-3AA01**		1	10 units	1CU	0.157
	4-pole, with inner fixing	L1–L3 + PE/N			**8US1923-4AA00**		1	10 units	1CU	0.233
8US1923-5AA00	2-pole, with outside fixing				**8US1923-5AA00**		1	10 units	1CU	0.112
	N/PE busbar supports 12, 20, 30 x 5, 10 mm									
5SH3540	1-pole, for flat copper profile for 5/10 mm busbars	PE/N			**5SH3540**		1	1 unit	1CU	0.069

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	Description	Connections	Standard	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
8US1923-1AA01	**N/PE busbar supports, 6 x 6 mm 12, 15, 20, 25, 30 x 5, 10 mm**									
	1-pole, for copper profiles for mounting on 8US1923-2AA01 3-pole busbar supports or free standing	PE/N	UL 508		**8US1923-1AA01**		1	1 unit	1CU	0.052
8US1923-3UA01	**End and intermediate holders for flat copper profiles 5 x 20 mm, 10 x 20 mm, 10 x 30 mm**									
	3-pole, with inner fixing	L1–L3	UL 508[1)]		**8US1923-3UA01**		1	10 units	1CU	0.154
8US1922-1AC00	③ **End covers**									
	For covering free busbar ends									
	• For 8US1923-2AA01, 3AA01 and 3UA01	L1–L3	UL 508		**8US1922-1AC00**		1	10 units	1CU	0.020

[1)] Only with base plate 8US1922-2UA01

Covers, supports for blanking covers, flat copper profiles and busbar connection parts

	Description	Length	Width	Depth	Stan-dard	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
		mm	mm	mm								
	④ **Cover profiles for busbars**											
8US1922-2CA00	12× 5 mm	1000	15	10			**8US1922-2CA00**		1	10 units	1CU	0.061
8US1922-2AA00	15 × 5 mm, 20 × 5 mm, 25 × 5 mm, 30 × 5 mm	1000	40	9	UL 508		**8US1922-2AA00**		1	10 units	1CU	0.150
	12 × 10 mm, 15 × 10 mm, 20 × 10 mm, 25 × 10 mm, 30 × 10 mm	1000	40	14	UL 508		**8US1922-2BA00**		1	10 units	1CU	0.172
8US1922-2EA0.	⑤ **Supports for blanking covers**											
	Mounting on busbar, 32 mm depth (2 units per section of blanking cover)				UL 508 ►		**8US1922-2EA00**		1	4 units	1CU	0.038
	Mounting on busbar, 107 mm depth (2 units per section of blanking cover)				UL 508 ►		**8US1922-2EA01**		1	8 units	1CU	0.081
8US1922-2EB00	⑥ **Blanking covers**											
	Mounting on 8US1922-2EA.. support for blanking covers Height 195 mm, Depth 63 mm, Length 700 mm				UL 508 ►		**8US1922-2EB00**		1	2 units	1CU	0.741

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Basic assemblies up to 630 A

	Description	Length	Cross-section	Standard	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	mm^2								kg
8US1922-2UA01	**Base plates** For 3-pole system, width 240 mm	1100	--	UL 508		8US1922-2UA01		1	2 units	1CU	0.574
	① **Flat copper profiles (flat profile, bare)** Flat copper profiles for universal applications										
	• 12 × 5 mm, current intensity 200 A	2400	60	EN 12167		8WC5123		1	1 unit	1CU	1.287
	• 15 × 5 mm, current intensity 250 A	2400	75	EN 12167		8WC5121		1	1 unit	1CU	1.620
	• 20 × 5 mm, current intensity 320 A	2400	100	EN 12167		8WC5126		1	1 unit	1CU	2.000
	• 20 × 5 mm, current intensity 400 A	1100	125	EN 12167		8WC5031-1AA00		1	1 unit	1CU	1.229
	• 25 × 5 mm, current intensity 400 A	2400	125	EN 12167		8WC5131		1	1 unit	1CU	2.670
	• 30 × 5 mm, current intensity 447 A	1100	150	EN 12167		8WC5033-1AA00		1	1 unit	1CU	1.500
	• 30 × 5 mm, current intensity 447 A	2400	150	EN 12167		8WC5133		1	1 unit	1CU	3.000
	• 20 × 10 mm, current intensity 520 A	2400	200	EN 12167		8WC5128		1	1 unit	1CU	4.120
	• 30 × 10 mm, current intensity 630 A	2400	300	EN 12167		8WC5134		1	1 unit	1CU	6.500
	① **Flat copper profiles, tinned**										
	• 12 × 5 mm, current intensity 200 A	2000	60	EN 12167		8WC5051		1	1 unit	1CU	1.072
	• 15 × 5 mm, current intensity 250 A	2000	75	EN 12167		8WC5052		1	1 unit	1CU	1.328
	• 20 × 5 mm, current intensity 320 A	2000	100	EN 12167		8WC5053		1	1 unit	1CU	1.788
	• 25 × 5 mm, current intensity 400 A	2000	125	EN 12167		8WC5054		1	1 unit	1CU	2.500
	• 30 × 5 mm, current intensity 447 A	2000	150	EN 12167		8WC5055		1	1 unit	1CU	2.682
	• 20 × 10 mm, current intensity 520 A	2000	200	EN 12167		8WC5063		1	1 unit	1CU	3.576
	• 30 × 10 mm, current intensity 630 A	2000	300	EN 12167		8WC5065		1	1 unit	1CU	5.364
	For further flat copper profiles, see chapter "Distribution Boards / Power Distribution Boards"										
8JK320	**Extension terminals** For busbars 12 × 5 mm, tightening torque 6.0 Nm (busbar not included, 1 set = 2 units)	--	--	--		8JK3201		1	10 sets	1BR	0.020
8US1921-2BE00	**Busbar connection pieces for bars** For flat profiles (max. 630 A) 20 × 5 mm, 20 × 10 mm, 25 × 5 mm, 25 × 10 mm, 30 × 5 mm, 30 × 10 mm	40	--	--		8US1921-2BE00		1	6 units	1CU	0.234
8US1921-2BF00	For flat profiles (max. 630 A) 12 × 5 mm, 12 × 10 mm, 15 × 5 mm, 15 × 10 mm, 20 × 5 mm, 20 × 10 mm	55	--	--		8US1921-2BF00		1	12 units	1CU	0.160

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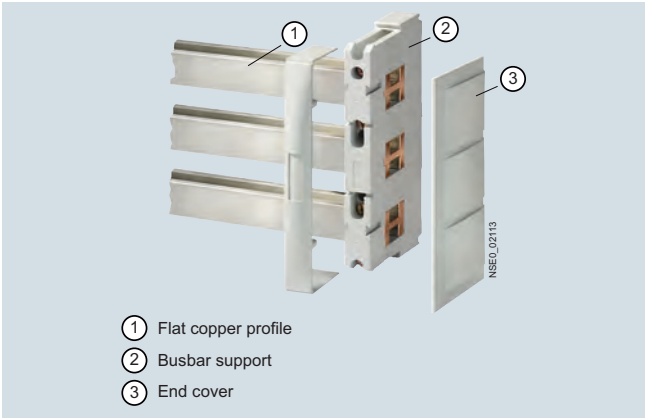
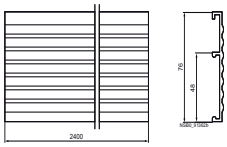
Overview



60 mm busbar system: Basic assembly up to 1600 A

Selection and ordering data

	Description		Standard	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
8US1943-3AA00	**Busbar supports** 3-pole, for TT special profiles End and intermediate holder with finger-safe busbar cover (1 pack = 2 busbar supports + finger-safe end covers)	L1–L3	UL 508		**8US1943-3AA00**		1	1 unit	1CU	1.084
8US1948-2AA00	**Flat copper profiles (approx. 2.4 m long, tinned)** TT special profile up to 1600 A, cross-section 720 mm^2				**8US1948-2AA00**		1	1 unit	1CU	15.600
8US1948-2AA00	**Cover profiles** For flat copper profiles, length 1000 mm				**8US1922-2DA00**		1	5 units	1CU	0.400
8US1941-2BF00	**Busbar connection pieces** For special profiles/TT profiles up to 1600 A				**8US1941-2BF00**		1	3 units	1CU	1.137
 8US1922-1JA00	**Partitions, closed** 76 mm wide, 2400 mm long For additional lateral touch protection at the top/bottom				**8US1922-1JA00**		1	1 unit	1CU	0.500
8US1922-2EA0.	**Supports for blanking covers** Mounting on busbar, 32 mm depth (2 units per section of blanking cover)		UL 508	►	**8US1922-2EA00**		1	4 units	1CU	0.038
	Mounting on busbar, 107 mm depth (2 units per section of blanking cover)		UL 508	►	**8US1922-2EA01**		1	8 units	1CU	0.081
8US1922-2EB00	**Blanking covers** Mounting on 8US1922-2EA.. support for blanking covers Height 195 mm, Depth 63 mm, Length 700 mm		UL 508	►	**8US1922-2EB00**		1	2 units	1CU	0.741

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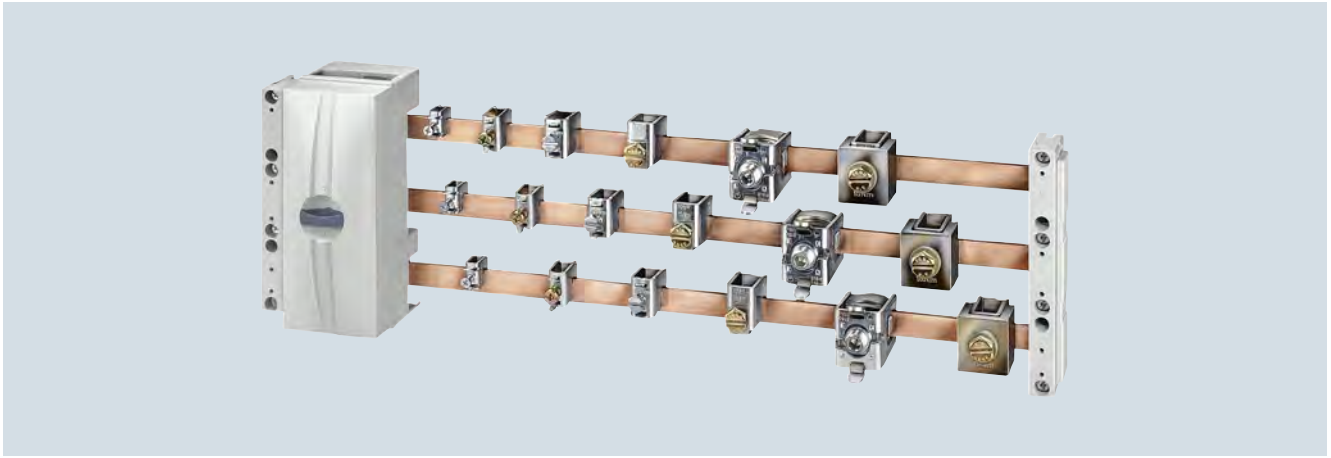
Infeed and connection methods

Overview



60 mm busbar system: Terminals and covers for infeed and connection methods

Selection and ordering data

	Description	Length	Width	Max. current	Conductor cross-section	Standard	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	mm	A	mm^2								kg
8US1921-1AA00	**Infeeds**												
	Connecting terminal plate with cover												
	• 3-pole	200	20	80	1.5 ...16	UL 508		5SH3538		1	5 units	1CU	0.172
	• 3-pole	200	54	300	6 ... 50	UL 508		8US1921-1BA00		1	1 unit	1CU	0.417
	• 3-pole	200	81	400	35 ... 120	UL 508		8US1921-1AA00		1	1 unit	1CU	0.496
8US1200-0AA00	**Outgoing modules for PE/N**												
	Connection module for 4th pole (PE/N) up to 16 mm, must be attached to an adapter/ device holder	242	18	--	--	--		8US1200-0AA00		1	1 unit	1CU	0.120
5SH3535	**SR60 connecting terminal plates**												
	3-pole with cover, suitable for aluminum conductors (shown without cover)			560	150 ... 300	--		5SH3535		1	1 unit	1CU	1.643
8US1941-2AA03	**Terminal sets**												
	3-pole without cover for round cables, suitable for aluminum conductors			560	95 ... 300	UL 508		8US1941-2AA03		1	1 unit	1CU	1.560

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	Description	Max. current	Conductor cross-section	Stan-dard	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
			mm^2								kg
8US1941-2AA04	**Terminal sets** 3-pole without cover for flat bars up to 32 x 20 mm	800	--	UL 508		**8US1941-2AA04**		1	1 unit	1CU	1.339
8US1922-1GC00	Covers for 8US1941-2AA03/04 terminal set	--	--	--		**8US1922-1GC00**		1	1 unit	1CU	0.347
Terminals	**Terminals for circular conductors** **5 mm busbar thickness**[1] 12 × 5 mm, 15 × 5 mm, 20 × 5 mm, 25 × 5 mm, 30 × 5 mm	180	1.5 ... 16		►	**8US1921-2AA00**		100	100 units	1CU	2.070
		270	4 ... 35		►	**8US1921-2AB00**		100	50 units	1CU	4.600
		400	16 ... 70		►	**8US1921-2AD00**		1	50 units	1CU	0.071
		440	16 ... 120		►	**8US1921-2AC00**		1	50 units	1CU	0.102
		180	1.5 ... 16		►	**8US1921-2AA01**		1	15 units	1CU	0.021
		270	4 ... 35		►	**8US1921-2AB01**		1	15 units	1CU	0.046
		400	16 ... 70		►	**8US1921-2AD01**		1	15 units	1CU	0.070
		440	16 ... 120		►	**8US1921-2AC01**		1	15 units	1CU	0.100
Terminals	**10 mm busbar thickness** 12 × 10 mm,[1] 15 × 10 mm,[1] 20 × 10 mm, 25 × 10 mm, 30 × 10 mm	180	1.5 ... 16		►	**8US1921-2BA00**		1	100 units	1CU	0.022
		270	4 ... 35		►	**8US1921-2BB00**		1	50 units	1CU	0.048
		400	16 ... 70		►	**8US1921-2BD00**		1	50 units	1CU	0.072
		440	16 ... 120		►	**8US1921-2BC00**		1	50 units	1CU	0.107
		180	1.5 ... 16		►	**8US1921-2BA01**		1	15 units	1CU	0.022
		270	4 ... 35		►	**8US1921-2BB01**		1	15 units	1CU	0.048
		400	16 ... 70		►	**8US1921-2BD01**		1	15 units	1CU	0.070
		440	16 ... 120		►	**8US1921-2BC01**		1	15 units	1CU	0.104
8US1941-2AA01	20 × 5 mm, 25 × 5 mm, 30 × 5 mm	500	95 ... 185		►	**8US1941-2AA01**		1	6 units	1CU	0.307
8US1941-2AA02		600	95 ... 300		►	**8US1941-2AA02**		1	3 units	1CU	0.406

[1] Cannot be used on a special profile up to 1600 A

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Infeed and connection methods

	Description	Max. current	Conductor cross-section	Stan-dard	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
			mm^2								kg
	Terminal covers for circular conductors (fixing to busbar)										
8US1922-1GA00	For terminals up to 120 mm^2 200 mm long, 84 mm wide		--	--	►	**8US1922-1GA00**		1	10 units	1CU	0.154
	For terminals up to 300 mm^2 [1] 200 mm long, 270 mm wide		--	--	►	**8US1922-1GA02**		1	1 unit	1CU	0.645
	Terminals										
8US1941-2AC00	For cable lugs up to 240 mm^2, 10 mm bar thickness (threaded bolts M10)	630	--	--		**8US1941-2AC00**		1	6 units	1CU	0.360
8US1941-2BB00	For copper bars or laminated conductors 20 x 5 mm, 20 x 10 mm, 25 x 5 mm, 25 x 10 mm, 30 x 5 mm, 30 x 10 mm	750	--	--		**8US1941-2BB00**		1	6 units	1CU	0.298
8US1941-2BA00	For 2 x 40 x 10 mm, for TT flat copper profile 30 x 10 mm profile for flat bars up to 40 x 25 mm	1250	--	--		**8US1941-2BA00**		1	3 units	1CU	0.812

[1] Only for 20 × 5 mm, 20 × 10 mm, 25 × 5 mm, 25 × 10 mm, 30 × 5 mm and 30 × 10 mm

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Overview

Rail-adaptable built-in components, such as NEOZED and DIAZED bus-mounting bases, adapters for modular installation devices, fuse switch disconnectors and NEOZED bus-mounting fuse switch disconnectors are made of glass-fiber reinforced, thermoplastic polyester. The material ensures the required mechanical, chemical and electrical properties.

Efficient power distribution up to 630 A.
Users have several options for mounting the SR60 busbar system:

1. Mounting in distribution boards

The busbar supports are mounted on the longitudinal stays. Once the built-in components are mounted and connected, the touch protection cover (section cover) protects against accidental contact with live parts.

2. Installation in industrial control cabinets

The demand for comprehensive touch protection has generated new solutions: Built-in components, such as busbar fuse bases have integrated reach-through guards, enable the implementation of cost-effective overall solutions.

Previously two optional solutions were provided, which can now be replaced using new technology: Touch protection over base and edges or touch protection over partitions.

Planning dimensions

	Width mm	MW
NEOZED bus-mounting bases D02		
Covers	27	1.5
Covers, extra wide	36	2.0
Covers, double width	54	3.0
DIAZED bus-mounting bases DII		
Covers	42	2.3
DIAZED bus-mounting bases DIII		
Covers	57	3.2
NEOZED bus-mounting switch disconnectors	27	1.5
LV HRC fuse switch disconnectors size 00	108	6
Bus-mounting fuse holders	27	1.5

Higher overall efficiency and cost savings in the plant engineering industry.

The fuse holders for cylindrical fuses, size 10 x 38 and for American fuses, Class CC, can be used in the international plant engineering industry. In addition, Siemens offers a broad range of UL-approved components for the design of switchboards according to UL 508 A.

Fuse holders, fuse switch disconnectors, switch disconnectors with fuse and 16 mm^2 connection modules with screwless terminals are available; this offers users maximum safety and comfort.

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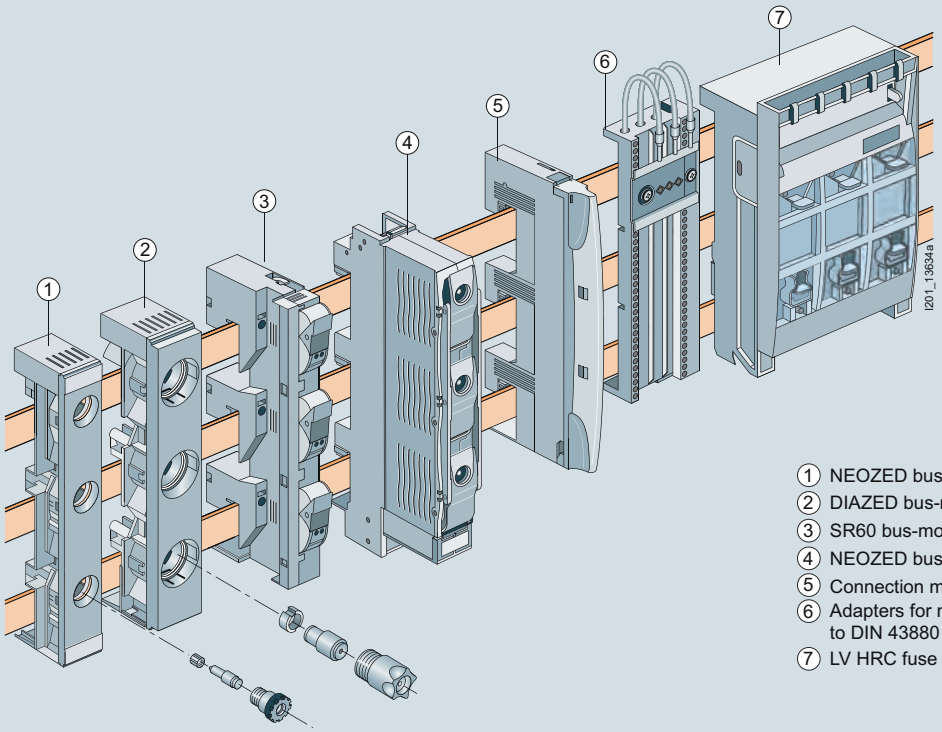
Built-in components



1. NEOZED bus-mounting bases, 3-pole
2. DIAZED bus-mounting bases, 3-pole
3. SR60 bus-mounting fuse holders, 3-pole
4. NEOZED bus-mounting switch disconnectors, 3-pole
5. Connection modules, three-phase
6. Adapters for modular installation devices according to DIN 43880
7. LV HRC fuse switch disconnectors

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Benefits

- The direct contact of the rail-adaptable switching and installation devices on the Cu busbars reduces distribution panels and mounting times
- Compared to conventional installation, the transfer resistance of the connections is drastically reduced. This prevents unnecessary temperature rise
- New built-in components with touch protection ensure comprehensive touch protection without the previously required partitions
- International application due to UL-approved components
- Enhanced effectiveness and increased safety due to screwless terminals.

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Technical specifications

Bus-mounting bases		**NEOZED SR60 bus-mounting bases**		**DIAZED SR60 bus-mounting bases**	
		5SG6202 5SG6206 5SG6207 5SG208		**5SF6014 5SF6015 5SF6020**	**5SF6214 5SF6215 5SF6220**
		D01	**D02**	**DII**	**DIII**
Standards		IEC 60269-3, DIN VDE 0636-3			
Rated voltage	V AC V DC	400 250		500 --	690 600
Rated frequency	Hz	50			
Rated current	A	16 (with 5SH5400 retaining springs)	63	25	63
Rated conditional short-circuit current	kA AC kA DC	50 8		50 8	
For fuse links with power losses per phase	W	2.5	5.5	4	7
Busbar center-to-center spacing	mm	60		60	

Bus-mounting fuse holders		**3NW7431**	**3NW7431-0HG**
Standards		IEC 60269-2, UL 512, CSA C22.2	UL 512, CSA C22.2
Approvals		, CSA	UL, CSA
Size		10 × 38	Class CC
Rated frequency	Hz	50/60	
Max. rated voltage U_e • IEC/EN • UL/CSA	 V AC V AC	 690 600	 -- 600
Max. rated current I_e (When several devices are used next to each other, it is essential to comply with the rated load factor according to EN 60439-1 (VDE 0660-500), Table 1.) • IEC/EN • UL/CSA	 A A	 32 30	 -- 30
Utilization categories • IEC/EN • UL/CSA		 AC-22B (500 V) AC-21B (690 V, 30 A) Can only be used as fuse holder	
Rated conditional short-circuit current (type-tested with fuse links, operational class gL/gG) • IEC/EN • UL/CSA	 kA kA	 100 (400 V, 500 V, 690 V) 50 (600 V)	 -- 200
For fuse links with power losses per phase	W	3	--
Screwless wire connections • IEC/EN • UL/CSA	 mm^2 AWG	 Cu 1.5 … 6 (f) 16 … 10 (str)	

Bus-mounting switch disconnectors with fuses		**5SG7230**	**3NW7430**
Standards		IEC 60269-3, IEC 60269-2	
Approvals		EN 60947-3 (VDE 0660-107), IEC 60947-3	
Size		D02 (D01)	10 mm × 38 mm
Rated frequency	Hz	50/60	50/60
Rated voltage U_e	V AC V DC	400 110	690 --
Rated insulation voltage U_i	V	800	800
Rated impulse withstand voltage U_{imp}	kV	6	6
Rated current I_e	A	63[1)]	Up to 32
Utilization categories (Type-tested with 3-pole, switchable version)		AC-23 A (400 V) DC-21 B (48 V), 1 pole DC-21 B (110 V), 2 pole	AC-20 DC-20
Box terminals for wire connection	mm^2 mm^2 mm^2	Cu 1.5 … 6 (re) Cu 1.5 … 16 (f) Cu 1.5 … 16 (f+AE)	Cu 1.5 … 6 (re) Cu 1.5 … 16 (f) Cu 1.5 … 16 (f+AE)
Signaling switches for the display of switching positions		1 CO	1 CO
Cable terminals		Bottom	Bottom
Busbar thickness	mm	Through combination foot for 5, 10 mm	
Rated conditional short-circuit current (type-tested with fuse links, operational class gL/gG)	kA AC kA DC	50 8	50 --
Permissible power loss of fuse links per phase For stand-alone operation without lateral modules or for group operation with lateral modules	W	5.5	3

[1)] In the case of permanent load over 35 A, we recommend the use of 5SH5526 lateral modules. Please observe EN 60439-1, Table 1.

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Selection and ordering data

	Size	Rated current	Rated voltage	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	V	MW							kg
	NEOZED SR60 bus-mounting bases with touch protection, 3P										
	For 5/10 mm busbars										
	27 mm wide										
	D02	63	400	1.5		5SG6206		1	4 units	1CU	0.146
	36 mm wide										
	D02	63	400	2		5SG6207		1	4 units	1CU	0.163
	NEOZED SR60 bus-mounting bases, 3P standard version										
	For 5/10 mm busbars										
	D02	63	400	1.5		5SG6202		1	4/104 units	1CU	0.111
	NEOZED SR60 covers for standard version										
	D02			1.5		5SH5241		1	4/200 units	1CU	0.024
	D02, extra wide			2		5SH5242		1	4/140 units	1CU	0.028
	D02, with double width			3		5SH5243		1	4/120 units	1CU	0.039
	DIAZED SR60 bus-mounting bases with touch protection, 3P										
	For use with DIAZED screw adapters										
	DII	25	500	2.3		5SF6020		1	4 units	1CU	0.295
	DIII	63	500 V AC/DC (according to DIN VDE 0636-3 also 690 V AC/600 V DC)	3.2		5SF6220		1	4 units	1CU	0.397
	For NEOZED screw caps, NEOZED adapter sleeves and NEOZED fuse links, see chapter "Fuse Systems", "NEOZED fuse systems"										
	DIAZED SR60 bus-mounting bases, 3P standard version										
	For use with DIAZED screw adapters										
	DII	25	500	2.3		5SF6015		1	2/52 units	1CU	0.233
	DIII	63	500 V AC/DC (according to DIN VDE 0636-3 also 690 V AC/600 V DC)	3.2		5SF6215		1	2/52 units	1CU	0.308

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* You can order this quantity or a multiple thereof.

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	Size	Rated current	Rated voltage	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	V	MW							kg
	DIAZED SR60 covers for standard version										
	DII			2.3		**5SH2042**		1	2/120 units	1CU	0.048
	DIII			3.2		**5SH2242**		1	2/120 units	1CU	0.059
	SR60 bus-mounting fuse holders, 3P										
	For 5/10 mm busbars										
	with screwless terminals										
	For cylindrical fuses, 10 × 38 mm										
	--	30	690	1.5		**3NW7431**		1	1 unit	1CU	0.249
	For UL fuses, Class CC										
	--	30	600	1.5		**3NW7431-0HG**		1	1 unit	1CU	0.230
	NEOZED SR60 bus-mounting switch disconnectors, 3P										
	For 5/10 mm busbars										
	D02	63*	400	1.5		**5SG7230**		1	1/30 units	1CU	0.688
	* From 35 A load use 5SH5526 lateral module										

DIAZED screw caps, DIAZED screw adapters and DIAZED fuse links see chapter "Fuse Systems", "DIAZED fuse system"

Other accessories

	Version	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		MW							kg
5SH5525	**Auxiliary switches for signaling the switching state for NEOZED SR60 bus-mounting switch disconnectors (5SG7230)**								
	1 CO	0.5		**5SH5525**		1	1/50 units	1CU	0.008
5SH5526	**Lateral modules**								
	For greater heat dissipation for loads from 35 A with NEOZED bus-mounting switch disconnectors	0.5		**5SH5526**		1	5/50 units	1CU	0.066
5SH5527	**Reducers**								
	For NEOZED fuse links D01								
	In SR60 bus-mounting switch disconnectors	--		**5SH5527**		1	10/100 units	1CU	0.001

*** You can order this quantity or a multiple thereof.**

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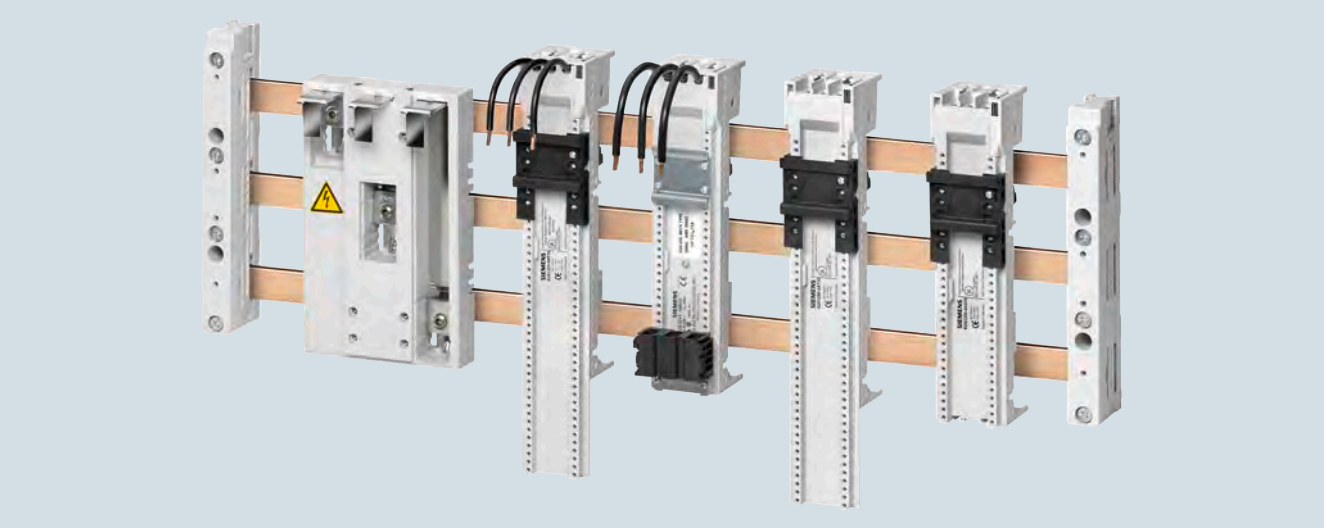
Device adapters and device holders

Overview



60 mm busbar system: Busbar device adapters and device holders

All busbar device adapters and device holders are designed for copper busbars according to DIN 46433, width 12 to 30 mm, thickness 5 mm and 10 mm, and special profiles up to 1600 A.

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Selection and ordering data

For SIRIUS 3RV2/3RT2 load feeders

Welded connecting cable resistant up to 150 °C

	Busbar device adapters for	Number of support rails (35 mm)	Adapter Length	Adapter Width	Connecting cable Cross-section	Connecting cable Temperature max.	Connecting cable Rated current	Connecting cable Rated voltage	Standard	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
			mm	mm	AWG	°C	A	V								kg
Device holders with 3RA2120	**Size S00 devices with screw connection**															
	Circuit breakers	1	200	45	12	150	25	690 600[1)]	UL 508	►	**8US1251-5DS10**		1	1 unit	1CU	0.285
	Direct-on-line starters	1	200	45	12	150	25	690 600[1)]	UL 508	►	**8US1251-5DS10**		1	1 unit	1CU	0.285
		1	260	45	12	150	25	690 600[1)]	UL 508	►	**8US1251-5DT10**		1	1 unit	1CU	0.312
	Reversing starters +	1	200	45	12	150	25	690 600[1)]	UL 508	►	**8US1251-5DS10** +		1	1 unit	1CU	0.285
	Device holders	1	200	45	--	--	--	--	UL 508	►	**8US1250-5AS10**		1	1 unit	1CU	0.217
Device holders with 3RA2120	**Size S00 devices with screw connection**															
	Circuit breakers	1	200	45	12	150	25	690 600[1)]	UL 508	►	**8US1251-5DS11**		1	1 unit	1CU	0.295
	Circuit breakers	1	260	45	12	150	25	690 600[1)]	UL 508	►	**8US1251-5DT11**		1	1 unit	1CU	0.320
	Direct-on-line starters	1	260	45	12	150	25	690 600[1)]	UL 508	►	**8US1251-5DT11**		1	1 unit	1CU	0.320
	Reversing starters +	1	260	45	12	150	25	690 600[1)]	UL 508	►	**8US1251-5DT11** +		1	1 unit	1CU	0.320
	Device holders	1	260	45	--	--	--	--	UL 508	►	**8US1250-5AT10**		1	1 unit	1CU	0.244

[1)] Value applies to UL 508

* You can order this quantity or a multiple thereof.

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	Busbar device adapters for	Number of support rails (35 mm)	Adapter Length	Adapter Width	Connecting cable Cross-section	Connecting cable Temperature max.	Connecting cable Rated current	Connecting cable Rated voltage	Standard	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
			mm	mm	AWG	°C	A	V								kg
	Size S0 devices with screw connection															
Device holders with 3RA2220	Circuit breakers	1	200	45	12	150	25	690 600[1)]	UL 508	►	8US1251-5DS10		1	1 unit	1CU	0.285
	Circuit breakers	1	260	45	10	150	32	690 600[1)]	UL 508	►	8US1251-5NT10		1	1 unit	1CU	0.319
	Direct-on-line starters	1	260	45	10	150	32	690 600[1)]	UL 508	►	8US1251-5NT10		1	1 unit	1CU	0.319
	Reversing starters	1	260	45	10	150	32	690 600[1)]	UL 508	►	8US1251-5NT10		1	1 unit	1CU	0.319
	+										+					
	Device holders	1	260	45	--	--	--	--	UL 508	►	8US1250-5AT10		1	1 unit	1CU	0.244
	Size S0 devices with spring-type terminals															
Device holders with 3RA2220	Circuit breakers	1	260	45	10	150	32	690 600[1)]	UL 508	►	8US1251-5NT11		1	1 unit	1CU	0.329
	Direct-on-line starters	1	260	45	10	150	32	690 600[1)]	UL 508	►	8US1251-5NT11		1	1 unit	1CU	0.329
	Reversing starters	1	260	45	10	150	32	690 600[1)]	UL 508	►	8US1251-5NT11		1	1 unit	1CU	0.329
	+										+					
	Device holders	1	260	45	--	--	--	--	UL 508	►	8US1250-5AT10		1	1 unit	1CU	0.244
	Size S2 devices NEW															
	Circuit breakers	1	200	54	4	150	80	690 600[1)]	UL 508		8US1261-5MS13		1	1 unit	1CU	0.508
	Direct feeders	1	260	54	4	150	80	690 600[1)]	UL 508		8US1261-6MT10		1	1 unit	1CU	0.572
	Reversing feeders	1	260	119	4	150	80	690 600[1)]	UL 508		8US1211-6MT10		1	1 unit	1CU	0.873

[1)] Value applies to UL 508

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Device adapters and device holders

For SIRIUS 3RV1/3RT1 load feeders

	Busbar device adapter for	Number of support rails (35 mm)	Adapter Length	Adapter Width	Connecting cable Cross-section	Connecting cable Temperature max.	Connecting cable Rated current	Connecting cable Rated voltage	Standard	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
			mm	mm	AWG	°C	A	V								kg
	Size S3 devices with screw connection															
Device holder	Circuit breakers	--	215	72	4	105	80	600	UL 508		8US1211-4TR00		1	1 unit	1CU	0.650

Lateral modules for busbar device adapters

	Description	Length	Width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	mm							kg
	Lateral modules									
	For extending busbar device adapters and device holders of the same length	200	9		8US1998-2BJ10		1	10 units	1CU	0.021

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* You can order this quantity or a multiple thereof.

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For circuit breakers and switch disconnectors which require busbar device adapters for mounting on busbars

8US1213-4AU01

8US1011-4SL01

8US1213-4AQ01

8US1213-4AH00

Busbar device adapters for	Adapter Length	Adapter Width	Connecting cable Type	Connecting cable Rated current	Connecting cable Rated voltage	Standard	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm		A	V								kg
3VA molded case circuit breakers													
3VA10/11 NEW	200	77	Busbars	144	690			**8US1213-4AU01**		1	1 unit	1CU	0.569
3VA20/21/221	240	105	Tubular contacts	250	690			**8US1213-4AP03**		1	1 unit	1CU	1.020
3VA23	300	140	Tubular contacts	400	690			**8US1213-4AH04**		1	1 unit	1CU	2.500
3VA24	300	140	Tubular contacts	580	690			**8US1213-4AH04**		1	1 unit	1CU	2.500
3VL molded case circuit breakers[1]													
3VL1[2]	175	108	Busbars	160	690			**8US1211-4SL01**		1	1 unit	1CU	0.572
3VL2[2]	175	108	Busbars	160	690			**8US1211-4SL01**		1	1 unit	1CU	0.572
3VL3[3]	175	108	Busbars	250	690			**8US1211-4SL00**		1	1 unit	1CU	0.636
3VL1 to 3VL4 and also with RCD module[2] see chapter "Molded Case Circuit Breakers"	320	184	M10 pin connector	400	690			**8US1210-4AF00** + **8US1927-4AF01**		1	1 unit	1CU	2.651
3VL5	325	184	Tubular contacts	580	690			**8US1213-4AF00**		1	1 unit	1CU	3.141
3VL UL circuit breakers													
VL150X UL CG frame	190	105	Tubular contacts	150	690 600[4]	UL 508		**8US1213-4AQ01**		1	1 unit	1CU	0.968
VL150 UL DG frame	190	105	Tubular contacts	150	690 600[4]	UL 508		**8US1213-4AQ03**		1	1 unit	1CU	0.916
VL250 UL FG frame	190	105	Tubular contacts	250	690 600[4]	UL 508		**8US1213-4AQ03**		1	1 unit	1CU	0.916
VL400 UL JG frame	296	140	Tubular contacts	400	690 600[4]	UL 508		**8US1213-4AH00**		1	1 unit	1CU	2.466
VL400X UL LG frame	296	140	Tubular contacts	540	690 600[4]	UL 508		**8US1213-4AH00**		1	1 unit	1CU	2.466
3KA and 3KL switch disconnectors													
3KA52[5] 3KA53[5] 3KL52[5] 3KL53[5]	320	184	M10 pin connector	630	690			**8US1210-4AF00**		1	1 unit	1CU	2.651
3KA55[5] 3KA57[5] 3KA58[5] 3KL55[5] 3KL57[5]	320	250	M10 pin connector	630	690			**8US1210-4AG00**		1	1 unit	1CU	2.868
3NP5 fuse switch disconnectors													
3NP5060 (NH00)	175	108	Busbars	160	690			**8US1291-4SB00**		1	1 unit	1CU	0.529
3NP52 3NP53 3NP54[6]	320	250	M10 pin connector	630	690 600[4]	UL 508		**8US1210-4AG00**		1	1 unit	1CU	2.868

1) Observe the short-circuit strength of the busbar system: Short-circuit strength > 50 kA on request.

2) Usable only for 3VL circuit breakers with line-side box terminals.

3) Only for 3VL 250 A circuit breakers, for screw fixing with metric thread, for flat terminals.

4) Value applies to UL 508

5) Without connecting cables. The connecting cable between adapter and device should be manufactured in accordance with the rated current as a round cable, e.g. H07V-R with cable lug, or as a flat conductor for an M10 stud terminal.

6) Without connecting cables. The connecting cable between adapter and device should be manufactured in accordance with the rated current as a round cable, e.g. H07V-R, bared at both ends for tunnel terminals.

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Device adapters and device holders

For SIRIUS 3RA6 compact starters according to IEC and UL

Welded connecting cable resistant up to 105 °C

	Busbar device adapter for	Number of support rails (35 mm)	Adapter Length	Adapter Width	Connecting cable Cross-section	Connecting cable Temperature max.	Connecting cable Rated current	Connecting cable Rated voltage	Standard	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
			mm	mm	AWG	°C	A	V								kg
Device holders	**Size equivalent to 3RA61**															
	Direct-on-line starters	1	200	45	10	105	32	690	UR, CSA	►	**8US1211-1NS10**		1	1 unit	1CU	0.328
Device holders	**Size equivalent to 3RA62**															
	Reversing starters	1	200	45	10	105	32	690	UR, CSA	►	**8US1211-1NS10**		1	1 unit	1CU	0.328
	+										+					
	Device holders	1	200	45	--	--	--	--	UL 508	►	**8US1250-1AA10**		1	1 unit	1CU	0.278

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For universal device design

	Number of support rails (35 mm)	Adapter Length	Adapter Width	Connecting cable Cross-section	Connecting cable Temperature max.	Connecting cable Length	Rated current	Rated voltage	Standard	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	mm	AWG	°C	mm	A	V								kg
	Devices 45 mm wide															
	Device holder for side mounting onto busbar device adapter, no electrical contact															
8US1250-1AA10	1	200	45	--	--	--	--	--	UL 508	▶	**8US1250-1AA10**		1	1 unit	1CU	0.278
8US1250-5AS10	1	200	45	--	--	--	--	--	UL 508	▶	**8US1250-5AS10**		1	1 unit	1CU	0.217
8US1250-5AT10	1	260	45	--	--	--	--	--	UL 508	▶	**8US1250-5AT10**		1	1 unit	1CU	0.244
	Devices 45 mm and 72 mm wide															
	Busbar device adapter with connecting cables for contact with busbars, welded connecting cable resistant up to 150 °C															
8US1261-5MS13	1	200	45	12	150	165	25	690/600[1]	UL 508	▶	**8US1251-5DS11**		1	1 unit	1CU	0.295
	1	200	45	12	150	99	25	690/600[1]	UL 508	▶	**8US1251-5DS10**		1	1 unit	1CU	0.285
	1	260	45	12	150	99	25	690/600[1]		▶	**8US1251-5DT10**		1	1 unit	1CU	0.312
	1	260	45	12	150	165	25	690/600[1]	UL 508	▶	**8US1251-5DT11**		1	1 unit	1CU	0.320
	1	260	45	10	150	99	32	690/600[1]	UL 508	▶	**8US1251-5NT10**		1	1 unit	1CU	0.319
	1	260	45	10	150	165	32	690/600[1]	UL 508	▶	**8US1251-5NT11**		1	1 unit	1CU	0.329
	1	200	45	10	105	118	32	690/600[1]	UL 508	▶	**8US1211-1NS10**		1	1 unit	1CU	0.328
	1	200	54	4	150	150	80	690/600[1]	UL 508		**8US1261-5MS13**		1	1 unit	1CU	0.508
	1	260	54	4	150	150	80	690/600[1]	UL 508		**8US1261-6MT10**		1	1 unit	1CU	0.572
	1	260	119	4	150	150	80	690/600[1]	UL 508		**8US1211-6MT10**		1	1 unit	1CU	0.873
8US1261-6MT10	--	215	72	4	105	210	100	690/600[1]	UL 508		**8US1211-4TR00**		1	1 unit	1CU	0.650
	Lateral modules															
	For extending busbar device adapters and device holders of the same length															
8US1998-2BJ10	--	200	9	--	--	--	--	--			**8US1998-2BJ10**		1	10 units	1CU	0.021

[1] Value applies to UL 508

*** You can order this quantity or a multiple thereof.**

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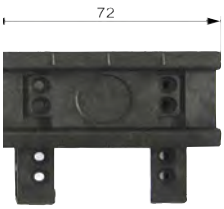
Selection and ordering data

Accessories for SIRIUS 3RV2/3RT2 load feeders

Accessories for SIRIUS 3RV2/3RT2 load feeders are designed for:

- 60 mm 8US busbar system (Cu busbars according to DIN 46433)
- Width 12 to 30 mm, thickness 5 and 10 mm
- And special profiles of up to 1600 A

	Description	Length	Width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	mm							kg
8US1921-2BE00	**Busbar connection pieces for bars**									
	20 x 5 mm, 20 x10 mm, 25 x 5 mm, 25 x10 mm, 30 x 5 mm, 30 x 10 mm	40			8US1921-2BE00		1	6 units	1CU	0.234
8US1921-2BF00	12 x 5 mm, 12 x 10 mm, 15 x 5 mm, 15 x 10 mm, 20 x 5 mm, 20 x 10 mm	55			8US1921-2BF00		1	12 units	1CU	0.160
	Support rails (35 mm)									
	Support rails made of plastic with fixing screws		45		8US1998-7CB45		1	10 units	1CU	0.015
	Support rails made of plastic with fixing screws		54		8US1998-7CB54		1	10 units	1CU	0.016
	Support rails made of plastic with fixing screws		72		8US1998-7CB72		1	10 units	1CU	0.030
	Connecting elements									
	For connecting busbar adapters and device holders			►	8US1998-1AA10		1	50 units	1CU	On req.
	Spacers									
	Fix the feeder to the busbar adapter			►	8US1998-1BA10		1	50 units	1CU	0.001
	Vibration & shock kit			►	8US1998-1CA10		1	2 units	1CU	0.008
	Lateral modules									
	For extending busbar device adapters and device holders of the same length	200	9		8US1998-2BJ10		1	10 units	1CU	0.021

10

* You can order this quantity or a multiple thereof.

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For further technical product information:

Configuration Manual

Measuring Devices and Power Monitoring
Article No.: 3ZW1012-7KM42-0AC1

Siemens Industry Online Support:

www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
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FAQ
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Product note
Software archive
Technical data

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Direct reference to the products in the Industry Mall from the selection and ordering data tables:

Article No.
www.siemens.com/product?Article No.
3VA2025-5HL36-0AA0

Paper catalog:
To get more product information enter the Web address plus Article No.

PDF catalog:
Get more product information with just a mouse click.

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Energy management in accordance with ISO 50001

Overview

A systematic approach to energy efficiency

The standard ISO 50001 supports companies with a specific process description for introducing a corporate energy management system. Standard-compliant energy management optimizes energy utilization, while continuously enhancing energy efficiency.

Defining energy policy objectives

A central management task is the formulation of an in-house energy policy. It defines relevant strategic and operational objectives. Ongoing planning will include the identification of additional optimization potential for the business areas under scrutiny, and the development of relevant improvement measures.

Introducing process optimization

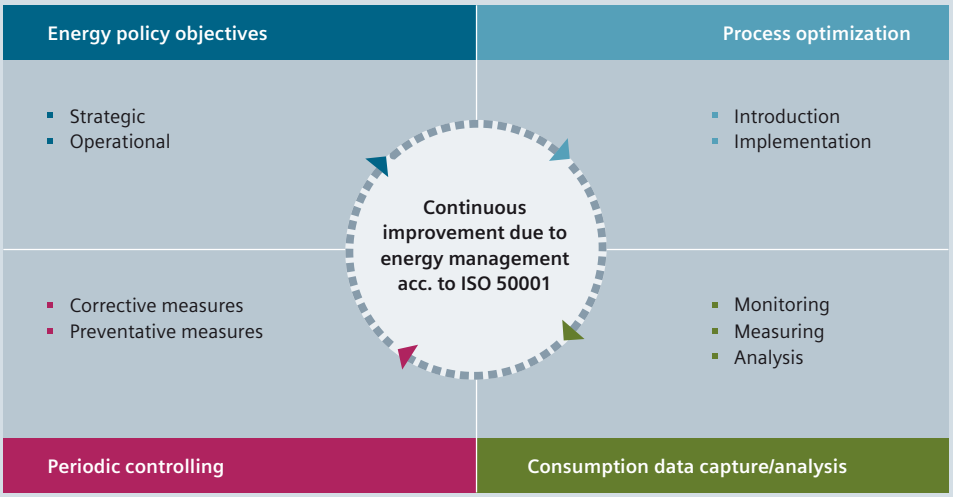
As a first step, an energy manager must be identified and nominated. He will then evaluate captured data, and derive and implement appropriate optimization measures. He will report the achieved results to corporate management.

Making energy flows transparent

As a second step, basic energy consumption and cost data, as well as information on in-house energy production must be collected and documented clearly and verifiably. This requires the development of a reliable and precise system for the capture and analysis of consumption data. The objective is to recognize sustainable savings potential, to derive appropriate measures for that potential, and to implement these measures systematically.

Periodic controlling

Periodic checks will ensure that your energy management system functions correctly, and that objectives are reached. Corrective and preventative measures can then be implemented as needed.



Introduction of a corporate energy management system in accordance with ISO 50001 for continuous improvement of energy efficiency by reducing energy consumption and costs.

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Providing the basis with power monitoring

The power monitoring system from the SENTRON portfolio is suitable for infrastructure, industrial applications, and buildings. The 7KT/7KM PAC measuring devices record the data of outgoing feeders or individual loads.

The 3WL/3VA/3VL circuit breakers supply measured values and important information for diagnostics, fault detection, and maintenance via standardized bus systems.

With the powermanager power monitoring software, the recorded measured values can be easily visualized, analyzed, archived, and monitored.

Recording of generated energy using measuring devices in MID version

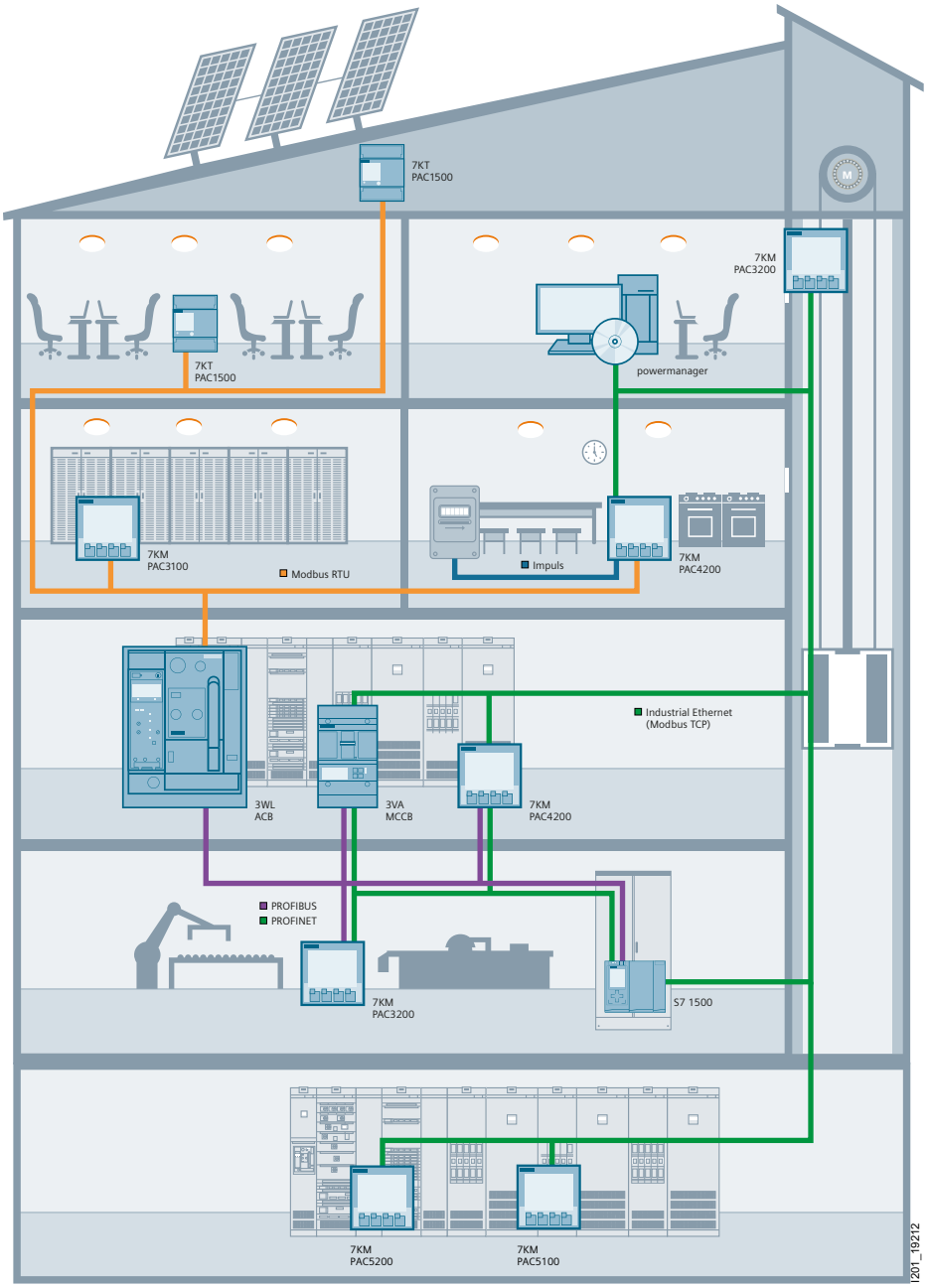
Derivation of optimization measures through transparency of the energy flows

Increased availability of energy through monitoring of critical states in the power supply

Increased system availability through continuous monitoring of switching states

Increased productivity through optimization of energy consumption and energy costs

Transparency at the infeed thanks to seamless recording of the power supply quality



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Energy management in accordance with ISO 50001

Continuously increasing energy efficiency

Precise cost center accounting for consumers

- Precise allocation of energy costs to cost centers
- Benchmarking between different cost centers
- Increased energy awareness

Detection of energy guzzlers, reduction of load peaks

- Detection of energy-intensive processes and loads
- Cost savings created by amending the power supply agreement
- Tax savings by seamless documentation of application-specific consumption

Protection of sensitive areas for high plant safety

- Avoidance of equipment failures due to overload
- Protection of sensitive devices against harmonics
- Early intervention possible by means of notifications

Monitoring of protective devices for high system availability

- Increased system availability
- Optimization of maintenance
- Fast response to service call-outs

Multi-site power monitoring

- Centralized, multi-site power monitoring via standard IT networks
- Benchmarking of various corporate units increases energy awareness
- Improvement of power supply conditions by bundling supply volumes

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Overview

7KT PAC, 7KM PAC measuring devices and 3VA molded case circuit breakers with ETUs of the 8-series

	7KT PAC1500	7KM PAC3100	7KM PAC3200	7KM PAC4200	7KM PAC5100	7KM PAC5200	3VA ETU8..
	The entry-level solution when it comes to energy measurement	The cost-effective solution for digital measurement	The specialist solution for precise energy measurement	The professional solution for communication/ monitoring	The specialist solution for measured value recording	The expert solution for power supply quality	The specialist solution for protection and energy measurement
Measuring range/connection							
Max. input voltage L-L/L-N	400 V/230 V	480 V/276 V	690 V/400 V[1]	690 V/400 V[1]	690 V/400 V	690 V/400 V	690 V/400 V
Transformer connection version	x/5 A	x/5 A	x/1 A/x/5 A	x/1 A/x/5 A	x/1 A/x/5 A	x/1 A/x/5 A	Integrated
Direct connection version	80 A/125 A	–	–	–	–	–	–
DC power supply unit with extra-low voltage version	–	–	22 ... 65 V	22 ... 65 V	–	–	24 V
Single-phase counter version	✓	–	–	–	–	–	–
Electrically isolated voltage inputs	–	–	–	–	✓	✓	–
Variant without display (with web server)	–	–	–	–	✓	✓	–
Measured quantities							
Voltage, current, power, frequency, power factor	✓[2]	✓	✓	✓	✓	✓	✓
Energy measurement							
• Apparent, active, reactive energy	– I ✓ I ✓	– I ✓ I ✓	✓ I ✓ I ✓	✓ I ✓ I ✓	✓ I ✓ I ✓	✓ I ✓ I ✓	✓ I ✓ I ✓
Extended measured quantities							
• Distortion factor THD (voltage, current)	–	–	✓[3]	✓	✓	✓	✓
• Harmonics (voltage, current)	–	–	–	3. ... 31.	2. ... 40.	2. ... 40.	–
• Phase angle/phase chart	–	–	–	✓	✓	✓	–
• Load profile record with time stamp for min/max values	–	–	–	✓	–	✓	✓
• Flicker acc. to IEC 61000-4-15	–	–	–	–	–	✓	–
Monitoring functions							
Operating hours counter	–	–	✓	✓	–	–	✓
Limit monitoring	–	–	✓	✓	✓	✓	✓
Logic functions	–	–	✓	✓	✓	✓	–
Event log	–	–	–	> 4000 events	✓	✓	✓
Gateway function	–	–	–	✓	–	–	–
Reporting acc. to EN 50160	–	–	–	–	–	✓	–
Integrated fault recorder	–	–	–	–	–	✓	–
System integration and communication							
Digital inputs/digital outputs	–	2/2	1/1	2/2	0/2	0/2	–
S0 interface	✓	✓	✓	✓	–	–	Optional
4DI/2DO expansion module	–	–	–	Optional	–	–	Optional
M-Bus	Optional	–	–	–	–	–	–
Instabus KNX	Optional	–	–	–	–	–	–
Modbus RTU	Optional	✓	Optional	Optional	–	–	Optional
Ethernet with Modbus TCP	–	–	✓	✓	✓	✓	✓
PROFIBUS DPV1	–	–	Optional	Optional	–	–	Optional
PROFINET IO/ PROFIenergy	–	–	Optional	Optional	–	–	Optional
Parameterization software	✓	powerconfig	powerconfig	powerconfig	powerconfig	powerconfig	powerconfig
Integration of power monitoring system	powermanager	powermanager	powermanager	powermanager	powermanager	powermanager	powermanager
Web servers	–	–	–	–	✓	✓	–
General data							
Measuring accuracy, active energy, reactive energy	1 I 2	1 I 3	0.5 S I 2	0.2 S I 2	0.5 S I 2	0.5 S I 2	2 S I 2[4]
MID version	✓	–	–	–	–	–	–
Installation	Standard mounting rail	Front mounting	Front mounting	Front mounting	Front mounting/standard mounting rail		see Ch. 2
Dimensions in MW (1 MW = 18 mm) or in mm	2 / 4 / 6 MW	96 × 96 × 56	96 × 96 × 56	96 × 96 × 82	96 × 96 × 100	96 × 96 × 100	96 × 96 × 82[5]

1) With the exception of devices with power supply units with extra-low voltage.

2) On the display – energy and power values only. Additional measured quantities are transmitted via optional expansion modules 7KT Modbus / 7KT M-Bus

3) THD indication.

4) Measuring accuracy including current transformer

5) For display via DSP800, see chapter "Molded Case Circuit Breakers"

✓ Available / possible -- Not available / not possible

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Hardware and software components

Accessories for 7KM PAC measuring devices

	7KT PAC expansion modules				**7KT LAN couplers**
	M-Bus	Modbus RTU	RS 485	KNX	Web servers
Specification	Up to 9600 bit/s	Up to 115200 bit/s	For connection to the 7KT LAN coupler	Up to 19200 bit/s	For up to 30 7KT PAC1500 measuring devices

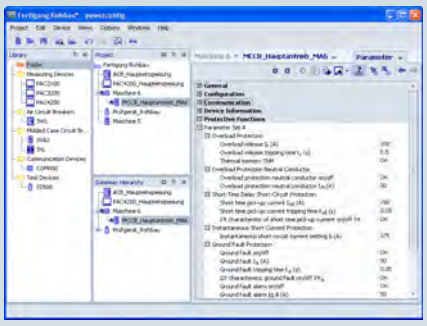
Accessories for 7KM PAC measuring devices

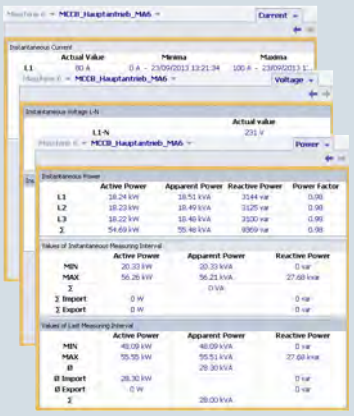
	7KM PAC expansion modules				**Standard mounting rail adapter**
	Switched Ethernet	PROFIBUS DP	RS 485	4DI/2DO	7KM PAC TMP2
	For 7KM PAC3200, 7KM PAC4200 and 3VA COM100/COM800	For 7KM PAC3200, 7KM PAC4200 and 3VA COM100/COM800	For 7KM PAC3200, 7KM PAC4200 and 3VA COM100/COM800	For 7KM PAC4200 (number of digital inputs/ outputs per module 4/2)	For 7KM PAC3100/ 3200/4200 for mounting on a standard mounting rail
Protocol	PROFINET IO PROFIenergy Modbus TCP	DPV1	Modbus RTU	S0 interface	--
Maximum number of connectable expansion modules of the same type	1	1	1	2	--

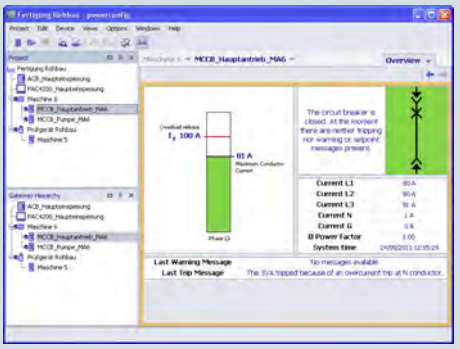
11

The powerconfig software for commissioning

	Software tool for the efficient commissioning and diagnosis of communication-capable SENTRON components
License	Free use
Supported devices	7KM PAC3100/3200/4200 measuring devices, incl. expansion modules 3WL/3VL/3VA/ATC5300 circuit breakers
General range of functions	The PC-based tool facilitates parameterization of the devices, resulting in substantial time savings, particularly when several devices have to be set up. The device settings can be stored in the PC and printed out. The tool enables monitoring of instantaneous measured quantities, which can be printed out if required. Execution of specific device functions, such as resetting of devices and setting of energy counters
Supported languages	German, English, Chinese, Spanish, Portuguese
Service functions	Firmware updates and switching of language packs for 7KM PAC measuring devices
Functional scope with 7KM PAC4200 and 3VA	Readout of data stored in the device (events; load profile history; daily energy counters), which are saved in csv format


Setting of parameter values


Display of actual measured quantities


Display of the circuit breaker state

For more information about powerconfig, see chapter "Software"

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Overview

Hardware components of the PC-based power monitoring system

Software component of the power monitoring software: powermanager

Power monitoring system with SENTRON components

The TÜV-certified power monitoring system from the SENTRON portfolio consists of the 7KT/7KM PAC measuring devices, the 3WL/3VA/3VL circuit breakers, and the powermanager power monitoring software. This forms the technical basis for supporting a corporate energy management system as specified by ISO 50001.

The hardware and software components are optimally coordinated with each other. For example, special drivers for the SENTRON devices are integrated in the powermanager power monitoring software. They enable energy data to be captured without any great configuration effort and they indicate the key measured values or the status by means of predefined views.

This reduces the engineering overhead. The device functions are optimally supported in the software.

Features of the powermanager power monitoring software

The powermanager power monitoring software constitutes the optimum technical basis for supporting a corporate power monitoring system as specified by ISO 50001:

- Independent power monitoring software
- Can be operated using a Windows PC and measuring devices with Ethernet connection
- Easy getting started with basic license, can be extended with flexible licensing concept according to customer requirements
- Fully scalable, relative to number of devices and software functions
- Ensures optimum integration of 7KT/7KM PAC measuring devices, as well as 3WL/3VA/3VL circuit breakers and other Modbus devices
- Support of the various device and communication interfaces (Modbus RTU, Modbus TCP)
- Status display of devices
- Available languages: German, English, Spanish, Portuguese, Italian, French, Turkish, Chinese

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PC-based power monitoring system

Application

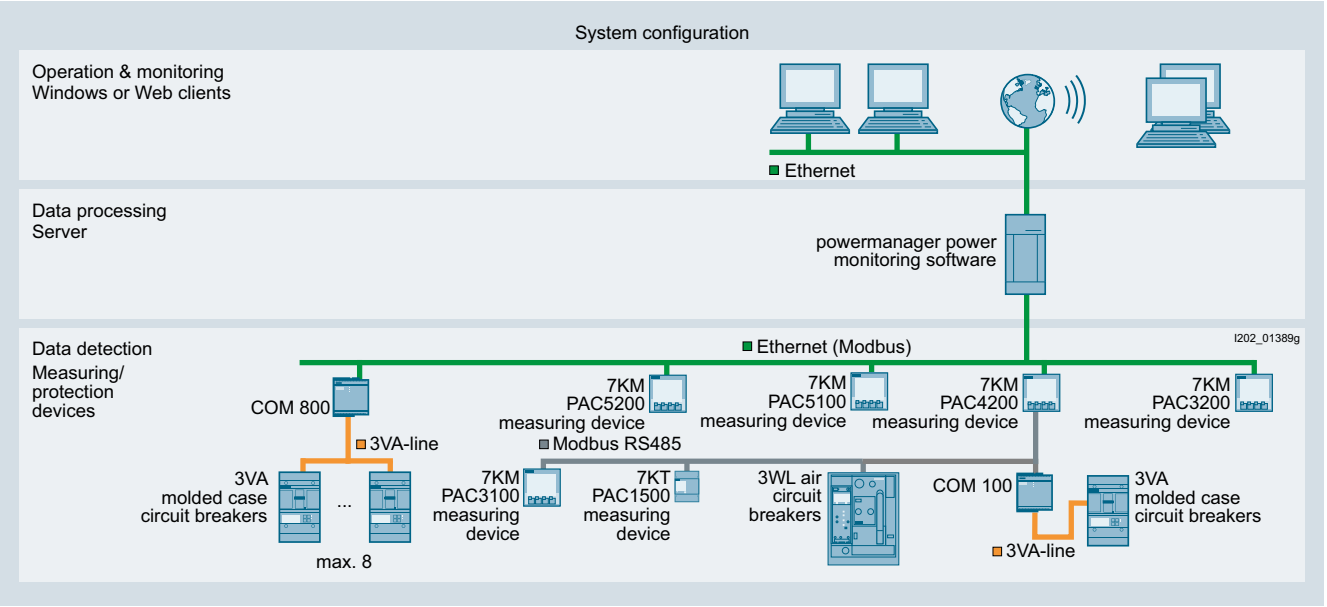
Industries

An energy-efficient production system enhances both the image and the productivity of the company, and thus its competitiveness.

Power monitoring as the technical basis for energy management for increasing a company's energy efficiency is thus of interest to all areas, from industrial applications to infrastructure, and buildings in the service sector.

System configuration

- Integration of measuring devices by means of predefined device templates for the 7KT/7KM PAC measuring devices and the 3WL/3VA/3VL circuit breakers
- Easy integration of existing modbus-capable measuring devices
- Communication through Standard Ethernet
- Integration of devices with RS 485 interface (ModbusRTU) through Modbus gateway, e.g. the 7KM PAC4200 measuring device can be used as the gateway



Typical topology of a power monitoring system

More information

TÜV certification

The TÜV certificate is available from

www.siemens.com/tuev-certificate-of-conformity

Components of the PC-based power monitoring system

The hardware components of the PC-based power monitoring system are

- 7KM PAC measuring devices, see this chapter
- 3WL air circuit breakers, see chapter "Air Circuit Breakers"
- 3VL molded case circuit breakers, see chapter "Molded Case Circuit Breakers"
- 3VA molded case circuit breakers, see chapter "Molded Case Circuit Breakers"

Software of the PC-based power monitoring system

The software of the PC-based power monitoring system is powermanager, see chapter "Software".

Powermanager system packages with software and hardware are an easy and low-cost way to get started in a power monitoring system, see chapter "Software".

Internet

You can find more information on the Internet at:
www.siemens.com/powermonitoring

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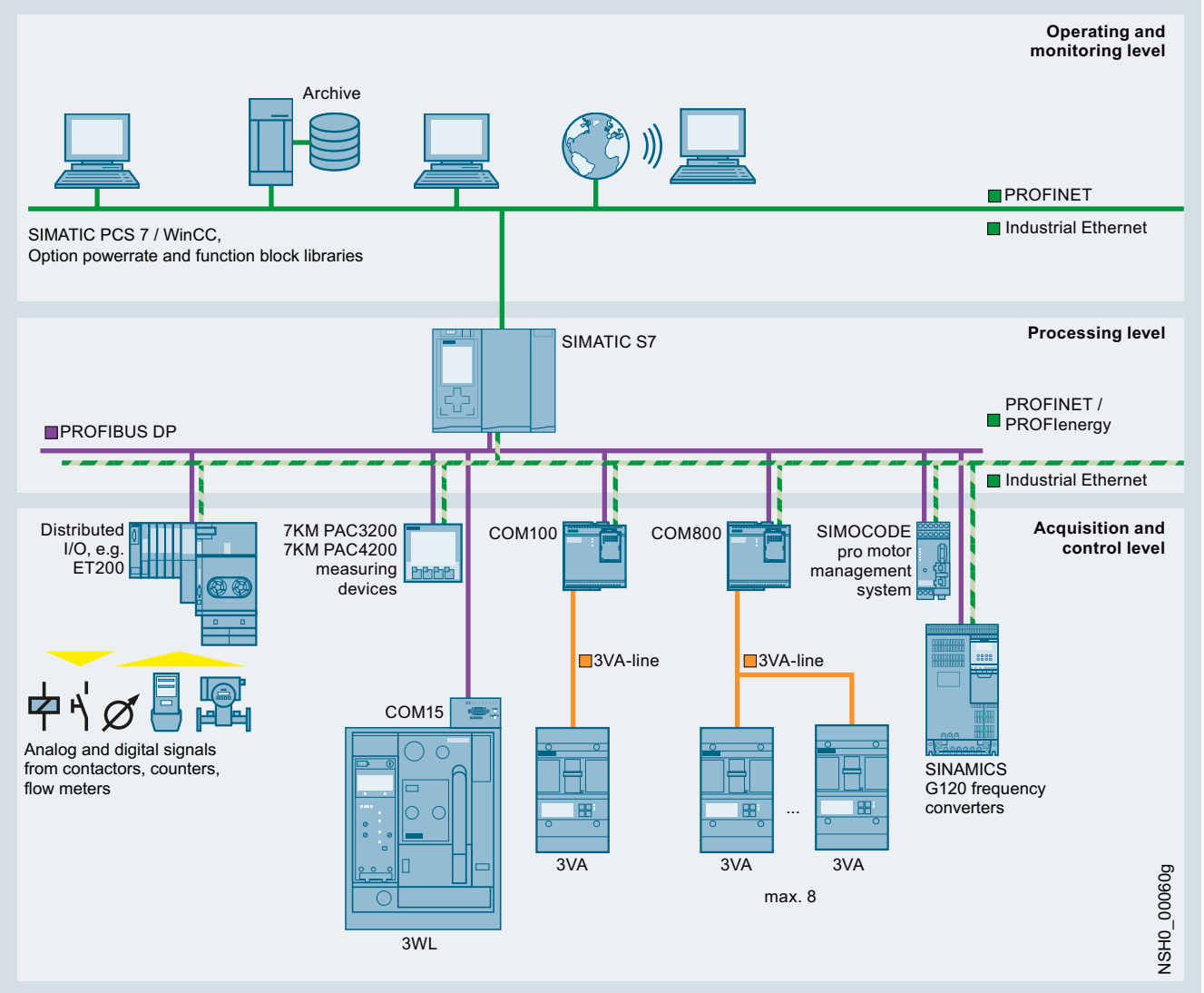
Overview



SIMATIC-based solutions for the process and manufacturing industry

A key feature of the process and manufacturing industry is frequently high energy consumption. It therefore makes sense to integrate a power data management system in existing systems.

Communication through PROFIBUS DP

PROFIBUS DP enables integration of a wide range of devices:

- For the protection of distribution boards and loads: Protective devices, such as circuit breakers
- For open-loop and closed-loop control: Frequency converters, motor management systems and soft starters
- For detection
  - Electrical measured quantities: Via the 7KM PAC3200/4200 measuring devices
  - Non-electrical measured quantities: Via analog/digital converters

PROFINET and PROFIenergy

An increasing number of devices in automation technology offer PROFINET. The 7KM PAC Switched Ethernet PROFINET expansion module enables the 7KM PAC3200/PAC4200 measuring devices and 3VA circuit breakers to be connected to the automation systems.

PROFIenergy is a "Common Application Profile" from Profibus International. Thanks to PROFIenergy it is possible to create a power data management system with standardized device interfaces.

Function block libraries for SIMATIC PCS 7 and WinCC

The function block library for SIMATIC PCS 7 and WinCC ensures device integration as follows:

- Measured quantities and states can be connected via CFC
- Structured display of measured quantities and protection parameters for the 3WL/3VA/3VL circuit breakers.
- Limit value violations are displayed, archived and acknowledged in the relevant communications system in the usual way
- Circuit breakers can be program-controlled or manually operated with the appropriate user authorization

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SIMATIC-based power data management system

Benefits

- Increased energy efficiency due to precise knowledge of the load profile
- Optimization of power supply agreements
- Allocation of power costs to cost centers
- Optimization of plant maintenance
- Identification of critical plant conditions
- Reliable monitoring of the power limit through automatic load management

Application

The SIMATIC-based power data management system is used in all industries in which PCS 7 and WinCC are used, and the transparency and monitoring of power flows is crucial.

More information

Hardware components

The hardware components of the SIMATIC-based power data management system are

- 7KM PAC measuring devices, see this chapter
- 3WL air circuit breakers, see chapter "Air Circuit Breakers"
- 3VL molded case circuit breakers, see chapter "Molded Case Circuit Breakers"
- 3VA molded case circuit breakers, see chapter "Molded Case Circuit Breakers"

Software components

The software components of the SIMATIC-based power data management system are

- Library 7KM PAC3200 for SIMATIC PCS 7
- Library 7KM PAC3200 for SIMATIC WinCC

For information about the software components, see chapter "Software"

You can find more information on the Internet at: www.siemens.com/powermonitoring

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Overview

Devices	Page	Application	Standards	Used in		
				Non-residential buildings	Residential buildings	Industry
7KM PAC measuring devices						
7KM PAC3100 measuring device AC/DC wide-range power supply unit, screw connection	11/14	Control panel instrument with graphics display, integrated digital inputs and outputs and an RS 485 interface for the transmission of measured values and configurations. Display of 30 electrical measured values and consumption values in switchboard assemblies, infeeds or outgoing feeders. International standards and multi-lingual displays for worldwide use.	Measurement accuracy for energy acc. to IEC 61557-12	✓	--	✓
7KM PAC3200 measuring device 3 versions: • AC/DC wide-range power supply unit, screw connection • DC power supply unit with extra-low voltage, screw connection • AC/DC wide-range power supply unit, ring cable lug connection	11/15	Control panel instrument with graphics display, integrated digital inputs and outputs and an integrated Ethernet interface for the transmission of measured values and configurations. Display of over 50 electrical measured values for switchboard assemblies, infeeds or outgoing feeders. Dual-tariff measuring devices for precise energy measurement for power import and feedback. The following components are available: • 7KM PAC Switched Ethernet PROFINET • 7KM PAC RS 485 • 7KM PAC PROFIBUS DP	Measuring accuracy for energy acc. to IEC 62053-22/23 and IEC 61557-12	✓	--	✓
7KM PAC4200 measuring device 3 versions: • AC/DC wide-range power supply unit, screw connection • DC power supply unit with extra-low voltage, screw connection • AC/DC wide-range power supply unit, ring cable lug connection	11/17	Control panel instrument with graphics display, user-defined displays, memory, clock and calendar function, digital inputs and outputs and an integrated Ethernet interface with gateway function to transfer measured values and configurations. Display of over 200 electrical measured values for switchboard assemblies, infeeds or outgoing feeders. Extensive functions for precise energy measurement for power import and feedback and assessment of the system quality. The following components are available: • 7KM PAC Switched Ethernet PROFINET • 7KM PAC RS 485 • 7KM PAC PROFIBUS DP • 7KM PAC 4DI/2DO	Measuring accuracy for energy acc. to IEC 62053-22/23 and IEC 61557-12	✓	--	✓
7KM PAC5100 measuring device *NEW* 2 versions: • Control panel instrument with graphics display • Standard rail instrument without display	11/19	Control panel instrument with graphics display and user-defined displays, or instrument for standard rail mounting in accordance with EN 60750, web server for parameterization, visualization and data management, 2 binary outputs, electrically isolated voltage inputs, synchronization via internal RTC clock or externally via NTP, 4 freely parameterizable LEDs for device status or limit violations, as well as integrated RJ45 Ethernet interface. Recording of more than 250 electrical measured values for switchboard assemblies, infeeds or outgoing feeders, extensive functions for precise energy measurement for power import and feedback, and for assessment of the system quality.	Measuring accuracy for energy acc. to IEC 62053-22/23 and IEC 61557-12	✓	--	✓
7KM PAC5200 measuring device *NEW* 2 versions: • Control panel instrument with graphics display • Standard rail instrument without display	11/20	Control panel instrument with graphics display and user-defined displays, or instrument for standard rail mounting in accordance with EN 60750, web server for parameterization, visualization and data management, 2 binary outputs, electrically isolated voltage inputs, flicker in accordance with IEC 61000-4-15, synchronization via internal RTC clock or externally via NTP, 4 freely parameterizable LEDs for device status or limit violations, 2 GB memory, integrated fault recorder, reporting in accordance with EN 50160, rms recorder, as well as integrated RJ45 Ethernet interface. Display of over 250 electrical measured values for switchboard assemblies, infeeds or outgoing feeders. Extensive functions for precise energy measurement for power import and feedback and assessment of the system quality.	Measuring accuracy for energy acc. to IEC 62053-22/23 and IEC 61557-12	✓	--	✓

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Introduction

Devices		Page	Application	Standards	Used in		
					Non-residential buildings	Residential buildings	Industry
	7KM PAC expansion modules	11/23	• The 7KM PAC Switched Ethernet PROFINET expansion module is used to connect the 7KM PAC3200 and 7KM PAC4200 measuring devices and 3VA molded case circuit breakers to Switched Ethernet PROFINET (PROFIenergy). • The 7KM PAC PROFIBUS DP expansion module is used to connect the 7KM PAC3200 and 7KM PAC4200 measuring devices and 3VA molded case circuit breakers to the PROFIBUS DPV1 • The 7KM PAC RS 485 expansion module is used to connect simple devices with RS 485 interface, such as the 7KM PAC3200 and 3VA molded case circuit breaker, and it supports the Modbus RTU protocol. • The 7KM PAC 4DI/2DO expansion module is used to expand the 7KM PAC4200 measuring device to up to 10 digital inputs and 6 digital outputs.	IEC 61784-2 IEC 61158 RS 485 IEC 62053-31	✓	--	✓
7KT PAC measuring devices							
	7KT PAC1500 three-phase measuring device 7KT154	11/26	Measurement of consumption data in three-phase systems of plant sections, offices or holiday apartments.	EN 50470-1, EN 50470-3 EN 62052-23, EN 62053-31	✓	✓	✓
	7KT PAC1500 single-phase measuring device 7KT153	11/28	For the measurement of consumption data in single-phase systems, e.g. in industrial plants, offices and apartments in apartment blocks.	EN 50740-1, EN 50470-3, EN 62053-31	✓	✓	✓
	7KT PAC expansion modules 7KT19	11/29	Communication interfaces with IrDA infrared interface for 7KT PAC1500 measuring devices. Modules are available for the following bus systems: • M-Bus • Modbus RTU • RS 485 (7KT1391 LAN coupler connection) • KNX/EIB	EN 13321-1, EN 13757 ISO/IEC 14543-3 EN 50090	✓	✓	✓
	7KT LAN couplers	11/30	Web server with 2 GB internal storage, for up to 30 7KT15.. measuring devices Global view and Excel export of current consumption data via LAN or Internet using a web browser such as Firefox.	IEEE 802	✓	--	✓

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Devices		Page	Application	Standards	Used in		
					Non-residential buildings	Residential buildings	Industry
Other measuring devices							
	Digital measuring devices 7KT111, 7KT112	11/32	Voltage and current measurement with large 3-digit LEDs for monitoring incoming/outgoing currents and device currents in order to prevent plant overload.	DIN 43751-1, DIN 43751-2	✓	--	✓
	Time and pulse counters for standard rail mounting 7KT58	11/34	For monitoring operating hours and starting operations for the planning of preventative maintenance tasks and preventing sudden shutdowns	IEC 60255-6, EN 60255-6 (VDE 0435-301) UL 94	✓	✓	✓
	Time counters for front-panel mounting 7KT55, 7KT56	11/36	For monitoring operating hours and starting operations for planning preventative maintenance tasks and preventing sudden shutdowns.	IEC 60255-6, EN 60255-6 (VDE 0435-301)	✓	✓	✓
Accessories							
	4NC current transformers	11/37	Window-type current transformers/pin-wound transformers, particularly suitable for long measuring leads, low cable losses	EN 60044-1, VDE 0414-44-1	✓	--	✓
	7KT12 current transformers	11/40	Straight-through transformers for installation in distribution boards and non-contact measuring of primary currents. Ideal for combination with switch disconnectors, measuring devices and counters.	IEC 60044-1, EN 60044-1 (VDE 0414 T 44-1)	✓	--	✓
	7KT90 measuring selector switches	11/41	For switching over the phases for voltmeters and ammeters		✓	--	✓

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7KM PAC3100 measuring devices

Overview

The 7KM PAC measuring devices are used to measure and display all relevant system parameters in low-voltage power distribution. They can be used for both single-phase and multi-phase measurements in 3 and 4-conductor power supply systems (TN, TT, IT).

They record energy values for main distribution boards, electrical branches or individual loads precisely and reliably, and also supply key measured values for assessment of the state of the plant.

The 7KM PAC3100 measuring device is fitted with an integrated Modbus RTU interface via RS 485, no expansion module is required.

Benefits

- Simple mounting and commissioning
- High IP65 degree of protection (front side, when installed) permits usage in extremely dusty and wet environments
- Intuitive operation using 4 function buttons and multilingual plain text displays
- Easy adaptation to different systems using integrated and optional
  - Digital inputs and outputs
  - Communication interfaces
- Worldwide use
  - At least 8 languages
  - International approvals
  - Developed and tested to European and international standards
- Low mounting depth
- User-friendly, free configuration software powerconfig, see below

Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
7KM3133-0BA00-3AA0	**7KM PAC3100 measuring device** Control panel instrument, 96 x 96 mm Screw connections for current and voltage connection AC/DC wide-range power supply unit U_{AUX}: 100 … 240 V AC ± 10 %, 50/60 Hz 110 … 250 V DC ± 10 % Measuring inputs U_e: max. 480/277 V 3 AC, 50/60 Hz I_e: /5 A		**Screw connection**					
			7KM3133-0BA00-3AA0		1	1 unit	1DD	0.469

More information

For current transformers, see page 11/37 or see chapter "Switch Disconnectors"

For other accessories, see page 11/22

powerconfig is available free of charge at http://support.automation.siemens.com/WW/view/en/63452759

For more information about powerconfig, See chapter "Software"

* You can order this quantity or a multiple thereof.

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Overview

The 7KM PAC measuring devices are used to measure and display all relevant system parameters in low-voltage power distribution. They can be used for both single-phase and multi-phase measurements in 3 and 4-conductor power supply systems (TN, TT, IT).

They record energy values for main distribution boards, electrical branches or individual loads precisely and reliably, and supply key measured values for assessment of the state of the plant and the quality of the power supply.

The 7KM PAC3200 measuring device is fitted with an integrated Modbus TCP interface via Ethernet, no expansion module is required.

Benefits

- Simple mounting and commissioning
- High IP65 degree of protection (front side, when installed) permits usage in extremely dusty and wet environments
- Intuitive operation using 4 function buttons and multilingual plain text displays
- Easy adaptation to different systems using integrated and optional
  - Digital inputs and outputs
  - Communication interfaces
- Worldwide use
  - At least 8 languages
  - International approvals
  - Developed and tested to European and international standards
- Low mounting depth

Additional performance characteristics of the 7KM PAC3200

- Precise energy measurement
- Versatile system integration
  - Integrated Ethernet interface
  - Optional communication modules available
  - Multifunctional digital inputs and outputs
  - Limit monitoring
- Can be connected directly to power supply systems up to 690 V AC (UL-L) and CATIII without voltage transformers (with the exception of devices with power supply units with extra-low voltage)
- User-friendly configuration software powerconfig, ssee chapter "Software"

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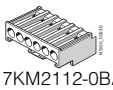
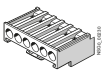
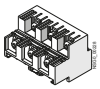
7KM PAC3200 measuring devices

Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
 7KM2112-0BA00-3AA0	**7KM PAC3200 measuring device** Control panel instrument, 96 x 96 mm Screw connections for current and voltage connection AC/DC wide-range power supply unit U_{AUX}: 95 … 240 V AC ± 10 %, 50/60 Hz 110 … 340 V DC ± 10 % Measuring inputs U_e: max. 690/400 V 3 AC, 50/60 Hz I_e: /1 A or /5 A		**Screw connection** **7KM2112-0BA00-3AA0**		1	1 unit	1DD	0.459
 7KM2111-1BA00-3AA0	**7KM PAC3200 measuring device** Control panel instrument, 96 x 96 mm Screw connections for current and voltage connection DC power supply unit with extra-low voltage U_{AUX}: 22 … 65 V DC ± 10 % Measuring inputs U_e: max. 500/289 V 3 AC, 50/60 Hz I_e: /1 A or /5 A		**Screw connection** **7KM2111-1BA00-3AA0**		1	1 unit	1DD	0.459
 7KM2112-0BA00-2AA0	**7KM PAC3200 measuring device** Control panel instrument, 96 x 96 mm Ring cable lug connections for current and voltage connection AC/DC wide-range power supply unit: U_{AUX}: 95…240 V AC ± 10 %, 50/60 Hz 110…340 V DC ± 10 % Measuring inputs U_e: max. 690/400 V 3 AC, 50/60 Hz I_e: /1 A or /5 A		**Ring cable lug connection** **7KM2112-0BA00-2AA0**		1	1 unit	1DD	0.470

More information

For current transformers, see page 11/37 or see chapter "Switch Disconnectors"

For other accessories, see page 11/22

powerconfig is available free of charge at http://support.automation.siemens.com/WW/view/en/63452759

For more information about powerconfig, see chapter "Software".

* You can order this quantity or a multiple thereof.

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Overview

The 7KM PAC measuring devices are used to measure and display all relevant system parameters in low-voltage power distribution. They can be used for both single-phase and multi-phase measurements in 3 and 4-conductor power supply systems (TN, TT, IT).

They record energy values for main distribution boards, electrical branches or individual loads precisely and reliably, and supply key measured values for assessment of the state of the plant and the quality of the power supply.

The 7KM PAC4200 measuring device is fitted with an integrated Modbus TCP interface via Ethernet, no expansion module is required.

Benefits

- Simple mounting and commissioning
- High IP65 degree of protection (front side, when installed) permits usage in extremely dusty and wet environments
- Intuitive operation using 4 function buttons and multilingual plain text displays
- Easy adaptation to different systems using integrated and optional
  - Digital inputs and outputs
  - Communication interfaces
- Worldwide use
  - At least 8 languages
  - International approvals
  - Developed and tested to European and international standards
- Low mounting depth

Additional performance characteristics of the 7KM PAC4200:

- Precise energy measurement
- Versatile system integration
  - Integrated Ethernet interface
  - Optional communication modules available
  - Multifunctional digital inputs and outputs
  - Limit monitoring
- Can be connected directly to power supply systems up to 690 V AC (UL-L) and CATIII without voltage transformers (with the exception of devices with power supply units with extra-low voltage)
- User-friendly configuration software powerconfig, see chapter "Software"
- Monitoring of plant status and power supply quality
  - Basic information for evaluating the power supply quality
  - Logging of plant history in the form of operation, control and system-related events
- Recording of the power range through power averaging (load profile)
- Daily energy meters for apparent, active and reactive energy across 365 days for cut-off date assessment
- Detection of gas, water, compressed air or other energy sources via pulse counter to the digital inputs
- Can be expanded using modules to up to 10 digital inputs and 6 digital outputs
- Counters for apparent, active and reactive energy for the precise detection of the power consumption of a partial process or manufacturing process
- 10/100 Mbit/s Ethernet interface with gateway function for the easy connection of devices with serial RS 485 interface via expansion module 7KM PAC RS 485 to an Ethernet network
- Comprehensive user-friendly indicators, such as user-defined displays, bar and status indicators, phase diagram and list and histogram graphics
- Satisfies the accuracy requirements of class 0.2S high-precision meters used by power supply companies according to IEC 62053-22, which are normally reserved for exacting industrial applications

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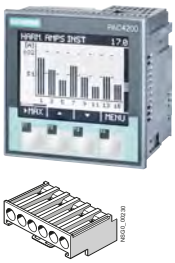
7KM PAC4200 measuring devices

Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
 7KM4212-0BA00-3AA0	**7KM PAC4200 measuring device** Control panel instrument, 96 x 96 mm Screw connections for current and voltage connection AC/DC wide-range power supply unit U_{AUX}: 95 … 240 V AC ± 10 %, 50/60 Hz 110 … 340 V DC ± 10 % Measuring inputs U_e: max. 690/400 V 3 AC, 50/60 Hz I_e: /1 A or /5 A		**Screw connection** **7KM4212-0BA00-3AA0**		1	1 unit	1DD	0.530
7KM4211-1BA00-3AA0	**7KM PAC4200 measuring device** Control panel instrument, 96 x 96 mm Screw connections for current and voltage connection DC power supply unit with extra-low voltage U_{AUX}: 22 … 65 V DC ±10 % Measuring inputs U_e: max. 500/289 V 3 AC, 50/60 Hz I_e: /1 A or /5 A		**Screw connection** **7KM4211-1BA00-3AA0**		1	1 unit	1DD	0.537
7KM4212-0BA00-2AA0	**7KM PAC4200 measuring device** Control panel instrument, 96 x 96 mm Ring cable lug connections for current and voltage connection AC/DC wide-range power supply unit: U_{AUX}: 95…240 V AC ± 10 %, 50/60 Hz 110…340 V DC ± 10 % Measuring inputs U_e: max. 690/400 V 3 AC, 50/60 Hz I_e: /1 A or /5 A		**Ring cable lug connection** **7KM4212-0BA00-2AA0**		1	1 unit	1DD	0.544

More information

For current transformers, see page 11/37 or see chapter "Switch Disconnectors""

For other accessories, see page 11/22

powerconfig is available free of charge at http://support.automation.siemens.com/WW/view/en/63452759

For more information about powerconfig, see chapter "Software"

* You can order this quantity or a multiple thereof.

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NEW **7KM PAC5100 measuring devices**

Overview

7KM PAC5100 measuring device

The 7KM PAC measuring devices are used to measure and display all relevant system parameters in low-voltage power distribution. They can be used for both single-phase and multi-phase measurements in 3 and 4-conductor power supply systems (TN, TT, IT). They record energy values for main distribution boards, electrical branches or individual loads precisely and reliably, and supply key measured values for assessment of the state of the plant and the quality of the power supply.

The 7KM PAC5100 measuring device has an integrated Modbus TCP interface via Ethernet and a web server for parameterization, visualization and data management.

Benefits

- Simple mounting and commissioning
- Intuitive operation via 4 function keys
- Integrated web server for parameterization, display and evaluation
- 4 parameterizable LEDs
- Worldwide use
  - International approvals
  - Developed and tested to European and international standards
- Low mounting depth
- Precise energy measurement
- Versatile system integration
  - Integrated Ethernet interface
  - Multifunctional digital outputs
  - Limit monitoring
- Can be directly connected to power supply networks up to 690 V AC (UL-L), CATIII without voltage transformer
- Electrically isolated voltage inputs
- Monitoring of plant status and power supply quality
  - Basic information for evaluating the power supply quality
  - Logging of plant history in the form of operation, control and system-related events
- Energy counters for apparent energy, active energy, reactive energy, as well as import, supply, inductive and capacitive
- Comprehensive user-friendly indicators, such as user-defined displays, bar and status indicators
- Measurement up to the 40th individual harmonic of current and voltage

Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
7KM5212-6BA00-1EA2	**7KM PAC5100 measuring device** Control panel instrument, 96 x 96 mm Screw connections for current and voltage connection AC/DC wide-range power supply unit U_{AUX}: 110 … 230 V AC ± 10 %, 50/60 Hz 24 … 250 V DC ± 10 % Measuring inputs U_e: max. 690/400 V 3 AC, 50/60 Hz I_e: /1 A or /5 A		**Screw connection** ⏚ **7KM5212-6BA00-1EA2**		1	1 unit	1DD	0.807
7KM5212-6CA00-1EA8	**7KM PAC5100 measuring device** Standard rail instrument without display Screw connections for connecting current and voltage AC/DC wide-range power supply unit U_{AUX}: 110 … 230 V AC ± 10 %, 50/60 Hz 24 … 250 V DC ± 10 % Measuring inputs U_e: max. 690/400 V 3 AC, 50/60 Hz I_e: /1 A or /5 A		**Screw connection** ⏚ **7KM5212-6CA00-1EA8**		1	1 unit	1DD	0.753

More information

For current transformers, see page 11/37
or see chapter "Switch Disconnectors"

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7KM PAC5200 measuring devices NEW

Overview

7KM PAC5200 measuring device

The 7KM PAC measuring devices are used to measure and display all relevant system parameters in low-voltage power distribution. They can be used for both single-phase and multi-phase measurements in 3 and 4-conductor power supply systems (TN, TT, IT).

They record energy values for main distribution boards, electrical branches or individual loads precisely and reliably, and supply key measured values for assessment of the state of the plant and the quality of the power supply.

The 7KM PAC5200 power quality measuring device has an integrated Modbus TCP interface via Ethernet and a web server for parameterization, visualization and data management.

Benefits

- Simple mounting and commissioning
- Intuitive operation via 4 function keys
- 4 parameterizable LEDs
- Integrated web server for parameterization, display and evaluation
- Worldwide use
  - International approvals
  - Developed and tested to European and international standards
- Low mounting depth
- Precise energy measurement
- Versatile system integration
  - Integrated Ethernet interface
  - Multifunctional digital outputs
  - Limit monitoring
- Can be directly connected to power supply networks up to 690 V AC (UL-L), CATIII without voltage transformer
- Electrically isolated voltage inputs
- Monitoring the plant status and the power supply quality:
  - Basic information for evaluating the power supply quality
  - Logging of plant history in the form of operation, control and system-related events
  - Flicker acc. to IEC 61000-4-15
- Energy counters for apparent energy, active energy, reactive energy, as well as import, supply, inductive and capacitive
- Comprehensive user-friendly indicators, such as user-defined displays, bar and status indicators
- Measurement up to the 40th individual harmonic of current and voltage
- Integrated 2 GB SD card for recorder functions
- Flexible recorder:
  - Measured value recorder
  - Trend recorder
  - Event recorder
  - Fault recorder
- Integrated PQ recording and reporting in accordance with EN 50160
- Data export:
  - COMTRADE
  - PQDif
- Classification of events
- ITIC /CBEMA evaluation in the device

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Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
7KM5412-6BA00-1EA2	**7KM PAC5200 measuring device** Control panel instrument, 96 x 96 mm Screw connections for current and voltage connection AC/DC wide-range power supply unit U_{AUX}: 110 … 230 V AC ± 10 %, 50/60 Hz 24 … 250 V DC ± 10 % Measuring inputs U_e: max. 690/400 V 3 AC, 50/60 Hz I_e: /1 A or /5 A		**Screw connection** **7KM5412-6BA00-1EA2**		1	1 unit	1DD	0.809
7KM5412-6CA00-1EA8	**7KM PAC5200 measuring device** Standard rail instrument without display Screw connections for connecting current and voltage AC/DC wide-range power supply unit U_{AUX}: 110 … 230 V AC ± 10 %, 50/60 Hz 24 … 250 V DC ± 10 % Measuring inputs U_e: max. 690/400 V 3 AC, 50/60 Hz I_e: /1 A or /5 A		**Screw connection** **7KM5412-6CA00-1EA8**		1	1 unit	1DD	0.754

More information

For current transformers, see page 11/37
or see chapter "Switch Disconnectors"

* You can order this quantity or a multiple thereof.

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Selection and ordering data

For 7KM PAC3100/3200/4200

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
7KM9900-0XA00-0AA0	**7KM PAC TMP2 standard mounting rail adapter** Two-tier adapter for mounting a measuring device on a standard mounting rail • Front display • For manual intervention		7KM9900-0XA00-0AA0		1	1 unit	1DD	0.397
7KM9900-0YA00-0AA0	**7KM PAC TMP mounting plate** Adapter for mounting a measuring device on standard mounting rail • Display faces backwards towards standard mounting rail • Readout and evaluation of measurements solely via mains operation		7KM9900-0YA00-0AA0		1	1 unit	1DD	0.140
7KM9900-0GA00-0AA0	**Compact holder** Device holder for 7KM PAC3100/3200/4200: • 10 holders for 5 PAC devices • For seamless side-by-side mounting of the devices (without spaces)		7KM9900-0GA00-0AA0		1	1 unit	1DD	0.148
7KM9900-0SA00-0AA0	**7KM PAC spare parts** Spare parts comprising: • Device holders for panel mounting (2X) • Screw terminal for connection of voltage inputs • Screw terminal for connection of current inputs • Terminal block inputs/outputs for 7KM PAC3100/4200 • Terminal block inputs/outputs for 7KM PAC3200 • RS 485 terminal block for 7KM PAC3100		7KM9900-0SA00-0AA0		1	1 unit	1DD	0.118

More information

Current transformers

For current transformers, see page 11/37

Software components

For more information about the software components, see chapter "Software" and on the Internet at www.siemens.com/lowvoltage/powermonitoring

More information

More information is available on the Internet at: www.siemens.com/lowvoltage/powermonitoring

*** You can order this quantity or a multiple thereof.**

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Overview

Expansion modules are used as communication interfaces and for expanding the digital inputs/outputs for 7KM PAC measuring devices.

The expansion modules are plugged in at the back of the measuring device. The device identifies the module automatically and presents the relevant parameters for this module for selection in the parameterization menu.

Versions

The following expansion modules are available (shown from left to right in the figure on the left):

- 7KM PAC Switched Ethernet PROFINET expansion module
- 7KM PAC PROFIBUS DP expansion module
- 7KM PAC RS 485 expansion module
- 7KM PAC 4DI/2DO expansion module

Connection for 3VA molded case circuit breakers

The following expansion modules can be mounted on the front of the COM800/COM100 data breaker servers of the 3VA molded case circuit breaker:

- 7KM PAC Switched Ethernet PROFINET and
- 7KM PAC PROFIBUS DP

For further details, see chapter "Molded Case Circuit Breakers" or in the manual at http://support.automation.siemens.com/WW/view/en/90318775

More information

For more information about the software components, see chapter "Software" and on the Internet at www.siemens.com/lowvoltage/powermonitoring

Version	Use in					
	7KM PAC					3VA
	PAC3100	PAC3200	PAC4200	PAC5100	PAC5200	COM800/ COM100
7KM PAC expansion modules						
7KM PAC Switched Ethernet PROFINET expansion module	--	✓	✓	--	--	✓

The 7KM PAC Switched Ethernet PROFINET expansion module is a plug-in communication module for 7KM PAC3200 and 7KM PAC4200 measuring devices and 3VA molded case circuit breakers.

It provides the following features:

- Standardized PROFIenergy interface to the measured quantities
- The measured quantities can be individually selected using a GSDML file. This permits use of cost-effective S7 CPUs
- Easy parameter assignment using the device display and STEP 7
- Integrated Ethernet switching allows networking with short cables without additional switches
- Direct integration in production machine networks using IRT (IRT = Isochronous-Real-Time)
- Full support of PROFINET IO (DHC, DNS, SNMP, SNTP)
- Device replacement without PG in the PROFINET assembly using LLDP
- Deterministic reversing time through ring redundancy (MRP)
- Modbus TCP communication
- Communication with powermanager or powerconfig
- 2 x Ethernet (RJ45) sockets
- Transmission rates 10 and 100 Mbit/s
- Protocols PROFINET IO, PROFIenergy and Modbus TCP
- No external auxiliary power necessary
- Additional display via the device display and via LEDs on the module

All measured quantities from 7KM PAC3200 and 7KM PAC4200 can be individually selected and cyclically transmitted by means of the GSDML file. This enables optimum use of the process image of the PROFINET controller, e.g. CPU 315-2 PN/DP of SIMATIC S7.

The measured quantities can be read out in acyclic mode using PROFIenergy, a PNO protocol profile. Thanks to PROFIenergy, it is possible to assemble a power monitoring system with devices from various manufacturers using PROFINET.

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7KM PAC expansion modules

Version		Use in					
		7KM PAC					3VA
		PAC3100	PAC3200	PAC4200	PAC5100	PAC5200	COM800/ COM100
	7KM PAC PROFIBUS DP expansion module The 7KM PAC PROFIBUS DP expansion module is a plug-in communication module for 7KM PAC3200 and 7KM PAC4200 measuring devices and 3VA molded case circuit breakers. The 7KM PAC PROFIBUS DP expansion module has the following features: • Plug-in communication module for measuring devices for connection to PROFIBUS DPV1 • For 7KM PAC3200 and 7KM PAC4200 • Parameterizable via device front or using parameterization software • Data can be transferred both cyclically and acyclically via PROFIBUS DPV1 • Easy engineering thanks to integration in SIMATIC STEP 7 and/or simple integration via GSD file for other programming systems • Optimum use of process image of a control system for selection of individual measured quantities for cyclical transfer • Supports all baud rates from 9.6 kbit/s up to 12 Mbit/s • Connection through 9-pole Sub-D connector according to IEC 61158 • No external auxiliary power necessary • Additional display via the device display and via LEDs on the module	--	✓	✓	--	--	✓
	7KM PAC RS 485 expansion module The 7KM PAC RS 485 expansion module has the following features: • Plug-in 7KM PAC RS 485 communication module for 7KM PAC3200 and 7KM PAC4200 measuring devices, and 3VA molded case circuit breakers • Parameterizable via device front or using parameterization software • Support for the Modbus RTU protocol • Plug and play • Supports transmission rates of 4.8/9.6/19.2 and 38.4 kbit/s • Connection by means of 6-pole screw terminals • No external auxiliary power necessary • Status indication by LED on the module • The 7KM PAC RS 485 expansion module is required for the gateway function of the 7KM PAC4200 for communication with simple devices with RS 485 interface, such as the 7KM PAC3100, via Ethernet (Modbus TCP).	--	✓	✓	--	--	--
	7KM PAC 4DI/2DO expansion module The 7KM PAC 4DI/2DO expansion module is used to expand the 7KM PAC4200 measuring device to up to 10 digital inputs and 6 digital outputs and offers the following features: • Up to two 7KM PAC 4DI/2DO modules can be plugged onto a 7KM PAC4200 • The 7KM PAC 4DI/2DO expansion modules mean that the internal digital inputs and outputs can be expanded by up to 8 inputs and 4 outputs. • The 7KM PAC 4DI/2DO expansion modules can be configured locally at the front of the device or via the powerconfig parameterization software • The digital inputs can be used without the need for an external power supply as they are self-powered. This is particularly useful for the integration of non-electric measuring devices, such as water or compressed-air counters • All functions of the integrated multifunctional inputs/outputs on the 7KM PAC4200 are also available in the 7KM PAC 4DI/2DO expansion module • Inputs and outputs can be used as an S0 interface conforming to IEC 62053-31 • The connection is made via a 9-pole screw terminal • No external auxiliary power supply is required	--	--	✓	--	--	--

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Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
7KM9300-0AE01-0AA0	**7KM PAC Switched Ethernet PROFINET expansion module** Expansion module for 7KM PAC3200 and 7KM PAC4200 (PROFIenergy) and COM100/800 (3VA) breaker data server		**7KM9300-0AE01-0AA0**		1	1 unit	1DD	0.070
7KM9300-0AB01-0AA0	**7KM PAC PROFIBUS DP expansion module** Expansion module for 7KM PAC3200 and 7KM PAC4200 (PROFIBUS DPV1) and COM100/800 (3VA) breaker data server		**7KM9300-0AB01-0AA0**		1	1 unit	1DD	0.075
7KM9300-0AM00-0AA0	**7KM PAC RS 485 expansion module** Expansion module for 7KM PAC3200 and 7KM PAC4200 (Modbus RTU) and COM100/800 (3VA) breaker data server		**7KM9300-0AM00-0AA0**		1	1 unit	1DD	0.074
7KM9200-0AB00-0AA0	**7KM PAC 4DI/2DO expansion module** Expansion module for 7KM PAC4200		**7KM9200-0AB00-0AA0**		1	1 unit	1DD	0.073

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* You can order this quantity or a multiple thereof.

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7KT PAC1500 three-phase measuring devices

Overview

7KT PAC1500 three-phase measuring devices for direct connection up to 80 A / 125 A

The measuring devices (power meters) are used to record the amount of electrical energy and power exported and imported. Siemens compact measuring devices are designed as modular devices for alternating current and can be mounted on standard mounting rails. They comply with the metering equipment standard EN 50470 (Part 1 and 3) and come with an LCD display.

The three-phase measuring devices for direct connection are available up to 125 A and in versions with transformer connections (…/5 A to 10000/5 A).

The measuring devices store active and reactive energy and all comply with accuracy class 1 (for active energy).

All measuring devices have a pulse output (S0) and are designed for 2-tariff measurements. The MID versions comply with the new Measuring Instruments Directive 2004/22/EC.

The measuring devices also have an integrated optical interface (IrDA) for connecting communication modules, which enables their integration in a range of other systems, such as power management systems.

Technical specifications

7KT PAC1500 three-phase measuring device			7KT1540 7KT1542	7KT1543 7KT1545	7KT1546 7KT1548
Standards			EN 50470-1, EN 50470-3, EN 62053-23, EN 62053-31		
Connection					
• Direct connection			--	80 A	125 A
• Transformer current connection			.../5 A	--	--
General data					
• Enclosure	Acc. to DIN 43880	MW (1 MW = 18 mm)	4	4	6
• Mounting	Acc. to EN 60715		35 mm		
• Mounting height		mm	70		
Function					
• Connection	Single-phase or three-phase	Number of conductors	4	2 ... 4	2 ... 4
• Storage of setting and counter reading	Via (EEPROM)		Yes	Yes	Yes
• Tariffs	For active and reactive energy		T1/T2	T1/T2	T1/T2
Supply (through measuring terminals)					
• Rated control supply voltage U_n		V AC	230		
• Voltage range		V	110... 276		
• Rated frequency f_n		Hz	50		
Measuring accuracy (at 23 ± 1 °C)	Based on nominal value				
• Active energy and active power	Acc. to EN 50470-3		Class B		
• Reactive energy and reactive power	Acc. to EN 62053-23		Class 2		
Measuring inputs					
• Connection type			Transformer TA-TC .../5 A	Direct	Direct
• Terminal capacitance, operational and main current paths	Rigid, min. (max.) Flexible min. (max.)	mm^2 mm^2	1.5 (6) 1.5 (6)	1.5 (35) 1.5 (35)	5 (50) 5 (50)
• Voltage U_n	Phase/phase Phase/N	V V	400 230		
• Operating range voltage	Phase/phase Phase/N	V V	190 ... 480 110 ... 276		
• Current I_{ref}		A	--	5	5
• Current I_n		A	5	--	--
• Current I_{min}		A	0.05	0.25	0.25
• Operating range current (I_{st} … I_{max})	Direct connection Transformer connection	A A	-- 0.003 ... 6	0.015 ... 80 --	0.020 ... 125 --
• Transformer current	Primary current of the transformer Smallest input step	A A	5 ... 10000 5	-- --	-- --
• Input ripple form			Sinusoidal		
• Operational starting current I_{st}		mA	3	15	20
S0 interface	Acc. to EN 62053-31				
• Pulse outputs for absorbed active and reactive energy T1 + T2			Yes		
• Pulse count	For input current I_{max} Automatic for transformers	Pulses/kWh Pulses/kWh	-- 100 - 10 - 1	500 --	500 --
IR interface					
• At the side for connecting communication modules			M-Bus/Modbus RTU/RS 485/KNX		

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Selection and ordering data

		U_n	I_{max}	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A AC	MW							kg
	7KT PAC1500 three-phase measuring device										
	Digital measuring device										
	• For transformer connection, double tariff	230	Transformer /5	4		**7KT1540**		1	1 unit	1DD	0.266
	• For transformer connection, double tariff, MID	230	Transformer /5	4		**7KT1542**		1	1 unit	1DD	0.269
	• For direct connection, double tariff	230	80	4		**7KT1543**		1	1 unit	1DD	0.421
	• For direct connection, double tariff, MID	230	80	4		**7KT1545**		1	1 unit	1DD	0.422
	• For direct connection, double tariff	230	125	6		**7KT1546**		1	1 unit	1DD	0.698
	• For direct connection, double tariff, MID	230	125	6		**7KT1548**		1	1 unit	1DD	0.710

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* You can order this quantity or a multiple thereof.

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7KT PAC1500 single-phase measuring devices

Overview

The 7KT PAC1500 single-phase measuring devices (power meters) are used to record the amount of electrical energy and power exported and imported. They comply with the metering equipment standard EN 50470 (Part 1 and 3) and come with an LCD display.

The 7KT PAC1500 single-phase measuring devices for direct connection are available up to 80 A. They store active and reactive energy, and all comply with accuracy class 1 (for active energy).

All measuring devices have a pulse output (S0) and are designed for 1-tariff or 2-tariff measurements, depending on the version.

The MID versions comply with the new Measuring Instruments Directive 2004/22/EC. The measuring devices (with the exception of 7KT1530) also have an integrated optical interface (IrDA) for connecting communication modules.

Technical specifications

7KT PAC1500 measuring device, single-phase direct connection up to 80 A			**7KT1530**	**7KT1531 7KT1533**
Standards			EN 50470-1, EN 50470-3, EN 62053-23, EN 62053-31	
General data				
• Enclosure	Acc. to DIN 43880	MW	2	
• Mounting	Acc. to EN 60715		35 mm	
• Mounting height		mm	70	
Function				
• Operating mode	Single-phase loads	Conductors	2	
• Storage of setting and counter reading	Via (EEPROM)		Yes	
• Tariff	For active energy For reactive energy		T1 T1	T1 + T2 T1 + T2
Supply (through measuring terminals)				
• Rated control supply voltage U_n		V AC	230	
• Voltage range		V	110 ... 276	
• Rated frequency f_n		Hz	50	
Measuring accuracy (at 23 ± 1 °C)	Based on nominal value			
• Active energy and active power	Acc. to EN 50470-3		Class B	
• Reactive energy and reactive power	Acc. to EN 62053-23		Class 2	
Measuring inputs				
• Connection type	Phase/N		Direct	
• Terminal capacitance, operational and main current paths	Rigid, min. (max.)	mm^2	1.5 (35)	1.5 (35)
	Flexible min. (max.)	mm^2	1.5 (35)	1.5 (35)
• Operating range voltage	Phase/N	V AC	110... 276	
• Current I_{ref}		A	5	
• Current I_{min}		A	0.25	
• Operating range current (I_{st} ... I_{max})	Direct connection	A	0.015 ... 80	
• Current waveform			Sinusoidal	
• Operational starting current I_{st}		mA	15	
S0 interface	Acc. to EN 62053-31			
• Pulse outputs for absorbed active and reactive energy			Yes	
• Pulse count		Pulses/kWh	1000	
IR interface				
• At the side for connecting communication modules (M-Bus/Modbus RTU/RS 485/KNX)			--	Yes

Selection and ordering data

		U_n	I_{max}	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A AC	MW							kg
	7KT PAC1500 single-phase measuring devices Digital measuring device										
	• For direct connection, single tariff	230	80	2		**7KT1530**		1	1 unit	1DD	0.206
	• For direct connection, double tariff	230	80	2		**7KT1531**		1	1 unit	1DD	0.207
	• For direct connection, double tariff, MID	230	80	2		**7KT1533**		1	1 unit	1DD	0.208

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Overview

Expansion modules for 7KT PAC1500 measuring devices, from left to right: Expansion modules for M-Bus, Modbus RTU, RS 485, Instabus KNX

Expansion modules are used as communication interfaces for 7KT PAC1500 measuring devices. They have the following features:

- The expansion modules can be selected independently of the measuring device. This means they can also be retrofitted in already installed measuring devices.
- Data transmission between the measuring devices and expansion modules is executed via the IrDA infrared interface.
- The expansion modules are placed alongside the measuring devices in the installation direction so that their IrDA interfaces are exactly opposite each other.

7KT PAC M-Bus expansion module (7KT1908)

- Power supply through bus cable
- Baud rates: 300 to 9600 kbit/s
- Status indication by LED on the module
- Can be parameterized using M-Bus Master software

7KT PAC Modbus RTU expansion module (7KT1907)

- Power supply: 230 V AC
- Baud rates: 4.8 / 9.6 / 19.2 and 38.4 kbit/s are supported.
- Status indication by LED on the module
- Configurable via RS 485 master software

7KT PAC RS 485 expansion module (7KT1903)

- Power supply: 230 V AC
- Status indication by LED on the module

7KT PAC 7KNX expansion module (7KT1900)

- Power supply through the KNX/EIB bus cable
- Status indication by LED on the module

Selection and ordering data

	Version	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		MW							kg
7KT1908	**7KT PAC M-Bus expansion module** For connecting 7KT PAC1500 measuring devices to M-Bus	1		**7KT1908**		1	1 unit	1DD	0.057
7KT1907	**7KT PAC Modbus RTU expansion module** For connecting 7KT PAC1500 measuring devices to Modbus RTU	1		**7KT1907**		1	1 unit	1DD	0.085
7KT1903	**7KT PAC RS 485 expansion module** For connecting 7KT PAC1500 measuring devices via RS 485 to 7KT1391 LAN couplers	1		**7KT1903**		1	1 unit	1DD	0.085
7KT1900	**7KT PAC KNX expansion modules** For connecting 7KT PAC1500 measuring devices to Instabus KNX	1		**7KT1900**		1	1 unit	1DD	0.063

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7KT LAN couplers

Overview

7KT LAN couplers

A LAN coupler supports worldwide data retrieval from 7KT PAC measuring devices, as long as there is a LAN link to the Internet.

Up to 30 devices can be linked to a LAN coupler via a Web browser, such as Firefox. In turn, the LAN coupler is connected to a LAN.

Data communication between the LAN coupler and the PC takes place using the TCP/IP protocol.

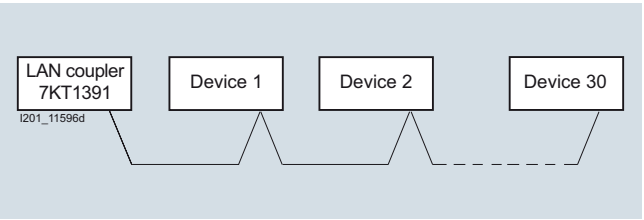
Application

Suitable 7KT PAC measuring devices

The following measuring devices can be connected to the LAN coupler:

	Article No.
Energy measuring devices	
7KT PAC1500 three-phase measuring device	
• For direct connection 80 A, double tariff	7KT1543
• For direct connection 80 A, double tariff, MID	7KT1545
• For transformer connection .../5 A, double tariff	7KT1540
• For transformer connection .../5 A, double tariff, MID	7KT1542
• For direct connection 125 A, double tariff	7KT1546
• For direct connection 125 A, double tariff, MID	7KT1548
7KT PAC1500 single-phase measuring device	
• For direct connection 80 A, double tariff	7KT1531
• For direct connection 80 A, double tariff, MID	7KT1533

Connecting several devices to a 7KT LAN coupler



Technical specifications

			7KT LAN couplers
Standards			IEEE 802.3 AS, IEC 60950, EN 61000-6-2, EN 61000-6-3
General data			
• Enclosure	Acc. to DIN 43880		4 modules
• Mounting	Acc. to EN 60715		Mounting on standard mounting rail (35 mm)
• Mounting height		mm	70
Supply			
• Rated power dissipation P_v		VA	≤ 10
• Rated control supply voltage U_c		V AC	230
• Primary operating range		× U_c	0.9 ... 1.10
• Rated frequency		Hz	50
• Frequency ranges		Hz	45 ... 65
Function			
• System start			Automatic upon switching on
• LAN server identification			Over the IP address of the PC
• Transmission rate	Limitation by LAN	Mbit/s	100
• Operating system			Windows XP/Vista/7
• Browser			IE 7,8; Mozilla Firefox 3.09 / 3.5.3 / 3.6; Opera 9.64 / 10 / 10.5; Safari 3.2.2 /4.0.5; Google Chrome 3.0.195.27.
LAN interface			
• HW interface			Connection RJ 45
• SW interface			TCP/IP

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			7KT LAN couplers
Interface to measuring devices			
• HW interface	RS 485 terminals	Number	3 (+/-/shielded twisted pair)
• Line	Version		STP (shielded twisted pair)
	Minimum cross-section	mm^2	2 × 0.2 or 2 x AWG 24
	Maximum line capacitance	pF/m	< 50
	Impedance	W	100
	Maximum overall cable length	m	≤ 1200
	Type of installation		Serial
Measuring devices can be connected directly		Number	30
Environmental conditions			
• Temperatures	In operation	°C	-10 ... +55
	Storage and transport	°C	-25 ... +70
• Relative humidity	In operation	%	≤ 80
• Vibrations	Sine amplitude at 50 Hz	mm	± 0.25
• Safety class	Acc. to IEC 60950		III
• Degree of protection	Installed device front side (terminals)		IP20

Selection and ordering data

	Version	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	MW							kg
	LAN couplers									
	For connection of up to 30 devices over RS 485									
		230	4		**7KT1391**		1	1 unit	1DD	0.215

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Digital voltmeters and ammeters

Overview

Digital measuring devices: Left: 7KT1 voltmeter, right: 7KT1 ammeter

These devices for measuring voltages and currents can be used for monitoring incoming and outgoing currents or device currents in electric plants.

They are suitable for direct connection in a single-phase system or with measuring transducers in three-phase systems.

The measuring ranges of the ammeter are set locally at the device using a coding switch.

Benefits

- The ammeters have 14 measuring ranges from 0 A to 20 A and 0 A to 999 A, which can be set using a coding switch. This ensures universal application.

Technical specifications

			7KT1110	7KT1120
Standards			DIN 43751-1, -2	
Rated voltage U_e		V AC	230	
Primary operating range	x U_e		0.9 ... 1.15	
Rated frequency		Hz	50/60	
Rated operational power P_S		VA	<2	
7+1-segment display			3 digits	
Measuring range				
• Voltage	Direct measurement	V AC	12 ... 600 (U_n)	--
• Current	Direct measurement	A AC	--	0.4 ... 20 (I_n)
	Transformer measurement	A AC	--	25, 40, 50,..1000/5
Lower display value	From the full-scale value	%	2	
Measuring resistance				
• Current	Direct measurement 20 A	mΩ	--	5
	Transformer measurement	mΩ	--	10
• Voltage	Direct measurement 600 V	MΩ	1	--
Measuring frequency		Hz	45 65	
Measuring cycle		/s	4	
Measuring accuracy	At 23 °C ±1 °C	%	± 0.5 ± 1 digit	
Temperature influence		%/°C	±0.03	
Overload capability				
• Voltage	Continuous	V	1.2 x U_n	--
	Short-time for 1 s	V	1.3 x U_n	--
• Current	Continuous, direct	A	--	1.1 x I_n
	Short-time for 1 s, direct	A	--	10 x I_n
Terminals	±screw (Pozidriv)		1	
Conductor cross-sections	Rigid, max.	mm^2	1 × 6/2 × 4	
	Flexible, with end sleeve, min.	mm^2	0.75	
Degree of protection			IP20, with connected conductors	
Permissible ambient temperature			IP20, with connected conductors	
• Operation		°C	-10 ... +55	
• Storage		°C	-40 ... + 70	

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Selection and ordering data

	Version	U_e	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	MW							kg
	Digital voltmeters Measuring range 12 ... 600 V AC	230	2		**7KT1110**		1	1 unit	1BK	0.214
	Digital ammeters for direct and transformer connection Measuring range Direct: 0.4 ... 20 A Transformer: 0.1 ... 1000 A/5	230	2		**7KT1120**		1	1 unit	1BK	0.224

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Time and pulse counters for standard rail mounting

Overview

Time counters: Left: Electromechanical, right: Electronic

Time and pulse counters are used for the reliable monitoring of production and service times, which enables the exact planning and monitoring of production sequences, maintenance cycles and warranty times.
As well as the proven electromechanical time and pulse counters for mounting in distribution boards, we also supply digital time and pulse counters.
The fields of application for both counter types are very diverse, such as the recording of operating hours of machines, systems or building management systems, as well as pulse counting for general volume flow counting, registration of starting frequencies, starting cycles or production quantities in systems and machines.

Benefits

- Time and pulse counters help to plan maintenance intervals, which safeguard and ensure high plant availability
- Versions without zero position and with electric or manual zero position for all applications
- Flexible application of the digital counters for power supplies of 12 V to 150 V DC and 24 V to 240 V AC in a single device

Technical specifications

			7KT5801	7KT5802	7KT5803	7KT5804	7KT5806	7KT5807
Standards **Approvals**			DIN VDE 0435-110; EN 60255-6; UL 863 UL 863, UL File No. E300537, CSA C22.2 No. 6 and 55					
Rated control supply voltage U_c		V AC V DC	-- 12 ... 24	24 --	115	230	115	230
Primary operating range	At 50/60 Hz	x U_c	0.9 ... 1.1					
Rated frequency		Hz	--	50			60	
Rated power dissipation P_v		VA	< 1		< 2			
Method of operation	Counting of		Hours					
Display	Drum-type register	h	00000.00					
Terminals	±screw (Phillips)		1					
Conductor cross-sections	Rigid Flexible, with end sleeve, min.	mm^2 mm^2	1.5 0.75					
Permissible ambient temperature		°C	-10 ... +70					
Degree of protection	Acc. to EN 60529		IP20, with connected conductors					
Safety class	Acc. to EN 61140/VDE 0140-1		II					
Permissible humidity		%	< 80					

			7KT5811	7KT5812	7KT5814	7KT5821	7KT5822	7KT5823	7KT5833
Standards **Approvals**			DIN VDE 0435-110; EN 60255-6; UL 863 UL 863, UL File No. E300537, CSA C22.2 No. 6 and 55						
Rated control supply voltage U_c		V AC V DC	-- 12 ... 24	24 --	230 --	24 ... 240 12 ... 150			
Primary operating range	At 50/60 Hz	x U_c	0.9 ... 1.1						
Rated frequency		Hz	--	50/60					
Rated power dissipation P_v		VA	< 1		< 2	< 1			
Method of operation	Counting of		Pulses			Hours			Pulses
Display	Drum-type register		0000000			--			--
	LCD	h	--			000000.0			--
			--			--			0000000
Counting frequency		Hz	10			--			10
Pulse duration		ms	50			--			50
Resetting	Electrical Mechanical		-- --				Yes	 Yes	
Terminals	±screw (Phillips)		1						
Conductor cross-sections	Rigid Flexible, with end sleeve, min.	mm^2 mm^2	1.5 0.75						
Permissible ambient temperature		°C	-10 ... +70						
Degree of protection	Acc. to EN 60529		IP20, with connected conductors						
Safety class	Acc. to EN 61140/VDE 0140-1		II						
Permissible humidity		%	< 80						

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Selection and ordering data

	U_c	Frequency	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V	Hz	MW							kg
	Time counters									
	Mechanical counting mechanism, display 00000.00 h without resetting									
	12 ... 24 DC	--	2		**7KT5801**		1	1 unit	1BK	0.092
	24 AC	50			**7KT5802**		1	1 unit	1BK	0.090
	115 AC				**7KT5803**		1	1 unit	1BK	0.100
	230 AC				**7KT5804**		1	1 unit	1BK	0.091
	115 AC	60			**7KT5806**		1	1 unit	1BK	0.091
	230 AC				**7KT5807**		1	1 unit	1BK	0.093
	Pulse counters									
	Mechanical counting mechanism, display 0000000 ⎍ without resetting									
	12 ... 24 DC	--	2		**7KT5811**		1	1 unit	1BK	0.090
	24 AC	50/60			**7KT5812**		1	1 unit	1BK	0.094
	230 AC				**7KT5814**		1	1 unit	1BK	0.094
	Electronic time counters									
	LCD 000000.0h without resetting									
	12 ... 150 DC, 24 ... 240 AC	-- 50/60	2		**7KT5821**		1	1 unit	1BK	0.087
	With electrical resetting									
	12 ... 150 DC, 24 ... 240 AC	-- 50/60			**7KT5822**		1	1 unit	1BK	0.087
	With electrical and mechanical resetting									
	12 ... 150 DC, 24 ... 240 AC	-- 50/60			**7KT5823**		1	1 unit	1BK	0.087
	Electronic pulse counters									
	LCD 0000000 ⎍									
	With electrical and mechanical resetting									
	12 ... 150 DC, 24 ... 240 AC	-- 50/60	2		**7KT5833**		1	1 unit	1BK	0.087

More information

Time counters count the time in hours with an accuracy of two decimal places (hundredths of hours). The pulse counter adds the number of pulses, e.g. the making operations of devices.

A power supply is required at terminals 1 and 2 of the electronic counters so that the device can constantly display the measured values. Once terminal 3 is supplied with voltage (for DC "+"), the counting procedure starts. If terminal 4 is supplied short-time with voltage (for DC "+"), the counter is reset.

In the case of electronic counters, the counting result is saved indefinitely in the event of a power failure (EEPROM). On recovery of the power, the counting is continued from the saved value. As well as a modern design, the electronic counter has a 7-digit LCD, which can be reset electrically or manually.

* You can order this quantity or a multiple thereof.

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Time counters for front-panel mounting

Overview

Time counters: Left: Counting mechanism, right: Counting mechanism with front frame

Time and pulse counters for control cabinets, control systems and mechanical engineering are used, e.g. in boilers, machine tools or compressors. The pulse counters count the starting frequencies. This supports planning for preventative maintenance.

In-time and regular maintenance is the best protection against unexpected shutdowns.

Benefits

- Time and pulse counters help to plan maintenance intervals, which safeguard and ensure high plant availability

Technical specifications

			7KT5500	7KT5501	7KT5502	7KT5503	7KT5504	7KT5505
Standards			DIN VDE 0435-110; EN 60255-6					
Rated control supply voltage U_c		V AC V DC	-- 10 ... 80	115 --	230	115	230	24
Rated frequency		Hz	--	50		60		50
Front-panel mounting • Without masking frame 55 × 55 mm • With masking frame 55 × 55 mm	Switchboard cutout	mm × mm Ø mm	$45.2 \times 45.2^{+0.3}$ $50.2^{+0.3}$					

			7KT5600	7KT5601	7KT5602	7KT5603	7KT5604
Standards			DIN VDE 0435-110; EN 60255-6				
Rated control supply voltage U_c		V AC V DC	-- 10 ... 50	115 --	230	115	230
Rated frequency		Hz	--	50		60	
Front-panel mounting	Switchboard cutout	mm × mm	$68^{+0.5} \times 68^{+0.5}$				

Selection and ordering data

		U_c	Frequency	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V	Hz	MW							kg
	Time counters Mechanical counting mechanism, display 00000.00 h, for front-panel mounting, front frame 48 x 48 mm										
		10 ... 80 DC	–			7KT5500		1	1 unit	1BK	0.058
		24 AC	50			7KT5505		1	1 unit	1BK	0.057
		115 AC				7KT5501		1	1 unit	1BK	0.055
		230 AC				7KT5502		1	1 unit	1BK	0.057
		115 AC	60			7KT5503		1	1 unit	1BK	0.057
		230 AC				7KT5504		1	1 unit	1BK	0.058
	For front-panel mounting, front frame 72 x 72 mm With narrow frame according to DIN 43700										
		10 ... 50 DC	–	2		7KT5600		1	1 unit	1BK	0.134
		115 AC	50			7KT5601		1	1 unit	1BK	0.138
		230 AC				7KT5602		1	1 unit	1BK	0.131
		115 AC	60			7KT5603		1	1 unit	1BK	0.134
		230 AC				7KT5604		1	1 unit	1BK	0.134
	Covers for 7KT55 time counters										
	55 × 55 mm					7KT9020		1	1 unit	1BK	0.004
	Sealing rings for 7KT9020 covers										
	IP43 installation in switchboards with smooth surfaces (1 set = 5 units)					7KT9000		1	1 set	1BK	0.011
	Terminal covers for 7KT56 time counters										
	Degree of protection, IP20, with connected conductors					7KT9021		1	1 unit	1BK	0.007

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Overview

4NC53 current transformers

Technical specifications

4NC current transformers for measuring purposes

Standards	EN 60044-1, VDE 0414-44-1
Window-type current transformers	The conductor to be measured (busbar or cable) is passed through the window opening and constitutes the primary circuit of the window-type current transformer. Pin-wound transformers: An economical solution especially for small primary currents of 5 ... 75 A are window-type current transformers when the conductor to be measured is pin-wound several times.
Rated primary current I_{pn}	Current transformers can be continuously loaded with 1.3 times the rated primary current (I_{pn}).
Rated secondary current I_{sn}	
1 A	Particularly suitable for longer measuring leads. Cable losses of only 4 % in contrast to 5 A current transformers.
5 A	5 A current transformers generate 25 times the power losses on measuring leads as compared with 1 A current transformers. These stray losses result in higher power in the case of long cables. Only recommended for use with short measuring leads.
Accuracy class	
Class 1	Operation measurement, internal metering Current error ±1 % at 1 x I_{pn} and 1.2 x I_{pn}
Class 3	Coarse measurement Current error ±3 % at 0.5 x I_{pn} and 1.2 x I_{pn}
Rated power P_n	The rated power of transformers is specified in VA. The actual load rating should be similar to the rated power; a lower actual load rating (underburden) increases the overcurrent factor and measuring devices are not sufficiently protected in case of a short-circuit, a higher actual load rating (overburden) has a negative effect on the accuracy. With a frequency of 60 Hz the rated power increases to 1.2 times. With $16^2/_3$ Hz the output power decreases to $^1/_3$ of the rated power.
Maximum voltage for equipment U_m	This is the rms value of the maximum voltage between the conductors of a system. For this voltage the insulation must be rated at normal operating conditions. 4NC5 current transformers are suitable for 720 V.
Overcurrent limiting factor FS	The overcurrent limiting factor is expressed using the characters FS and a factor, e.g. FS5 or FS10. When a short-circuit current flows through the primary winding of a current transformer, the stress on the measuring devices connected to the current transformer is the lower the smaller the overcurrent limiting factor is.
Rated short-time thermal current I_{th}	The rated short-time thermal current I_{th} is the rms value of the primary current with a duration of one second, whose heat effect the current transformer can resist without being damaged in the event of a short-circuited secondary winding.
Rated impulse current I_{dyn}	The rated impulse current I_{dyn} is the highest instantaneous value of the current after a short circuit whose force the current transformer can resist without being damaged. The rated impulse current is specified as peak value.

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4NC current transformers

4NC51 window-type current transformers, used as pin-wound transformers, classes 1 and 3, from 5 A to 75 A

Pin-winding increases the primary current of the current transformer. Consequently, window-type current transformers can also be used for low primary currents.

4NC51 used as pin-wound transformer

Basic type		4NC5112	4NC5113	4NC5115	4NC5117	4NC5121	4NC5122	4NC5123
Rated primary current	A	50	60	75	100	150	200	250
Rating	VA	2.5	2.5	2.5	2.5	2.5	5	5
Primary current to be measured		Number of required pin windings						
	A	**Class 3**			**Class 1**			
	5	10	--	--	--	--	--	--
	10	5	6	--	10	--	--	--
	15	--	4	5	--	10	--	--
	20	--	3	--	5	--	10	--
	25	2	--	3	4	6	8	10
	30	--	2	--	--	5	--	--
	40	--	--	--	--	--	5	--
	50	--	--	--	2	3	4	5
	75	--	--	--	--	2	--	--

Selection and ordering data

4NC current transformers for measuring purposes

	Rated primary current I_{pn}	Rating P_n	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	VA							kg
Classes 1 and 3, from 50 to 1 500 A									
	Rated secondary current 1A								
	Class 3								
	• For circular conductors with max. diameter 17.5 mm								
	• For busbars up to max. 12 × 10 mm								
4NC5112-0BC20	50	2.5		4NC5112-0BC20		1	1 unit	1CL	0.424
	60	2.5		4NC5113-0BC20		1	1 unit	1CL	0.421
	75	2.5		4NC5115-0BC20		1	1 unit	1CL	0.428
	Class 1								
	• For circular conductors with max. diameter 17.5 mm								
	• For 1 busbar up to max. 12 × 10 mm								
4NC5117-0CC20	100	2.5		4NC5117-0CC20		1	1 unit	1CL	0.331
	150	2.5		4NC5121-0CC20		1	1 unit	1CL	0.326
	200	5		4NC5122-0CE20		1	1 unit	1CL	0.356
	250	5		4NC5123-0CE20		1	1 unit	1CL	0.353
	• For circular conductors with max. diameter 28 mm								
	• For 1 busbar up to max. 30 × 10 mm								
	• For 2 busbars up to max. 25 × 5 mm								
4NC5222-0CE20	200	5		4NC5222-0CE20		1	1 unit	1CL	0.456
	250	5		4NC5223-0CE20		1	1 unit	1CL	0.477
	300	5		4NC5224-0CE20		1	1 unit	1CL	0.359
	400	5		4NC5225-0CE20		1	1 unit	1CL	0.378
	• For circular conductors with max. diameter 36 mm								
	• For 1 busbar up to max. 50 × 10 mm								
	• For 2 busbars up to max. 40 × 5 mm								
4NC5325-0CE20	400	5		4NC5325-0CE20		1	1 unit	1CL	0.460
	500	5		4NC5326-0CE20		1	1 unit	1CL	0.399
	600	5		4NC5327-0CE20		1	1 unit	1CL	0.417
	750	5		4NC5328-0CE20		1	1 unit	1CL	0.381
	• For circular conductors with max. diameter 45 mm								
	• For 1 busbar up to max. 60 × 10 mm								
	• For 2 busbars up to max. 60 × 10 mm								
	• For 3 busbars up to max. 60 × 5 mm								
4NC5431-0CH20	1000	10		4NC5431-0CH20		1	1 unit	1CL	0.647
	1250	10		4NC5433-0CH20		1	1 unit	1CL	0.681
	1500	10		4NC5434-0CH20		1	1 unit	1CL	0.702

*** You can order this quantity or a multiple thereof.**

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4NC51 window-type current transformers, used as pin-wound transformers, classes 1 and 3, from 5 A to 75 A

	Rated primary current I_{pn}	Rating P_n	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	VA							kg
	Rated secondary current 5 A								
4NC5112-2BC20	**Class 3**								
	• For circular conductors with max. diameter 17.5 mm								
	• For 1 busbar up to max. 12 × 10 mm								
	50	2.5		**4NC5112-2BC20**		1	1 unit	1CL	0.419
	60	2.5		**4NC5113-2BC20**		1	1 unit	1CL	0.426
	75	2.5		**4NC5115-2BC20**		1	1 unit	1CL	0.424
4NC5117-2CC20	**Class 1**								
	• For circular conductors with max. diameter 17.5 mm								
	• For 1 busbar up to max. 12 × 10 mm								
	100	2.5		**4NC5117-2CC20**		1	1 unit	1CL	0.331
	150	2.5		**4NC5121-2CC20**		1	1 unit	1CL	0.334
	200	5		**4NC5122-2CE20**		1	1 unit	1CL	0.349
	250	5		**4NC5123-2CE20**		1	1 unit	1CL	0.352
4NC5222-2CE20	• For circular conductors with max. diameter 28 mm								
	• For 1 busbar up to max. 30 × 10 mm								
	• For 2 busbars up to max. 25 × 5 mm								
	200	5		**4NC5222-2CE20**		1	1 unit	1CL	0.460
	250	5		**4NC5223-2CE20**		1	1 unit	1CL	0.476
	300	5		**4NC5224-2CE20**		1	1 unit	1CL	0.359
	400	5		**4NC5225-2CE20**		1	1 unit	1CL	0.374
4NC5325-2CE20	• For circular conductors with max. diameter 36 mm								
	• For 1 busbar up to max. 50 × 10 mm								
	• For 2 busbars up to max. 40 × 5 mm								
	400	5		**4NC5325-2CE20**		1	1 unit	1CL	0.447
	500	5		**4NC5326-2CE20**		1	1 unit	1CL	0.407
	600	5		**4NC5327-2CE20**		1	1 unit	1CL	0.416
	750	5		**4NC5328-2CE20**		1	1 unit	1CL	0.388
4NC5431-2CH20	• For circular conductors with max. diameter 45 mm								
	• For 1 busbar up to max. 60 × 10 mm								
	• For 2 busbars up to max. 60 × 10 mm								
	• For 3 busbars up to max. 60 × 5 mm								
	1000	10		**4NC5431-2CH20**		1	1 unit	1CL	0.636
	1250	10		**4NC5433-2CH20**		1	1 unit	1CL	0.631
	1500	10		**4NC5434-2CH20**		1	1 unit	1CL	0.677

More information

For other current transformers for measuring purposes,
See chapter "Switch Disconnectors"

*** You can order this quantity or a multiple thereof.**

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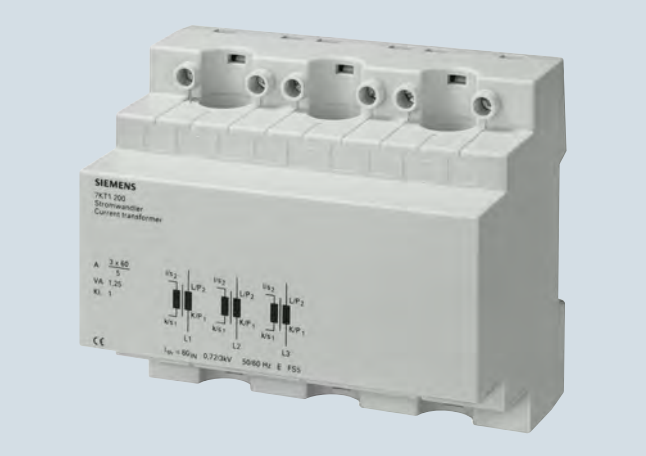
7KT12 current transformers

Overview



7KT12 current transformers

The three-phase 7KT12 current transformer can be used in distribution boards according to DIN 43880. The measuring leads are routed vertically through the standard mounting rail.

This type of current transformer is suitable for infeeds or outgoing lines in connection with the installation of a 5TE8 switch or a 5TE1 disconnector, as the primary connecting leads do not have to be interrupted.

The current transformer is designed for cables of up to 13 mm in diameter, e.g. H07V-R with 50 mm^2 conductor cross-section.

Benefits

- The current transformer has accuracy class 1 in accordance with EN 60044-1.
- The versions designed for a transformer ratio of 60/5 A, 100/5 A and 150/5 A enable an even broader range of applications.

Technical specifications

			7KT1200	7KT1201	7KT1202
Standards			EN 60044-1		
Secondary rated current strength		A	5		
Accuracy class		Cl.	1		
Rated power		VA	1.25	2.5	3.75
Rated frequency f_n		Hz	50/60		
Thermal current limit I_{th}	Short-time	A	60 × I_e		
Thermal continuous current		A	1 × I_e		
Overcurrent limit factor		FS	5		
Rated impulse withstand voltage U_{imp}		kV	> 3		
Creepage distances and clearances		mm	> 3		
Rated operational voltage U_e		V AC	720		
Rated operational current I_e		A AC	3 × 60	3 × 100	3 × 150
Terminals ±screw (Pozidriv)			PZ 1		
Conductor cross-sections					
- Rigid		mm^2	0.5 ... 4		
- Flexible, with end sleeve		mm^2	0,5 ... 2.5		
Permissible ambient temperature		°C	-5 ... +60		
Resistance to climate	Acc. to EN 60068-1		20/60/4		

Selection and ordering data

		U_e	I_e	I_{sec}	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A AC	A AC	MW							kg
	Current transformers											
		720	3 × 60	5	6		**7KT1200**		1	1 unit	1BK	0.535
			3 × 100				**7KT1201**		1	1 unit	1BK	0.543
			3 × 150				**7KT1202**		1	1 unit	1BK	0.558

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Overview

Measuring selector switch (voltmeter selector switch)

Measuring selector switches are used as CO contacts of the phases for voltages and currents in three-phase systems for voltmeters and ammeters.

The design of these switches is adapted to match the modular installation devices. They support use in compliance with EN 60947-3.

Benefits

The devices have a rated insulation voltage of 660 V. This permits use in many systems.

Selection and ordering data

	U_e	I_e	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V AC	A AC	V AC	MW							kg
	Voltmeter selector switches										
	400	12	6	3		**7KT9010**		1	1/48 units	1BK	0.137
	Ammeter selector switches for operation with current transformer										
	400	12	6	3		**7KT9011**		1	1 unit	1BK	0.137

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Notes

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12/2 **Introduction**

Transfer control devices
12/5 Introduction
12/7 3KC ATC5300 transfer control devices
12/8 3KC ATC3100 NEW transfer control devices

Monitoring devices for electrical values
12/9 5SV8 residual current monitors
12/15 5TT3 voltage relays
12/19 5TT3 voltage and frequency relays
12/21 5TT6 current relays
12/23 5TT3 reverse power relays
12/25 5TT3 fuse monitors
12/26 5TT3 phase and phase sequence monitors
12/27 5TT3 insulation monitors for industrial applications
12/28 7LQ3 monitors for medical premises

Monitoring devices for plants and equipment
12/35 5TT7 GSM alarm modules
12/37 5TT3 fault signaling units
12/38 5TT5 EMERGENCY STOP modules
12/39 5TT3 level relays
12/41 5TT3 line circuit relays

Charging infrastructure for electric vehicles
5TT3 charging units
12/42 - Introduction
12/43 - WB140A charging units
12/44 - CC100A charging cables NEW

For further technical product information:

Configuration Manual

Monitoring Devices
Article No.: 3ZW1012-5SV80-0AC1

Siemens Industry Online Support:

www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
Download
FAQ
Manual
Product note
Software archive
Technical data

NEW

Direct reference to the products in the Industry Mall from the selection and ordering data tables:

Article No.
www.siemens.com/product?Article No.
3VA2025-5HL36-0AA0

Paper catalog:
To get more product information enter the Web address plus Article No.

PDF catalog:
Get more product information with just a mouse click.

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Introduction

Overview

Devices		Page	Application	Standards	Used in		
					Non-residential buildings	Residential buildings	Industry
Transfer control devices							
	3KC ATC5300 transfer control devices	12/7	The 3KC ATC5300 transfer control device, equipped with two motor-driven circuit breakers, serves as a transfer system that automatically or manually switches between two power supply systems in low-voltage power distribution applications. The 3KC ATC5300 transfer control device offers several programmable inputs and outputs, communication interfacing and displays. Settings are defined via user-friendly software.	IEC 60947-6-1; DIN VDE 0660-114; UL 508; CSA 22.2 No. 14	✓	✓	✓
	3KC ATC3100 NEW **transfer control devices**	12/8	The 3KC ATC3100 transfer control device constitutes the transfer control system together with two circuit breakers with motorized operating mechanism. It is a simplified version of the 3KC ATC5300 and enables fast parameterization without software.	IEC 60947-6-1; GB 14048.11	✓	✓	✓
Monitoring Devices for Electrical Values							
	5SV8 residual current monitors	12/9	To increase system availability and operating safety through continuous monitoring of residual current in electrical systems and signaling if a defined threshold is exceeded.	IEC 62020; EN 62020	✓	--	✓
	Modular residual current devices (MRCD)	12/9	The MRCD is a modular residual current device for personal safety and fire protection.	EN 60947-2 (Annex M); IEC 60947-2 (Annex M)	✓	--	✓
	5TT3 voltage relays	12/15	Monitoring the voltage of emergency lighting in public buildings, short-time failures of 20 ms, for ensuring operational parameters for devices or system components or monitoring the neutral conductor for breaks.	IEC 60255; DIN VDE 0435-303; DIN VDE 0108; DIN VDE 0435; DIN VDE 0633	✓	--	✓
	5TT3 voltage and frequency relays	12/19	The voltage and frequency relay monitors the status of the grid in the case of in-plant generation systems. Violation of an upper or lower limit results in shutdown and disconnection of the generation system from the grid. This ensures a stable incoming supply system.	IEC/EN 60255-1; IEC/EN 61000; VDE-AR-N-4105	✓	✓	✓

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Devices		Page	Application	Standards	Used in		
					Non-residential buildings	Residential buildings	Industry
	5TT6 current relays	12/21	Monitoring of emergency and signal lighting and motors. All current relays can be short-time overloaded and connected either with direct measurement or through transformers.	IEC 60255; DIN VDE 0435-303	✓	--	✓
	5TT3 reverse power relays	12/23	Reverse power relays are used in power supply systems, e.g. photovoltaic, wind power, water power and unit-type cogenerating stations, to control the reverse power. They prevent voltage being returned from the grid and causing damage if the infeed system itself fails or is damaged.	IEC 50255; DIN VDE 0435-303	✓	✓	✓
	5TT3 fuse monitors	12/25	Monitoring of all types of low-voltage fuses. Can be used in asymmetric systems afflicted with harmonics and regenerative feedback motors.	IEC 60255; DIN VDE 0435	✓	--	✓
	5TT3 phase and phase sequence monitors	12/26	For the visual signaling of phase failures or phase sequences in three-phase systems. The phase sequence is arbitrary. The device is also suitable for 1, 2 or 3-phase operation.	IEC 60255; DIN VDE 0435	--	--	✓
	5TT3 insulation monitors for industrial applications	12/27	To increase system availability and operating safety through continuous monitoring of the isolation resistance in non-grounded direct voltage or AC voltage systems.	IEC 60255; IEC 61557	--	--	✓
	7LQ3 monitors for medical premises	12/28	For the insulation monitoring of a medical IT system or the load current monitoring of an IT system transformer for a non-permissible temperature rise. Monitoring of the voltage supply with automatic switchover.	EN 61557-8; IEC 61557-8; DIN VDE 0100-710; IEC 60364-7-710	✓	--	--
	5TT7 GSM alarm modules	12/35	For mobile monitoring and controlling of electrical installations and system components. To this end, alarms or status messages and switching commands are sent quickly and reliably by SMS or e-mail.	EN 50178, EN 55011, EN 61326-1	✓	✓	✓

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Introduction

Devices		Page	Application	Standards	Used in		
					Non-residential buildings	Residential buildings	Industry
Monitoring devices for plants and equipment							
	5TT3 fault signaling units	12/37	Evaluation and display of fault alarms and alarm signals for monitoring industrial plants and control systems. With 4 inputs and connections for 39 expansion fault signaling units.	IEC 60255, DIN VDE 0435-303	✓	--	✓
	5TT5 EMERGENCY STOP modules	12/38	For EMERGENCY-OFF switching in accordance with the Directive 98/37/EC on Safety of Machines. Safe types of circuits for machines, plants or test stations in industrial, commercial and private enterprise applications.	According to the Machinery Directive 98/37/EC; EN 954-1	✓	--	✓
	5TT3 level relays	12/39	Control of liquid levels in containers with 3 electrode connections for 1-step and 2-step level control. High immunity to interference of the measuring circuit isolated from the system.	IEC 60255, DIN VDE 0435	✓	--	✓
	5TT3 line circuit relays	12/41	For disconnecting the voltage of unused lines when loads are disabled.	IEC 60255, DIN VDE 0435	--	✓	--
Charging infrastructure for electric vehicles							
	WB140A charging units	12/42	The WB140A charging unit can be used to charge electric vehicles in charging mode 3 acc. to IEC 61851. The charging cable type 2 is fixed to the charging unit and is equipped with residual current and line protection.	IEC/EN 61851-1; IEC/EN 61851-22; IEC/EN 62196-1; IEC 62196-2; IEC 60439-3; DIN 43880	✓	✓	✓
	CC100A charging cables NEW	12/44	The CC100A charging cable in charging mode 2 in compliance with IEC 61851-1 is a safe and convenient alternative to using charging units or posts. The mobile charging cable for home and travel can be connected easily to common household plug-and-socket devices. The range includes versions that cater for most common plug sockets in Europe. Type 1 or type 2 vehicle charging couplers are available at the vehicle end.	IEC/EN 61851-1; IEC/EN 62196; IEC 62335	✓	✓	--

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Overview

3KC ATC5300 and 3KC ATC3100 transfer control devices

Automatic transfer with the 3KC ATC5300 or 3KC ATC3100 transfer control devices

The 3KC ATC5300 and ATC3100 transfer control devices, equipped with two circuit breakers with motorized operating mechanism, serve as an open transfer system that automatically or manually switches between two power supply systems in low-voltage power distribution applications.

In particular, the 3KC ATC5300 or 3KC ATC3100 transfer control device is deployed wherever a power failure is especially critical, e.g. distributed power supply systems with UPS supply (e.g. air-conditioning of control cabinets), in industrial processes and the emergency power supply of public buildings, such as hotels.

Mode of operation

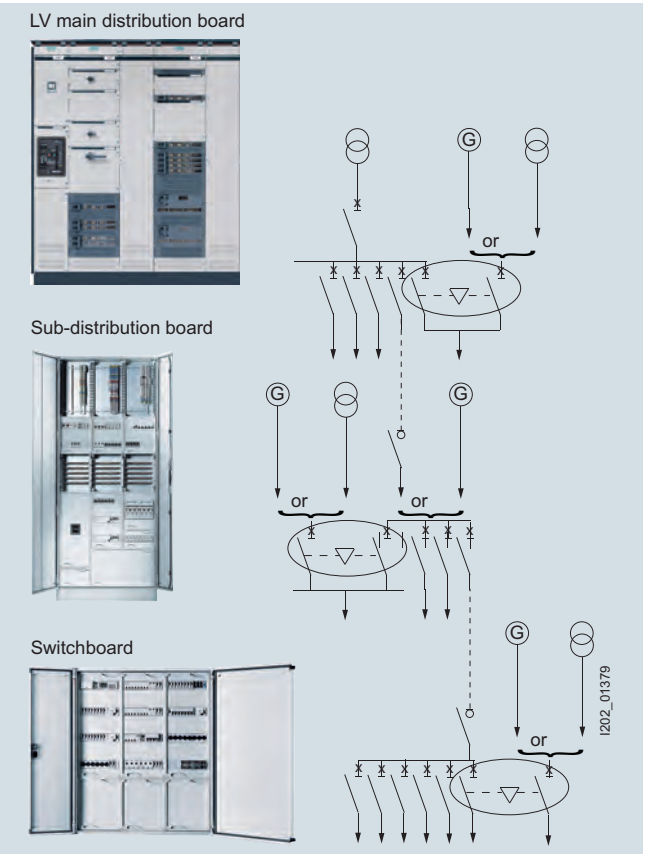
The 3KC ATC5300 and ATC3100 transfer control devices control the transfer between the main and standby power supplies fully automatically, while incorporating set limit values and delay times. It detects fluctuations occurring in the main power supply quickly and switches to the standby power supply. The control device only switches to the standby power supply after it has ensured that the standby supply is delivering the required power supply quality. The device switches back to the main power supply taking into consideration the set parameters once the required power supply quality is available again. If the standby power supply and/or the main power supply is fed by a generator, the control devices also offer a wide range of settings, such as a generator lead time, generator delay time, and generator start test at specified times.

The 3KC ATC transfer control devices can control air circuit breakers, molded case circuit breakers, switch disconnectors and contactors. The circuit breakers are controlled via the related motorized operating mechanisms.

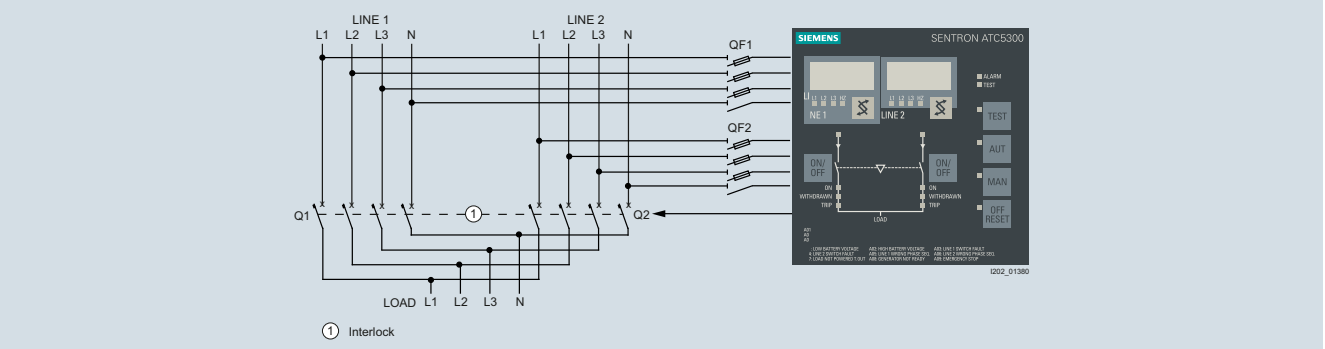
Q1 and Q2, configured with circuit breakers

All circuit breakers connected to the 3KC ATC5300 or ATC3100 transfer control devices must be equipped with the following accessories:

- 3VL/3VA molded case circuit breakers
  The following is also required for each molded case circuit breaker:
  - One motorized operating mechanism
  - One alarm switch
  - Two auxiliary switches 1 NO/1 NC
- 3WL air circuit breakers
  The following is also required for each 3WL air circuit breaker:
  - One motorized operating mechanism
  - One closing solenoid
  - One auxiliary release (shunt release)
  - One tripped signal switch
  - One auxiliary switch block 2 NO/2 NC (standard fittings)



Applications in low-voltage power distribution



Implementation of an automatic transfer control (according to IEC 60947-6-1); ① interlocking

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Technical specifications

		ATC5300	ATC3100
Measuring inputs			
Max. rated voltage U_n			
• Phase-phase	V AC	690	400
• Phase-neutral	V AC	400	230
Phase-phase measuring range	V AC	80 ... 800	161 ... 264
Frequency ranges	Hz	45 ... 65	50 ... 60
Measuring method		RMS value (true RMS)	
Measuring input impedance			
• Phase-phase	MΩ	> 1.1	
• Phase-neutral	MΩ	> 0.5	> 1.1
Connection method		1, 2 or 3-phase system	4-phase system
Measuring errors		± 0.25 %, value range ± 5 %	
Auxiliary supply			
Operating range			
• AC	V AC	187 ... 264	161 ... 264
• DC	V DC	9 ... 70	18 ... 36
Rated voltage U_n			
• AC	V AC	220 ... 240	
• DC	V DC	12/24/48	24
Frequency	Hz	45 ... 65	50 ... 60
Max. power consumption at U_n = 240 V AC	VA	9	18 ... 36
Max. power loss			
• At 240 V AC	W	6.3	4
• At 48 V DC	W	4.1	4
Max. power consumption			
• At 12 V DC	mA	300	--
• At 24 V DC	mA	180	120
• At 48 V DC	mA	90	--
Safety in the event of short interruptions	ms	50	--
Digital inputs			
Number of inputs		8, 6 of which are programmable	5
Type of input		Negative	--
Input current	mA	≤ 10	--
Input signal			
• Logic state "0"	V	≤ 1.5 (typical 2.9)	--
• Logic state "1"	V	≥ 5.3 (typical 4.3)	--
Input signal delay	ms	≥ 50	--
Relay outputs			
Number of outputs		7, of which 5 are programmable	7
Contact configuration			
• 2 relays		1 NO, 12 A, 250 V AC (AC1)	
• 3 relays		1 NO, 8 A, 250 V AC (AC1)	
• 2 relays		1 CO, 8 A, 250 V AC (AC1)	
• 1 relay		1 NO, 12 A, 250 V AC	
• 4 relays		1 NO, 8 A, 250 V AC	
• 2 relays		2 CO, 8 A, 250 V AC	
Reversing time of control device	s	1	0.5
Communication cables			
RS 232 serial interface • Programmable transmission rate • Connection through RJ6/6 connector	bit/s	1200 ... 38400	--
RS 485 serial interface • Optically insulated • With programmable transmission rate • Connection through plug-in terminals	bit/s	1200 … 38400	--
Real-time clock			
Energy storage		Stored-energy capacitors	--
Operating time without supply voltage	Days	Approx. 12 ... 15	--

		ATC5300	ATC3100
Insulation voltage			
Rated insulation voltage U_i	V	690	400
Ambient conditions			
Operating temperature	°C	-20 … +60	-25 … +70
Storage temperature	°C	-30 … +80	-40 … +80
Relative humidity	%	< 90	95
Max. pollution degree		3	
Overvoltage category		3	
Measuring category		CAT III	CAT IV
Connections			
Terminal type		Removable/pluggable	
Cable cross-section	mm^2	0.2 ... 2.5 (24 ... 12 AWG)	
Max. tightening torque	Nm	0.5 (4.5 lbf·in)	0.4
Enclosure			
Enclosure material		Thermoplastic LEXAN 3412R	Thermoplast Bayblend FR3010
Version		Door installation	Door installation, standard rail mounting, floor mounting
Degree of protection		IP41 front, IP20 rear	
Weight	g	950	1050
Certificates and conformity			
Tested ATS/ATSE standards:		IEC60947-6-1	
		GB14048.11	
		UL 508	--
		CSA 22.2 No. 14	--
ATS/ATSE standard fulfilled in combination with:		3WL, 3VL, 3VA	3WL, 3VL
EMC		Acc. to IEC 60947-6-1	

For more information, see manual at: www.siemens.com/lowvoltage/manuals.

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Overview

3KC ATC5300 transfer control devices

Communication with Modbus protocol

For communication, the 3KC ATC5300 supports the Modbus RTU and Modbus ASCII protocols through the RS 232 and RS 485 interfaces. The 3KC ATC5300 provides all available data of the transfer control system and the networks through these interfaces. Additionally, the ATC5300 can be controlled through these interfaces. These functions make it possible to integrate the ATC5300 into additional monitoring software (e.g. SCADA) or other intelligent devices that support Modbus (e.g. Siemens PLCs) and to control it.

Compatibility with 3VA

The 3KC ATC5300 fulfils the IEC 60947-6-1(ATS/ATSE) standard in combination with the 3VA molded case circuit breakers. You will find further information on the 3VA molded case circuit breakers in the manual: www.siemens.com/lowvoltage/manuals.

Parameterizing and monitoring using 3KC ATC5300 software or Siemens powerconfig

In addition to operation and parameterization on-site, you can also monitor and set the parameters of the controllers using the 3KC ATC5300 and Siemens powerconfig software. Both offer a high level of convenience and quick access to all device settings, e.g. complex settings that arise when connecting generators.

Benefits

The advantages of the 3KC ATC5300 transfer control devices at a glance:

- Two measuring inputs for single-phase and multi-phase power supply systems
- Costs of installing the transformer are dispensed with
- Has two voltage supply units to cover all standard AC/DC voltage supplies, alternative supply via main and standby system possible
- Two displays for monitoring the normal/standby system and displaying the phase and interlinked cable voltages
- Calendar clock
- 8 digital inputs, 6 of which are programmable and 7 relay outputs, 5 of which are programmable
- Data, parameter and logged events (e.g. power failure, faults) remain accessible and unaltered even after a power failure or restarting a device
- Logging and statistical processing of occurring events possible
- The illuminated LED display makes reading measured values and parameters easy, even in unfavorable lighting conditions
- The 3KC ATC5300 programming or powerconfig software saves considerable time when setting parameters and setting up the 3KC ATC5300 transfer control device
- Generator test run function for mandatory testing intervals

Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
			Screw connection					
	3KC ATC5300 transfer control devices Control panel instrument 144 x 144 x 94 mm with the following features: • Screw terminal connection • AC/DC power supply unit • 220 … 240 V AC, 45 ... 65 Hz • 9 ... 70 V DC • Rated setting range: 100 AC…690 V		3KC9000-8TL30		1	1 unit	1CL	1.005
	3KC ATC5300 software Software for setting parameters and remote control operations, incl. connection cable from control device to PC, cable length 1.8 m • CD incl. software and manuals • Minimum hardware and software requirements: - Pentium, 64 MB RAM - COM interface (serial RS 232) - CD drive - Windows 95/98/2000/XP/Vista		3KC9000-8TL70		1	1 unit	1CL	0.187

*** You can order this quantity or a multiple thereof.**

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3KC ATC3100 transfer control devices NEW

Overview

3KC ATC3100 transfer control devices

Convient handling

The 3KC ATC3100 transfer control device offers customers flexible and fast commissioning for implementing simple applications. The 3KC ATC3100 can be mounted in a control cabinet door, on a standard rail or on a rear panel without additional accessories. By default, the transfer control device is supplied with a lockable safety cover (IP41). The connecting cable is pre-assembled to assist fast cabling.
The 3KC ATC3100 can be configured without software. Thanks to the well-thought-out concept, automatic changeover applications can be implemented with ease.

3KC ATC3100 connecting cable for MCCB/ACB

To connect 3VL or 3WL molded case circuit breakers you need the pre-assembled connecting cable (3KC9000-8EL62).

With this cable, connection of the molded case circuit breakers is fast and easy.

Benefits

The advantages of the 3KC ATC3100 transfer control device at a glance:

- Costs of installing the transformer are dispensed with
- Integrated DPS (double power supply) powers the motorized operating mechanisms of the connected circuit breakers for reliable switching
- Good readability of the system status by means of 10 LEDs
- 3 mounting options without additional accessories: door installation, standard rail mounting and floor mounting
- Pre-assembled cable set for fast wiring to 3VL and 3WL molded case circuit breakers
- Terminal available for external 24 V DC power supply unit

Integration

Implementation of an automatic transfer system

The 3KC ATC3100 transfer control device is used to automatically and manually switch from a main power supply to a standby power supply and vice versa. In the event that system faults occur, the 3KC ATC3100 transfer control device controls the switching operations fully automatically. This ensures a very high level of operational continuity.

The 3KC ATC3100 transfer control device allows implementation of an automatic transfer control in conjunction with molded case circuit breakers, air circuit breakers, switch disconnectors or contactors.

The following devices are ideally matched to the 3KC ATC3100 transfer control systems:

- 3VL molded case circuit breakers
- 3WL air circuit breakers

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Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
			Screw connection					
	3KC ATC3100 transfer control devices [1] Control panel instrument 171 x 131 x 99 mm with the following features: • Screw terminal connection • Rated setting range: 280 – 460 V AC • Aux. 24 V DC voltage • English labeling (Chinese labeling on request)		3KC9000-8EL10		1	1 unit	1CL	1.100
	3KC ATC3100 connecting cables Necessary measurement and control cable for connection of 3KC ATC3100 to 3VL or 3WL • Cable 1.8 m long		3KC9000-8EL62		1	1 unit	1CL	0.450

[1] For the 3KC ATC3100 transfer control devices you additionally need the 3KC ATC3100 connecting cable (3KC9000-8EL62).

* You can order this quantity or a multiple thereof.

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Overview

Plant safety and operating safety are becoming increasingly important alongside the protection of personnel. Shutdowns due to the unexpected tripping of protective devices cause high costs. However, it is possible to detect residual currents in the electrical installation before the protective device responds.

Residual current devices (RCD)

Residual current monitors (RCM) monitor residual current in electrical installations and issue a signal when the residual current exceeds a set value.

RCMs are used primarily in plants where a fault should result in a signal, but not in disconnection. This enables plant operators to detect faults and eliminate their causes before the protective devices disconnect the installation, which increases plant and operating safety and cuts costs.

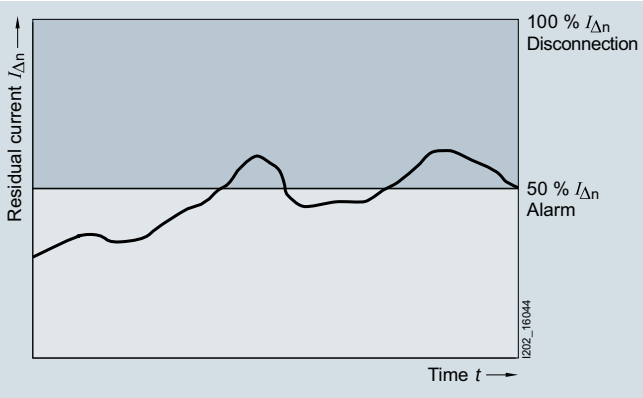
Modular residual current devices (MRCD)

Modular residual current devices (MRCD) monitor residual currents in electrical systems and trip the molded case circuit breaker via a shunt trip or an undervoltage release after an adjustable advance warning if the residual current exceeds a defined value. See accessories for molded case circuit breakers (MCCBs) in chapter "Molded-case circuit breakers".

This makes it possible for you to offer molded case circuit breakers (MCCBs) with personal and fire protection in compliance with EN 60947-2 (Annex M) (also as a retrofit).

Summation current transformer

The summation current transformer detects all conductors required to conduct the current, i.e. including the neutral conductor where applicable. In a fault-free system, the magnetizing effects of the conductors through which current is flowing cancel each other out for the summation current transformer, i.e. the sum of all currents is zero. If a residual current is flowing due to an insulation fault, a residual magnetic field is left in the core of the transformer and produces a voltage. This voltage is evaluated using the electronics of the RCM/MRCD. The switched contact can be used to operate an acoustic/optical signaling device, a higher-level control system or a circuit breaker for example.



Time characteristic of the rated residual current $I_{\Delta n}$

Benefits

- Higher plant availability and operating safety through permanent monitoring of residual currents
- Adjustable limit values for residual current and response time enable timely detection and signaling – plant shutdowns are often avoidable
- Devices for every application:
  The summation current transformers are available in various sizes, the RCMs can be used optionally for signaling and/or switching
- Additional fire protection can be implemented using the monitoring system

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Technical specifications

		5SV8000-6KK	5SV8001-6KK	5SV8200-6KK	5SV8101-6KK
Standards		EN 62020, IEC 62020			EN 60947-2 (Annex M), IEC 60947-2 (Annex M)
Approvals		--	UL		--
Rated operational voltage U_e	V AC	230			230 From a 1-phase auxiliary voltage source (also externally)
• Frequency	Hz	50/60			
Rated residual current $I_{\Delta n}$					
• Type A	A	0.03 ... 3	0.03 ... 3	0.03 ... 3	0.03 ... 3 (default setting: 30 mA)
• Type AC	A	>3	5 ... 30	5 ... 30	--
Response time Δt	s	0.02 ... 5	0.02 ... 10, INS, SEL[1]	0.02 ... 10, INS, SEL[1]	$I_{\Delta n}$ = 30 mA: INS instantaneous $I_{\Delta n}$ > 30 mA: INS - SEL - 0.06 ... 10[1] (default INS)
Relay contacts		1 × alarm	1 × pre-alarm, 1 × alarm	1 × pre-alarm, 4 × alarm	1 × alarm, 1 × tripping operation
• Rated voltage	V AC	230	230	230	230
• Rated current	A	6	6	6	6
Summation current transformer	mm ∅	20 ... 210			35 ... 210
Maximum cable length RCM/CT (shielded cable)	m	10			
Conductor cross-section	mm^2	1.5			0.125 ... 2.08
Test/Reset		Yes/Yes			
External tripping operation/ external reset		--/Yes	Yes/Yes	Yes/Yes	Yes/Yes
Mounting width	MW	2	3	3	3
Degree of protection					
• Contacts		IP20			
• Front		IP41			
Operating temperature	°C	-10 ... +50			

[1] INS: Instantaneous, SEL: Selective.

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Selection and ordering data

	Rated operational voltage	Rated residual current	Response time	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	U_e	$I_{\Delta n}$	Δt								
	V AC	A	s	MW							kg
Residual current monitors											
	RCM analog										
	230, 50/60 Hz	0.03 ... 5 (Type A) > 3 (Type AC)	0.02 ... 5	2		**5SV8000-6KK**		1	1 unit	1BE	0.196
	RCM digital										
	230, 50/60 Hz	0.03 ... 3 (Type A) 5 ... 30 (Type AC)	0.02 ... 10, INS, SEL[1]	3		**5SV8001-6KK**		1	1 unit	1BE	0.269
	RCM digital, 4 channels										
	230, 50/60 Hz	0.03 ... 3 (Type A) 5 ... 30 (Type AC)	0.02 ... 10, INS, SEL[1]	3		**5SV8200-6KK**		1	1 unit	1BE	0.294
Modular residual current devices											
	MRCD										
	230, 50/60 Hz	0.03 ... 3 (Type A)	0.02 ... 10 INS, SEL[1]	3		**5SV8101-6KK**		1	1 unit	1BE	0.253

[1] INS: Instantaneous, SEL: Selective.

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5SV8 residual current monitors

		Internal diameter	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm							kg
Summation current transformers									
	Summation current transformers								
	Including holder for standard mounting rail[1] UL	20		5SV8700-0KK		1	1 unit	1BE	0.072
		30		5SV8701-0KK		1	1 unit	1BE	0.088
	Including holder for wall mounting[2] UL	35		5SV8702-0KK		1	1 unit	1BE	0.163
		70		5SV8703-0KK		1	1 unit	1BE	0.285
		105		5SV8704-0KK		1	1 unit	1BE	0.474
	Including holder for wall mounting UL	140		5SV8705-0KK		1	1 unit	1BE	1.065
		210		5SV8706-0KK		1	1 unit	1BE	1.800
	Holders for standard mounting rail [3] Suitable for summation current transformer with internal diameter of 20 mm, 30 mm, 35 mm, 70 mm			5SV8900-1KK		1	2 units	1BE	0.005
Accessories for summation current transformers									
	Magnetic field centering sleeves								
	35 mm			5SV8902-1KK		1	1 unit	1BE	0.306
	70 mm			5SV8903-1KK		1	1 unit	1BE	0.810
	105 mm			5SV8904-1KK		1	1 unit	1BE	1.670
	140 mm			5SV8905-1KK		1	1 unit	1BE	2.430
	210 mm			5SV8906-1KK		1	1 unit	1BE	3.340

1) Not for MRCD.

2) Mounting on standard mounting rail with optional holder for standard mounting rail also possible.

3) Cannot be used together with magnetic field centering sleeves.

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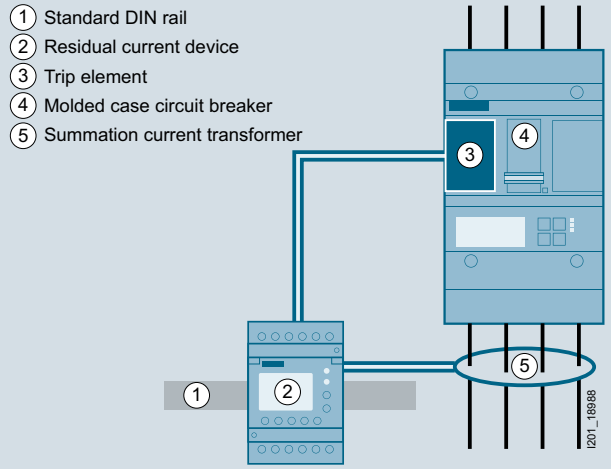
Combination possibilities for residual current protection device



5SV8101-6KK (tested combinations)				
2	5SV8101-6KK			
1	EN 60715 - TH35 - 7.5 35 - 15			
5	5SV8702-0KK 5SV8703-0KK 5SV8704-0KK 5SV8705-0KK 5SV8706-0KK	35 mm 70 mm 105 mm 140 mm 210 mm		5SV8902-1KK 5SV8903-1KK 5SV8904-1KK 5SV8905-1KK 5SV8906-1KK
4			3	3
3VL17...			3VL9400-1ST00	3VL9400-1UP00
3VL27...			3VL9400-1ST00	3VL9400-1UP00
3VL37...			3VL9400-1ST00	3VL9400-1UP00
3VL47...			3VL9400-1ST00	3VL9400-1UP00
3VA20... 3VA21... 3VA22...			3VA9988-0BL30 3VA9988-0BL32 3VA9988-0BL33	3VA9908-0BB11 3VA9908-0BB20 3VA9908-0BB24 3VA9908-0BB25
3VA10... 3VA11...			3VA9988-0BL30 3VA9988-0BL32 3VA9988-0BL33	3VA9908-0BB11 3VA9908-0BB20 3VA9908-0BB24 3VA9908-0BB25

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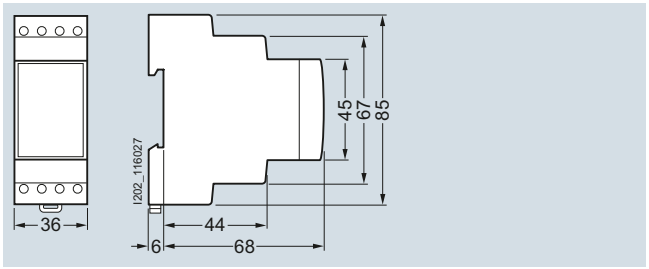
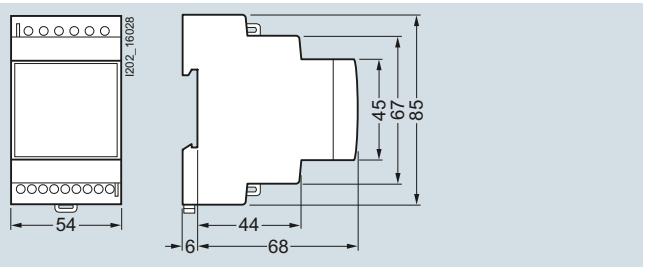
Dimensional drawings

Residual current monitors

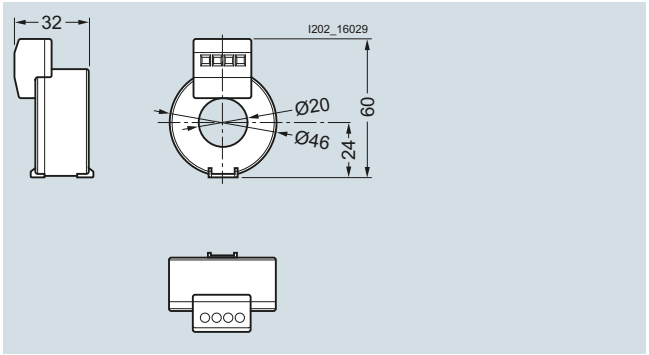


RCM analog, 5SV8000-6KK

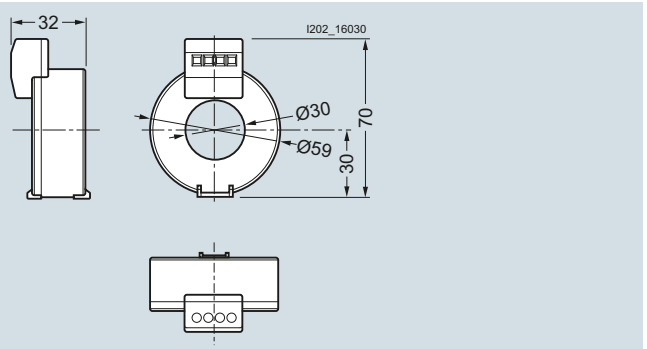


RCM digital, 5SV8001-6KK, 5SV8200-6KK, MRCD, 5SV8101-6KK

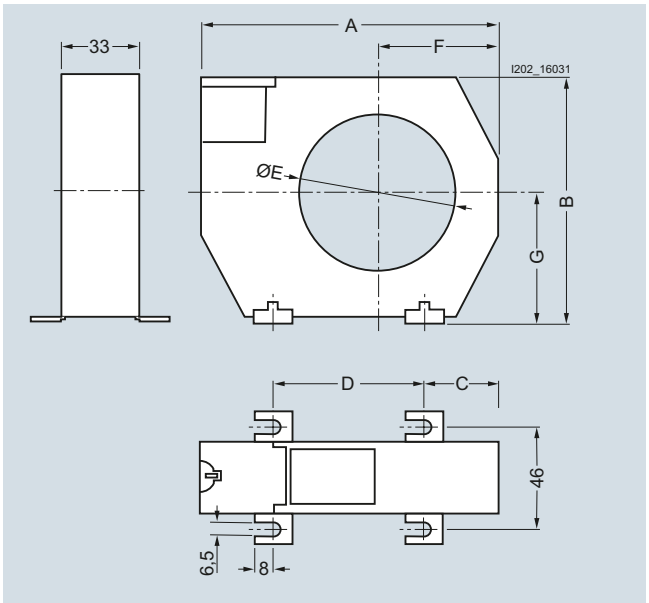
Summation current transformers



Summation current transformers, 5SV8700-0KK



Summation current transformers, 5SV8701-0KK



Summation current transformers, 5SV8702-0KK, 5SV8703-0KK, 5SV8704-0KK, 5SV8705-0KK, 5SV8706-0KK

Type	Dimensions	A	B	C	D	E	F	G
5SV8702-0KK		100	79	26	49	35	35	43
5SV8703-0KK		130	110	32	66	70	52	57
5SV8704-0KK		170	146	38	94	105	72	73
5SV8705-0KK		230	196	49	123	140	97	98
5SV8706-0KK		299	284	69	161	210	141	142

Type	Rated current	Maximum current[1)]
5SV8700-0KK	≤ 40 A	240 A
5SV8701-0KK	≤ 63 A	380 A
5SV8702-0KK	≤ 80 A	480 A
5SV8703-0KK	≤ 200 A	1200 A
5SV8704-0KK	≤ 250 A	1500 A
5SV8705-0KK	≤ 500 A	3000 A
5SV8706-0KK	≤ 600 A	3600 A

[1)] Short-time starting current, up to 2 s

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Overview

Voltage relays are used for device and plant protection, supplying safety light devices and the detection of N-conductor breaks and short-time voltage interruptions.

They are available as undervoltage, overvoltage and under/overvoltage relays. The devices are equipped with different functions, depending on their intended use, and comply with the pertinent regulations.

Benefits

- Complete voltage protection in a compact design for overvoltage and undervoltage monitoring in a single device
- Plants and devices are reliably and easily protected by phase-failure relays
- Overvoltages and consequential damage due to high voltages are prevented through N-conductor monitoring
- Asymmetry monitoring in the voltage relay also protects three-phase AC motors against operation with voltage skew

Technical specifications

			5TT3400 5TT3401 5TT3402 5TT3403	**5TT3404 5TT3405**	**5TT3406**	**5TT3195**
Standards			IEC 60255; DIN VDE 0435-110, -303			
Rated control voltage U_c		V AC	230/400			400
Operating range (overload capability)		$\times U_c$	1.1			1.35
Rated frequency		Hz	50/60			
Response values	ON-switching OFF-switching	$\times U_c$	0.9/0.95 0.7/0.85		4 % hysteresis 0.7 ... 0.95	0.9 ... 1.3
Minimum contact load		V; mA	10; 100			
Phase asymmetry	Setting accuracy Repeat accuracy	% %	-- --	Approx. 5 ... 10 1		Approx. 5 ... 10 1
Phase failure detection	At L1 or L2 or L3	ms	100			--
N-conductor monitoring			--	Yes		--
Rated insulation voltage U_i	Between coil/contact	kV	4			
Contacts	μ contact (AC-11)	A	4			
Electrical isolation	Creepage distances and clearances Actuator/contact	 mm	 3	 5.5		
Rated impulse withstand voltage U_{imp}	Actuator/contact	kV	> 2.5	> 4		
Terminals	± screw (Pozidriv)		1			
Conductor cross-sections • Rigid, max. • Flexible, with end sleeve, min.		 mm^2 mm^2	 2 × 2.5 0.5			
Permissible ambient temperature		°C	-20 ... +60			
Resistance to climate	Acc. to EN 60068-1		20/60/4			

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5TT3 voltage relays

			5TT3407	5TT3408	5TT3410
Standards			IEC 60255; DIN VDE 0435-303		
Rated control voltage U_c		V AC	230/400		
Operating range (overload capability)		$\times U_c$	1.1	1.35	1.2
Rated frequency		Hz	50/60		
Back-up fuse	Terminals L1/L2/L3	A	2		
Response values	Overvoltage:				
	OFF-switching	$\times U_c$	--	0.9 ... 1.3	--
	ON-switching		--	4 % hysteresis	--
	Undervoltage:				
	OFF-switching	$\times U_c$	0.8	0.7 ... 1.1	--
	ON-switching		0.85	4 % hysteresis	--
Minimum contact load		V; mA	10; 100		
Phase asymmetry	Setting accuracy	%	Approx. 5 ... 10		
	Repeat accuracy	%	1		
Phase failure detection	At L1, L2 or L3	ms	≥ 20	100	--
OFF delay		s	--	0.1 ... 20	0.1 ... 20
Automatic reclosing delay		s	0.2 ... 2	--	--
Rated insulation voltage U_i	Between coil/contact	kV	4		
Contacts	μ contact (AC-11)	A	3	1	4
Electrical isolation	Creepage distances and clearances				
	Contact/contact	mm	--	4	--
	Actuator/contact	mm	4		5.5
Rated impulse withstand voltage U_{imp}	Actuator/contact	kV	> 4		
Rated operational power P_s	AC operation:				
	230 V and p.f. = 1	VA	2000	--	--
	230 V and p.f. = 0.4	VA	1250	--	--
	DC operation:				
	U_e = 24 V and I_e = 6 A	W	max. 100	--	--
	U_e = 60 V and I_e = 1 A	W	max. 100	--	--
	U_e = 110 V and I_e = 0.6 A	W	max. 100	--	--
	U_e = 220 V and I_e = 0.5 A	W	max. 100	--	--
Terminals	± screw (Pozidriv)		1		
Conductor cross-sections					
• Rigid, max.		mm^2	2 × 2.5		
• Flexible, with end sleeve, min.		mm^2	0.5		
Permissible ambient temperature		°C	-20 ... +60		
Humidity class	Acc. to IEC 60068-2-30		F		

			5TT3411	5TT3414	5TT3415
Rated control voltage U_c		V AC	230	230/400	
Overload capability		$\times U_c$	1.15		
Rated frequency		Hz	50/60		
Response values	ON-switching		2 % hysteresis	5 %	
	OFF-switching	$\times U_c$	0.9	0.85	
Minimum contact load		V/mA	10/100		
Phase failure detection	At L1, L2 or L3	ms	--	500	
N-conductor monitoring			--		
Rated insulation voltage U_i	Between coil/contact	kV	4	--	
Contacts	AC-15 NO contacts		3	--	
	AC-15 NC contacts		2	--	
	AC-15 CO contacts		--	1	2
Electrical service life in switching cycles	AC-15, 1 A, 230 V AC		5×10^5	1×10^5	
Rated impulse withstand voltage	Acc. to IEC 60664-1	kV	4	6	
Pollution degree			2		
Terminals	± Screw (Pozidriv)		2	--	
	– Screw (slot)		--	3.5	
Conductor cross-sections					
• Rigid		mm^2	2 × 2.5	1 x 4	
• Flexible, with end sleeve		mm^2	2 × 1.5	1 x 2.5	
Permissible ambient temperature		°C	-20 … +60	-25 … +60	
Resistance to climate	Acc. to EN 60068-1		20/060/04		

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Selection and ordering data

	Contacts	U_e	I_e	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A	V	MW							kg
	Overvoltage relays											
5TT3194	For the monitoring of 3 phases against N, with N-conductor monitoring, switching thresholds: 0.9 ... 1.3 × U_c, 4 % hysteresis, adjustable											
	2 CO	230	4	230/400 AC	2		**5TT3195**		1	1 unit	1BK	0.127
	Undervoltage relays											
5TT3400	For the monitoring of 1, 2 or 3 phases against N, with phase failure detection											
	• Switching thresholds: 0.7 and 0.9 x U_c, not adjustable											
	1 CO	230	4	230/400 AC	1	▶	**5TT3400**		1	1 unit	1BK	0.077
	2 CO	230	4	230/400 AC	2	▶	**5TT3402**		1	1 unit	1BK	0.124
	• Switching thresholds: 0.9 ... 0.95 × U_c											
	2 CO	230	4	230/400 AC	2		**5TT3403**		1	1 unit	1BK	0.124
5TT3402	For the monitoring of 1, 2 or 3 phases against N, with phase failure detection, switching thresholds: 0.85 and 0.95 x U_c, not adjustable											
	1 CO	230	4	230/400 AC	1	▶	**5TT3401**		1	1 unit	1BK	0.078
	For the monitoring of 3 phases against N, with asymmetry, reverse voltage and phase failure detection, with N-conductor monitoring											
	• Switching thresholds: 0.7 and 0.9 x U_c, not adjustable											
	2 CO	230	4	230/400 AC	2		**5TT3404**		1	1 unit	1BK	0.124
	• Switching thresholds: 0.7 ... 0.95 × U_c, 5 % hysteresis, adjustable											
	2 CO	230	4	230/400 AC	2		**5TT3406**		1	1 unit	1BK	0.128
5TT4404	For the monitoring of 3 phases against N, with asymmetry, reverse voltage and phase failure detection, with N-conductor monitoring, switching thresholds: 0.85 and 0.95 x U_c, not adjustable											
	2 CO	230	4	230/400 AC	2		**5TT3405**		1	1 unit	1BK	0.128
	For the monitoring of 1, 2 or 3 phases against N, switching thresholds: 0.85 x U_c, not adjustable response delay 0.5 s off-delay 60 s											
	1 CO	230	4	230/400 AC	1		**5TT3414**		1	1 unit	1BK	0.074
	• With TEST pushbutton											
5TT3415	2 CO	230	4	230/400 AC	1		**5TT3415**		1	1 unit	1BK	0.080

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* You can order this quantity or a multiple thereof.

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5TT3 voltage relays

	Contacts	U_e	I_e	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A	V AC	MW							kg
5TT3407	**Short-time relays** For the monitoring of short-time failure detection ≥ 20 ms of 1, 2 or 3 phases against N, with phase failure detection and N-conductor monitoring, switching thresholds: 0.8 ... 0.85 × U_c, not adjustable											
	2 CO	230	4	230/400	2		**5TT3407**		1	1 unit	1BK	0.131
5TT3408	**Undervoltage and overvoltage relays** For the monitoring of 3 phases against N, with asymmetry, reverse voltage and phase failure detection, with N-conductor monitoring and adjustable time delay of 0.1 ... 20 s, switching thresholds: Undervoltage: 0.7 ... 1.1 × U_c, 4 % hysteresis, adjustable overvoltage: 0.9 ... 1.3 × U_c, 4 % hysteresis, adjustable											
	2 CO	230	4	230/400	2		**5TT3408**		1	1 unit	1BK	0.132
5TT3410	**N-conductor monitors** With asymmetry detection and N-conductor monitoring											
	2 CO	230	4	230/400	2		**5TT3410**		1	1 unit	1BK	0.122
5TT3411	**Voltage relays for undervoltage monitoring of medical premises** Single-phase against N with test button, switching thresholds: 0.9 × U_n, 2 % hysteresis											
	2 NO, 2 NC	230	4	230	4		**5TT3411**		1	1 unit	1BK	0.226
	Single, two or three-phase against N, with asymmetry, reverse voltage and phase failure detection, with N-conductor monitoring, and one test button each for the phases, switching thresholds: 0.9 × U_n, 4 % hysteresis											
	1 CO, 1 NO, 1 NC	230	4	230/400	4		**5TT3412**		1	1 unit	1BK	0.231

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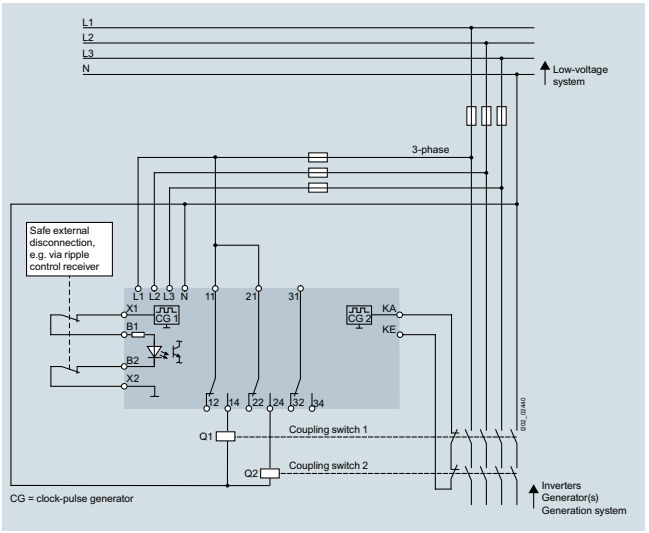
Overview

The voltage and frequency relay monitors the status of the grid in the case of in-plant generation systems. Violation of an upper or lower limit results in shutdown and disconnection of the generation system from the grid. Connection or automatic re-connection of the generation system to the grid only takes place when the grid frequency and the grid voltage have remained within their respective tolerance ranges without interruption for the duration of an adjustable time delay t_W. Following shutdown due to a brief interruption, re-connection takes place when the grid frequency and grid voltage have remained within the tolerance range for 5 s without interruption.

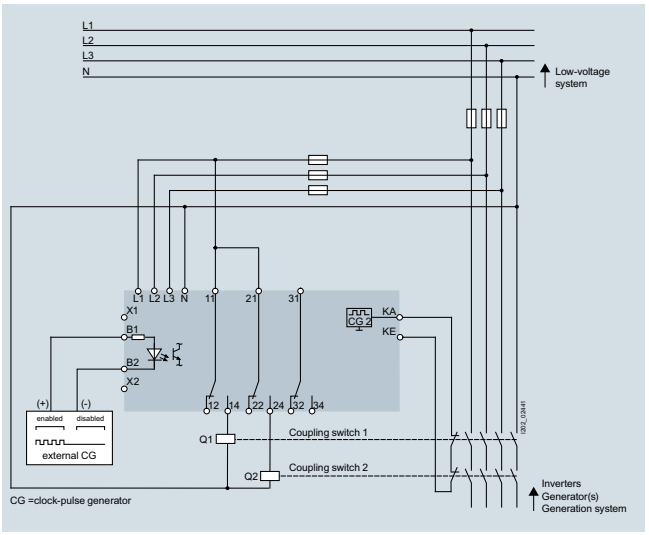
Benefits

- Clearance certification of the German Employer's Liability Association (Energy, Textile, Electrical and Media Products)
- Default settings in accordance with VDE-AR-N-4105
- The voltage and frequency relay meets the high requirements of VDE AR-N 4105
- It can be used both for centralized and integrated grid and plant protection
- The latching rotary switches enable fast and easy setting of the required values
- An illuminated LCD display provides plant status information
- The voltage and frequency relay ensures single-fault tolerance as stipulated in the VDE-AR-N 4105 application guide
- Passive procedure for detecting islanding

Application



Enable via external contact



Enable using external voltage 24 V AC, 40 ... 400 Hz

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Technical specifications

			Voltage and frequency relays	
			5TT3426	5TT3427
Standards			IEC/EN 60255-1; IEC/EN 61000; VDE-AR-N-4105	
Power supply U_v		V AC	3 x 85 ... 288	
Supply voltage B1/B2		V AC	24 (at 40 ... 400 Hz)	
Rated control voltage U_c		V AC	230/400	
Rated impulse withstand voltage	Acc. to IEC 60664-1			
• Contact 31, 32, 34		kV	6	
• KA, KE and measuring circuit		kV	4	
• Pollution degree			2	
Recommended fuse Measurement inputs	gG/gL	A	6	
Temperature range		°C	-20 ... +60 (in the range 0 °C ... -20 °C, there may be restrictions to the functionality of the LCD display)	
Conductor cross-sections				
• Rigid, flexible		mm^2	0.5 ... 4	
• Flexible with end sleeve		mm^2	0.5 ... 2.5	
• Multi-conductor connection 2 conductors of same cross-section		mm^2	0.5 ... 1.5	
Output relay				
Mode of operation			Quiescent current	
Contacts				
• NO contacts	AC15	A AC/V AC	3/230	
• NC contacts	AC15	A AC/V AC	1/230	
Thermal current		A AC	5	
Electrical service life				
• NO contacts	AC15, 1A, AC230	Switching cycles	300000	
Rise in frequency		Hz	50.2 ... 51.2	
Drop in frequency		Hz	47.0 ... 49.8	
Rise in voltage				
• Phase/neutral		V AC	253 ... 288	
• Phase/phase		V AC	--	438 ... 498
Drop in voltage				
• Phase/neutral		V AC	184	
• Phase/phase		V AC	--	319
Mean rise in voltage over 10 minutes				
• Phase/neutral		V AC	253 ... 267	
• Phase/phase		V AC	--	438 ... 462
Re-connection time t_w		s	0 ... 600	
Disconnection response time		ms	< 100	
Connection condition				
• Frequency		%	5	
• Voltage		Hz	47.5 ... 50.05	
Accuracy				
• Frequency		% (± 1 digit)	≤ ±1	
• Voltage		% (± 1 digit)	≤ ±0.02	
Dimensions		W x H x D	70 x 90 x 71 mm	

Selection and ordering data

	Contacts	U_e	I_e	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V	A	V AC	MW							kg
	Voltage and frequency relays											
	For monitoring of grid infeeds ≤ 30 kVA											
	3 CO	230	5	230/400	4		5TT3426		1	1 unit	1BK	0.215
	For monitoring of grid infeeds > 30 kVA											
	3 CO	230	5	230/400	4		5TT3427		1	1 unit	1BK	0.257

* You can order this quantity or a multiple thereof.

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Overview

Current relays monitor single and three-phase systems for the flow of current, e.g. in emergency lighting installations, and the loading of motors. They are available as undercurrent, overcurrent and under/overcurrent relays.

Benefits

- Devices with an extremely broad range of applications of minimum 0.1 A to maximum 15 A without transformer
- Permanent overload capability up to 20 A or 30 A max. for up to 3 seconds, protect the function against uncontrolled plant states and increase plant availability
- Range changing enables the precise setting of current values through a high resolution
- Ultra compact current relays require only the smallest of space and save costs

Technical specifications

			5TT6111	5TT6112
Standards			IEC 60255; DIN VDE 0435-303	
Rated control current I_c		A	1 ... 10	
Rated control voltage U_c		V AC	230	
Primary operating range **Overload capability, continuous** **Overload capability, short-time**	 at 50 °C ambient temperature max. 3 s	$\times U_c$ A A	0.9 ... 1.1 15 20	
Rated frequency		Hz	50/60	
Response values	ON-switching OFF-switching		Infinitely variable Permanent, 4 % hysteresis	
Switching delay t_v	Infinitely adjustable	s	0.1 ... 20	
Response time	Non-adjustable	ms	Current corresponds to the rated operational power of the continuous-flow heater	
Minimum contact load		V; mA	10; 100	
Rated insulation voltage U_i	Between coil/contact	kV	2.5	
Contacts μ contact (AC-15)	 NO contacts NC contacts	 A A	 3 1	
Electrical isolation	Creepage distances and Actuator/contact	mm	3	
Rated impulse withstand voltage U_{imp}	Actuator/contact	kV	> 4	
Terminals	± screw (Pozidriv)		1	
Conductor cross-sections	Rigid Flexible, with end sleeve	max. mm^2 min. mm^2	2 × 2.5 1 × 0.5	
Permissible ambient temperature		°C	-20 ... +60	
Resistance to climate	Acc. to EN 60068-1		20/60/4	

			5TT6113	5TT6114	5TT6115
Standards			IEC 60255; DIN VDE 0435-303		
Rated control current I_c			4 ranges		
		A	0.1 ... 1		
		A	0.5 ... 5		
		A	1 ... 10		
		A	1.5 ... 15		
Rated control voltage U_c		V AC	230		
Primary operating range **Overload capability, continuous** **Overload capability independent of measuring range**	 max. 3 s	$\times U_c$ A A	0.9 ... 1.1 20 30		
Rated frequency		Hz	50/60		
Response values	ON-switching OFF-switching		Infinitely variable Permanent, 4 % hysteresis		
Switching delay t_v	Infinitely adjustable	s	0.1 ... 20		
Response time	Non-adjustable	ms	See: www.siemens.com/lowvoltage/manuals		
Minimum contact load		V; mA	10; 100		
Rated insulation voltage U_i	Between coil/contact	kV	2.5		
Contacts μ contact (AC-15)	 NO contacts NC contacts	 A A	 5 1		
Electrical isolation	Creepage distances and Actuator/contact	mm	3		
Rated impulse withstand voltage U_{imp}	Actuator/contact	kV	> 4		
Terminals	± screw (Pozidriv)		1		
Conductor cross-sections	Rigid Flexible, with end sleeve	max. mm^2 min. mm^2	2 × 2.5 1 × 0.5		
Permissible ambient temperature		°C	-20 ... +60		
Resistance to climate	Acc. to EN 60068-1		20/60/4		

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Selection and ordering data

	Contacts	U_e	I_e	Measuring range	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A	A AC	MW							kg
	Current relays for single-phase loads up to 230 V AC, auxiliary voltage and measuring circuit, not isolated											
	Undervoltage monitoring, single-phase											
	1 CO	230	5	1 ... 10	1		**5TT6111**		1	1 unit	1BK	0.082
	Overcurrent monitoring, single-phase											
	1 CO	230	5	1 ... 10	1		**5TT6112**		1	1 unit	1BK	0.081
	Current relays for single-phase loads up to 230 V AC, auxiliary voltage and measuring circuit electrically isolated											
	Undervoltage monitoring, single-phase											
	2 CO	230	5	4 ranges 0.1 ... 1 0.5 ... 5 1 ... 10 1.5 ... 15	2		**5TT6113**		1	1 unit	1BK	0.144
	Overcurrent monitoring, single-phase											
	2 CO	230	5	4 ranges 0.1 ... 1 0.5 ... 5 1 ... 10 1.5 ... 15	2		**5TT6114**		1	1 unit	1BK	0.149
	Over/undervoltage monitoring, single-phase											
	2 CO	230	5	4 ranges 0.1 ... 1 0.5 ... 5 1 ... 10 1.5 ... 15	2		**5TT6115**		1	1 unit	1BK	0.151

* You can order this quantity or a multiple thereof.

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Overview

The 5TT3424 and 5TT3425 reverse power relays monitor the direction of the energy transport in an electric grid. This may be necessary where public grids and industrial grids intersect, e.g. when using emergency generators, motor-driven generators, etc.

Benefits

If, for example, the motor fails (due to lack of fuel or a defect in the injection system, for example) while operating emergency power equipment in parallel with another power generator, the function mode of the generator changes seamlessly to "motor-driven". The equipment draws active/reactive/apparent power from the system and the generator drives the diesel that could be damaged by this. The emergency power equipment must then be switched off immediately.

Function

The response value of the reverse power can be set from 2 % to 20 % with the potentiometer PR. Whether for devices with or without neutral connection, the reverse power per phase is calculated as follows:
U_{star} x I_u x cos φ x response value (%). With a response value of 20 % and cos φ = 1, this equals 230 V x 5 A x 0.2 = 230 W. If the current exceeds the rated current of the device, an external current transformer with a minimum rating of 2.5 VA can be connected upstream. The direction of current flow must be noted here.

Technical specifications

			Reverse power relays	
			5TT3424	**5TT3425**
Standards			IEC 60255; DIN VDE 0435-303	
Rated voltage U_n		V AC	230, 3-phase systems without N	400, 1- or 3-phase systems with N
Rated current I_n		A	5	
Response value	Reverse power	%	2 ... 20	
Hysteresis		%	12.5 of the set reponse value	
Rated frequency		Hz	45 ... 65	
Response delay t_{an}		s	0.2 ... 10, adjustable	
Contact arrangement			2 CO	
Output				
Contact arrangement			2 CO	
Breaking capacity	IEC 60947-5-1			
• NO contacts • NC contacts • Acc. to DC 13	AC15 AC15	A AC/V AC A AC/V AC A DC/V DC	3/230 1/230 1/24	
Thermal current		A	2 x 5	
Electrical service life	IEC 60947-5-1			
• NO contacts	15 AC, 3A, 230 AC	Switching cycles	2 x 10^5	
Reliable switching frequency		Switching cycles/h	1800	
Short-circuit strength max. melting fuse	IEC 60947-5-1		4 A gL	
Mechanical service life		Switching cycles	30 x 10^6	
General data				
Permissible ambient/storage temperature		°C	-20 ... +60	
Clearance and creepage distances				
• Rated impulse withstand voltage		kV	4	
• Pollution degree	IEC 60664-1		II	
Degree of protection				
• Enclosure			IP40	
• Terminals			IP20	
Wire connections				
• Fixed screw terminal (S)			0.2 ... 4 mm^2 solid or 0.2 ... 1.5 mm^2 strand with sleeve	
Dimensions		W x H x D	70 x 90 x 71 mm	

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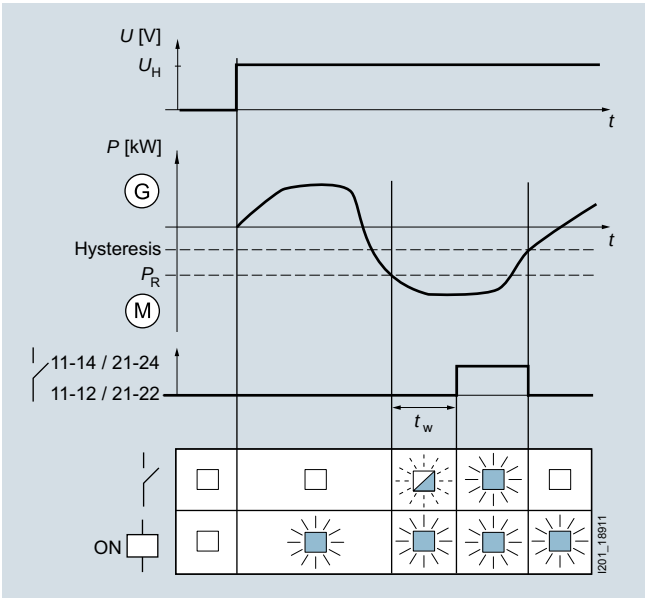
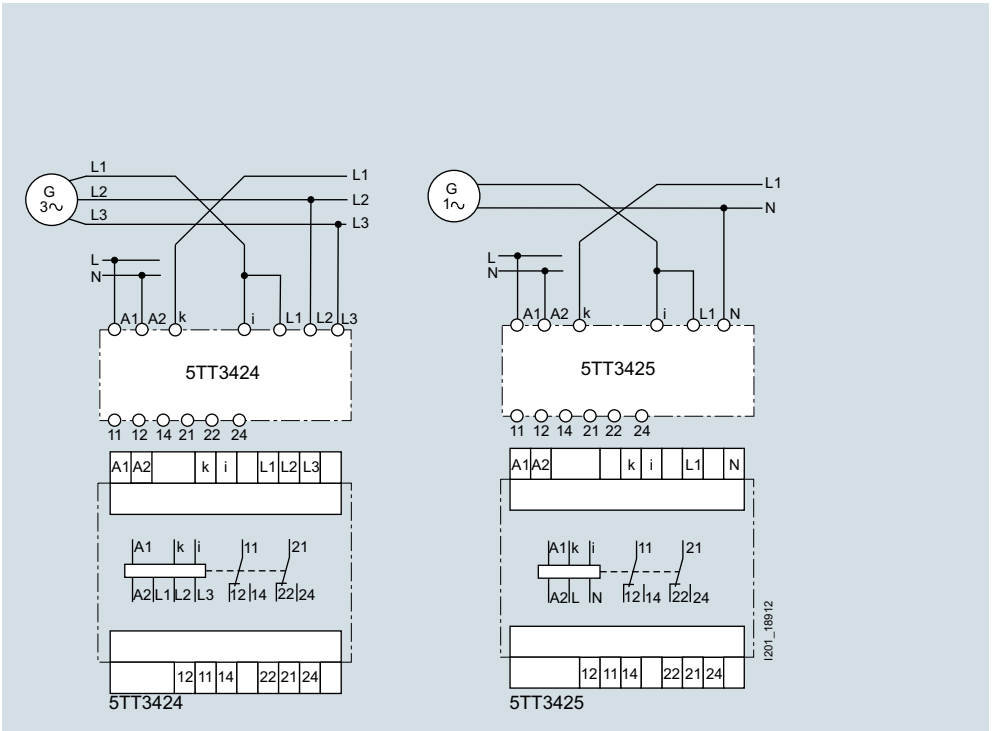
5TT3 reverse power relays

Selection and ordering data

	Rated voltage U_n	Rated current I_n	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V AC	A							kg
	Reverse power relays								
	230, 3-phase systems without N	5		5TT3424		1	1 unit	1BK	0.297
	400, 1- or 3-phase systems with N	5		5TT3425		1	1 unit	1BK	0.284

Application





* You can order this quantity or a multiple thereof.

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Overview

Fuse monitors serve to monitor all types and versions of melting fuses that cannot be equipped with a fault signal contact. This enables integration in fault signaling circuits or a central alarm in order to improve plant availability.

Benefits

- Increase in plant availability, because fuse failures – which could cause considerable damage to the plant – are detected in plenty of time
- A fuse failure is detected even if the load is switched off. This ensures the highest level of plant availability

Technical specifications

			5TT3170
Standards			IEC 60255; DIN VDE 0435-110
Rated control voltage U_c		V	380 ... 415 3 AC
Primary operating range		× U_c	0.8 ... 1.1
Rated frequency		Hz	50 ... 400
Internal resistance of measuring paths		Ω/V	> 1000
Max. permissible rear feed		%	90
Response/release time		ms	< 50
Rated impulse withstand voltage U_{imp} Input/output		kV	> 4
Rated operational voltage U_e		V AC	250
Rated operational current I_e	AC-1	A	4
Electrical service life	AC-11	In switching cycles at 1 A	1.5×10^5
Terminals	± screw (Pozidriv)		1
Conductor cross-sections	Rigid, max. Flexible, with end sleeve, min.	mm^2 mm^2	2 × 2.5 1 × 0.5
Permissible ambient temperature		°C	-20 ... +45
Resistance to climate	Acc. to EN 60068-1		20/45/4

Selection and ordering data

	U_e	I_e	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V AC	A	3 V AC	MW							kg
	Fuse monitors For all low-voltage fuse systems. Can be used in asymmetric systems afflicted with harmonics and regenerative feedback motors. Signal also for disconnected loads.										
	230	4	380 ... 415	2	►	**5TT3170**		1	1 unit	1BK	0.149

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* You can order this quantity or a multiple thereof.

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5TT3 phase and phase sequence monitors

Overview

Phase monitors monitor the voltages in three-phase system and signal the power failure of one or more phases over a floating contact. Phase sequence monitors monitor the phase sequence in three-phase systems and signal any changes in the phase sequence – change of rotating field – over a floating changeover contact.

Benefits

- The three-phase LED display in the phase monitor and the LED display in the phase sequence monitors provide constant information on the switching state of the plant
- The compact design in 1 MW saves space

Technical specifications

			5TT3421	5TT3423
Standards			IEC 60255; DIN VDE 0435	
Rated control voltage U_c		V AC	230/400	400
Primary operating range		$\times U_c$	0.8 ... 1.1	
Rated frequency		Hz	50/60	
Rated power dissipation P_v	Electronics Contacts	VA VA	9 0.2	
Rated operational voltage U_e		V AC	250	
Rated operational current I_e		A	4	
Minimum contact load		V; mA	10; 100	
Rated insulation voltage U_i	Between coil/contact	kV	4	
Contacts	μ contact (AC-11)	A	3	
Electrical isolation	Creepage distances and clearances Actuator/contact	 mm	 4	
Rated impulse withstand voltage U_{imp}	Actuator/contact	kV	> 2.5	
Terminals	± screw (Pozidriv)		1	
Conductor cross-sections	Rigid, max. Flexible, with end sleeve, min.	mm^2 mm^2	2 × 2.5 --	
Degree of protection	Acc. to EN 60529		IP20, with connected conductors	
Safety class	Acc. to EN 61140/VDE 0140-1		II	
Permissible ambient temperature		°C	-20 ... +60	
Resistance to climate	Acc. to EN 60068-1		20/60/4	

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Selection and ordering data

	Contacts	U_e	I_e	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A	V AC	MW							kg
	Phase monitors With 3 green LEDs for 3 phases											
	1 CO	250	4	230/400	1	▶	**5TT3421**		1	1 unit	1BK	0.079
	Phase sequence monitors With one green LED, which lights up for right-rotating field											
	1 CO	250	4	400	1	▶	**5TT3423**		1	1 unit	1BK	0.079

* You can order this quantity or a multiple thereof.

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Overview

Insulation monitors are used for protection of persons and against fire in non-grounded systems (IT systems). The insulation resistance of the system being monitored is measured against ground.

These types of measurements are specified according to DIN VDE 0100-410 – Power installations up to 1,000 V – Protection against electric shock.

Technical specifications

			5TT3470	5TT3471
Power supply U_c		V AC V DC	220 ... 240 --	-- --
Primary operating range	With AC supply For DC supply	$\times U_c$ V DC	0.8 ... 1.1 --	-- --
Frequency range for U_c		Hz	45 ... 400	--
Rated power dissipation P_v	 For DC supply	VA W	Approx. 2 --	-- Approx. 1
Rated impulse withstand voltage U_{imp}	Terminals A1 to A2 Terminals L to PU Terminals A1, A2 to L, PU Terminals against contacts	kV kV kV kV	< 4 < 4 < 4 < 6	< 4 < 4 < 3 < 6
Measuring circuit			For three-phase and AC systems	For direct voltage systems
Measurement voltage range U_{meas}		V AC V DC	0 ... 500 --	-- 12 ... 280
Primary operating range		$\times U_{meas}$	0 ... 1.1	0.9 ... 1.1
Frequency range for U_{meas}		Hz	10 ... 10000	--
Alarm values	Measuring shunt R_{AL}	kΩ	5 ... 100	5 ... 200
Setting of alarm value	On absolute scale		Infinitely variable	Infinitely variable
Alternating current internal resistance	Internal testing resistance	kΩ	> 250	--
Direct current internal resistance	Internal testing resistance L+ and L- to PU	kΩ kΩ	> 250 --	-- 75 each
Measurement voltage U_{meas}	Internal	V DC	Approx. 15	--
Max. measurement current I_{meas}	Short circuit	mA	< 0.1	0.2 ... 4 depending on the voltage
Direct interference voltage	Max. permissible	V DC	500	--
Response delay	at R_{AL} 50 kΩ and 1 µF and ∞ up to 0.9 x R_{meas} and R_{meas} from ∞ to 0 Ω	 s s	 < 1.3 < 0.7	 0.8 0.4
Switching hysteresis	At R_{meas} 50 kΩ	%	15	10 ... 15
Contacts	µ contact		2 CO	2 CO
Rated operational voltage U_e		V	230 AC	12 ... 280 DC
Rated operational current I_s	Thermal current limit I_{th} DC-13 at 24 V DC DC-13 at 250 V DC AC-15 AC-15 NO contacts AC-15 NC contacts	A A A A A A	4 -- -- -- 5 2	4 2 0.2 3 -- --
Terminals	± screw (Pozidriv)		2	2
Conductor cross-sections	Rigid, max. Flexible, with end sleeve, min.	mm^2 mm^2	2 × 2.5 1 × 0.50	
Permissible ambient temperature		°C	-20 ... +60	
Degree of protection	Terminals (acc. to EN 60529) Enclosure (acc.to EN 60529)		IP20 IP40	
Resistance to climate	Acc. to EN 60068-1		20/060/04	

Selection and ordering data

	Contacts	U_c	U_e	Measuring range	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	V	kΩ	MW							kg
	Insulation monitors											
	For monitoring insulation resistance in non-grounded three-phase and AC systems from 10 ... 1000 Hz against ground											
	2 CO	230	0 ... 500 V AC	5 ... 100	2		5TT3470		1	1 unit	1BK	0.177
	For monitoring the insulation resistance in non-grounded DC systems against ground											
	2 CO	--	12 ... 280 V DC	5 ... 200	2		5TT3471		1	1 unit	1BK	0.142

* You can order this quantity or a multiple thereof.

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7LQ3 monitors for medical premises

Overview

In areas that conform to Group 2 of DIN VDE 0100-710, any interruption to the examination and/or treatment of patients would place those patients at risk.

Limit monitoring

This is prevented through the use of changeover and monitoring units. These monitor the insulation resistance of the non-grounded IT system, the load current and the temperature of the transformer. If the limit value is exceeded, the insulation monitor gives out a warning signal.

Voltage monitoring

In addition, a special voltage relay monitors the voltage of the power supply and switches to a second power supply if it falls below the specified limit values.

Benefits

- TÜV-certified switchover device with increased functionality
- Plant state signal over contacts – No specific manufacturer's bus system
- Easy operation over potentiometers as the set limit value is always visible
- Easy in existing plants; can also be integrated from other manufacturers

Technical specifications

			Switchover devices 7LQ3361	7LQ3362
Standards			IEC 60364-7-710; DIN VDE 0100-710	
Power supply U_v		V AC	230	230/400
Primary operating range		× U_v	0.9 … 1.1	
Supply frequency f_v		Hz	50 … 60	
Insulation coordination			IEC 60664-1	
Rated impulse withstand voltage		kV	4	
Pollution degree			3	
Power loss max. P_v		W	10.7	
Power section				
Contactors			Mechanically latched; mechanically and electrically locked	
Rated operational current acc. to DIN VDE 0100-710		A	51	32
Rated operational current AC-3		A	113	71
Short-circuit protection acc. to DIN VDE 0100-710 • Max. backup protection	 gG	 A	 63	
Switchover time		s	0.1 ... 10	
Measuring circuit insulation monitoring				
Response value R_{resp}		kΩ	50	
Response deviation			EN 61557-8	
Response time t_{on} at R_{on} = 50 kΩ, C_e = 1 µF	R_F from ∞ to 0.5 × R_{to} R_F from ∞ to 0 kΩ	s s	< 1.3 < 0.7	
Hysteresis		%	15	
Measurement voltage U_m		V DC	Approx. 15	
Measurement current $I_{m\ max}$ (at R_F = 0 Ω)		µA	< 50	
Internal resistance DC R_i		kΩ	> 250	
Impedance Z_i at 50 Hz		kΩ	> 250	
Permissible direct interference voltage U_{fg}		V DC	< 300	
Test button			External/internal	
Measuring circuit load current monitoring				
Response value, adjustable with external transformer 50/5 A, Class 1		A	5 … 50	
Hysteresis		%	4	
Temperature influence		%/°C	≤ 0.05	
Time delay t_v, adjustable		s	0.1 … 20	
Measuring circuit temperature monitoring				
Response value		kΩ	3.2 … 3.8	
Release value		kΩ	1.5 … 1.8	
PTC thermistor	Acc. to DIN 44081/44082	Unit(s)	1 … 6 in series	
Measuring circuit voltage monitoring				
Response values	ON-switching OFF-switching	 × U_c	2 % hysteresis 0.9	4 % hysteresis 0.9
Phase failure detection	At L1, L2 or L3	ms	--	100
N-conductor monitoring			--	Yes

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			Switchover devices 7LQ3361	7LQ3362
Connection				
Terminals				
• Load circuit	Feeder terminals Output terminals	mm^2	4 ... 16	
• Communication	Status signals Fault indications	mm^2	2.5	
Environmental conditions				
Permissible ambient temperature		°C	-20 ... 45	
Mounting position			Vertical	

			Insulation monitors 7LQ3354	7LQ3355
Standards			EN 61557-8	
Power supply U_v		V AC	230	
Primary operating range		× U_v	0.9 … 1.1	
Supply frequency f_v		Hz	50 … 60	
Power loss max. P_v		VA	Approx. 7	
Rated system voltage U_n (measuring circuit)		V AC	0 … 300	
Rated frequency f_n		Hz	10 … 1000	
EMC immunity to interference			IEC 61000-6-2	
EMC emitted interference			IEC 61000-6-3	
Insulation coordination			IEC 60664-1	
Rated impulse withstand voltage		kV	4	
Pollution degree			3	
Flammability class			UL 94V-0	
Measuring circuit insulation monitoring				
Response value R_{resp}		kΩ	50	50 ... 500
Response deviation			EN 61557-8	
Response time t_{on} at R_{on} = 50 kΩ, C_e = 1 µF	R_F from ∞ to 0.5 × R_{on} R_F from ∞ to 0 kΩ	s s	< 1.3 < 0.7	
Hysteresis		%	15	
Measurement voltage U_m		V DC	Approx. 15	
Measurement current $I_{m\ max}$ (at R_F = 0 Ω)		µA	< 50	
Internal resistance DC R_i		kΩ	> 250	
Impedance Z_i at 50 Hz		kΩ	> 250	
Permissible direct interference voltage U_{fg}		V DC	< 300	
Measuring circuit load current monitoring				
Response value, adjustable with external transformer 50/5 A, Class 1		A	5 … 50	
Hysteresis		%	4	
Temperature influence		%/°C	≤ 0.05	
Time delay t_v, adjustable		s	0.1 … 20	
Measuring circuit temperature monitoring				
Response value		kΩ	3.2 … 3.8	
Release value		kΩ	1.5 … 1.8	
PTC thermistor	Acc. to DIN 44081/44082	Unit(s)	1 … 6 in series	
Display and control elements				
Operating error	Acc. to IEC 61557-8			
LED display				
• Current and temperature monitoring			One red and one green LED	
• Ready-to-run			Green	
• Insulation fault			Red	
• Line breakage monitoring of the isolation measuring circuit			Red	
• Display of current insulation resistance			--	11-step LED chain
Pushbuttons			Test and Reset	

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7LQ3 monitors for medical premises

			Insulation monitors 7LQ3354	7LQ3355
Output relay				
Contacts for	Overtemperature Overload Insulation fault		2 CO 2 CO 2 CO	
Mode of operation			Working current	
Contacts	AC-15 NO contacts AC-15 NC contacts	A AC/V AC A AC/V AC	3/230 1/230	
Electrical service life	AC-15, 1 A, 230 V AC	Switching cycles	30000	
Thermal current		A AC	5	
Connection				
Terminals	± screw (Pozidriv)		2	
• Conductor cross-sections • Insulation fault	Rigid Flexible, with end sleeve	mm^2 mm^2	2 × 2.5 1 × 2.5	
Environmental conditions				
Permissible ambient temperature		°C	-20 … +60	
Resistance to climate	Acc. to EN 60068-1		20/060/04	
Degree of protection	Acc. to EN 60529		IP20, with connected conductors	
Mounting position			Any	
Vibration stress • Amplitude • Frequency	Acc. to IEC 60068-2-6	 mm Hz	 0.35 10 … 55	

			Test and signaling panels 7LQ3356	7LQ3357
Standards			DIN VDE 0100-710; IEC 60364-7-710	
Rated voltage U_n		V AC/DC	24	
Rated impulse withstand voltage	Acc. to IEC 60664-1	kV	4	
Voltage range		AC DC	0.8 ... 1.1 x U_n 0.9 ... 1.2 x U_n	
Rated current per input		mA	0.25	
Rated consumption		VA	6	
Rated operating mode			Continuous operation	
Pollution degree	Acc. to IEC 60664-1		2	
Degree of protection • Enclosure • Terminals	 Acc. to IEC/EN 60529 Acc. to IEC/EN 60529		 IP40 IP20	
Flammability class			UL 94V-0	
Vibration strain • Amplitude • Frequency	Acc. to IEC/EN 60068-2-6	 mm Hz	 0.35 10 … 55	
Resistance to climate	Acc. to IEC/EN 60068-1		20/045/04	
Terminal marking			EN 50005	
Wire connections				
• Solid		mm^2 mm^2	1 × 1.5 2 × 0.5	
• Strand		mm^2 mm^2	1 × 1 2 × 0.2	
• Strand with sleeve		mm^2	1 × 0.5	
Conductor mounting			Box terminals with wire protection	
Device dimensions		mm	80 × 160 × 57	82 × 150 × 57
Temperature range		°C	-20 ... +45	

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			Current transformers Class 1 7LQ3358
Standards			IEC/EN 60044-1, VDE 0414-44-1
Rated control voltage U_c		V AC	230
Rated frequency		Hz	50/60
Test voltage	50 Hz, 1 min	kV	3
Rated transmission ratio k_n		A	50/5
Primary rated current		A	50
Secondary rated current		A	5
Rated power		V/A	1.5
Class			1
Rated frequency		Hz	50 ... 60
Highest voltage at equipment / insulation level		kV	0.72/3
Overcurrent factor			FS5
• Thermal rated short-time current		× I_n	60
• Thermal rated continuous current		× I_n	1.2
Expanded current range		%	120
Permissible ambient temperature		°C	-20 … +60

			Test and signaling combination for insulation monitors 7LQ3360
Standards			DIN VDE 0100-710; IEC 60364-7-710
Rated voltage U_n		V AC	24
Voltage range		AC	0.8 ... 1.1 × U_n
Connected load		W	0.5
Rated operating mode			Continuous operation
EMC			
• Static discharge	Acc. to IEC/EN 61000-4-2	kV	8 (air discharge)
• RF irradiation	Acc. to IEC/EN 61000-4-3	V/m	10
• Rapid transients	Acc. to IEC/EN 61000-4-4	kV	2
• Surge voltage (surge)	Acc. to IEC/EN 61000-4-5	kV	1
Degree of protection			IP30
Amplitude		mm	0.35
Frequency		Hz	10 ... 55
Temperature range		°C	-5 ... +55
Resistance to climate	Acc. to IEC/EN 60068-1		05/055/04
Terminal marking			EN 50005
Wire connections			
• Solid		mm^2	1 × 4
• Strand with sleeve and plastic collar		mm^2	1 × 2.5
• Strand with sleeve and plastic collar	DIN 46228-1/-2/-3/-4	mm^2	2 × 1.5
• Strand with sleeve	DIN 46228-1/-2/-3	mm^2	2 × 2.5
Conductor mounting			Box terminals with wire protection
Device dimensions		mm	80 × 80 × 35

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7LQ3 monitors for medical premises

			Voltage relays 5TT3411
Rated control voltage U_c		V AC	230
Overload capability		× U_c	1.15
Rated frequency		Hz	50/60
Response values	ON-switching OFF-switching	 × U_c	2 % hysteresis 0.9
Minimum contact load		V/mA	10/100
Phase failure detection	At L1, L2 or L3	ms	--
N-conductor monitoring			--
Rated insulation voltage U_i	Between coil/contact	kV	4
Contacts	AC-15 NO contacts AC-15 NC contacts		3 2
Electrical service life in switching cycles	AC-15, 1 A, 230 V AC		5×10^5
Rated impulse withstand voltage	Acc. to IEC 60664-1	kV	4
Pollution degree			2
Terminals	± screw (Pozidriv)		2
Conductor cross-sections • Rigid • Flexible, with end sleeve		 mm^2 mm^2	 2 × 2.5 2 × 1.5
Permissible ambient temperature		°C	-20 … +60
Resistance to climate	Acc. to EN 60068-1		20/060/04

			IT line transformers 4AT3/4AT4
In the case of isolating transformers used to set up medical IT systems, overcurrent protective devices are only permissible as protection against short circuits. To protect the isolating transformers against overload they are fitted with monitoring devices that signal an excessive rise in temperature (e.g. 7LQ3354 insulation monitors).			
Standards			EN 61558-2-15
Safety class			I
Static shield between primary and secondary winding			With insulated connection
Thermistor transformer protection			Warning in the event of thermal overload[1)]
Insulation monitoring			With center tap
Short-circuit voltage u_z		%	≤ 3
No-load supply current i_0 • Starting current (rush), max.		% x I_{1N}	≤ 3 8
Rated ambient temperature t_a / Thermal Class			55 °C/H

1) Tripping units must be ordered separately.

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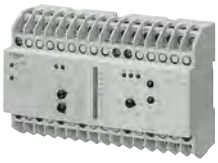
Selection and ordering data

	Version	U_e	I_e	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A	V AC	MW							kg
	Switchover devices according to VDE 0100-710 for medical premises 2-pole, for medical premises of Group 2, for switching over two redundant supply leads, monitoring of IT system and the IT line transformer, up to 8 kVA	230	51	230			**7LQ3361**		1	1 unit	1BK	17.500
	4-pole, for use with symmetric loads	230	32	230/400			**7LQ3362**		1	1 unit	1BK	17.500
	Insulation monitors With load current and temperature monitoring for medical premises			230	6		**7LQ3354**		1	1 unit	1BK	0.440
	With load current and temperature monitoring of medical premises with adjustable response value of 50 … 500 kΩ and output for 7LQ3360 test and signaling combination			230	8		**7LQ3355**		1	1 unit	1BK	0.592
	Test and signaling panels For switchover devices, 24 V AC/DC, 50/60 Hz											
	Surface mounting						**7LQ3356**		1	1 unit	1BK	0.335
	Flush mounting						**7LQ3357**		1	1 unit	1BK	0.222

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*** You can order this quantity or a multiple thereof.**

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7LQ3 monitors for medical premises

	Version	U_e	I_e	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A	V AC	MW							kg
	Test and signaling combination for insulation monitors 24 V AC 50/60 Hz						7LQ3360		1	1 unit	1BK	0.142
	Current transformers 50A/5A AC Class 1 With base angle	230					7LQ3358		1	1 unit	1BK	0.425
	Voltage relays for undervoltage monitoring of medical premises Single-phase against N with test button, switching thresholds: 0.9 × U_n, 2 % hysteresis 2 NO, 2 NC	230	4	230	4		5TT3411		1	1 unit	1BK	0.226

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Overview

The GSM alarm module is a compact, distributed control and signaling system. With the GSM alarm module, it is possible to monitor and control, for example, heating, air-conditioning and cooling systems, elevators and escalators, and all kinds of production equipment such as machinery, automated devices and conveyor belts in industrial and private building management. Additionally, the GSM alarm module is particularly suitable for remote plants, such as monitoring the heating of summer houses or the pumps of a water treatment plant. In combination with voltage relays, current relays, fuse monitors, miniature circuit breakers, residual current devices, or surge arresters fitted with auxiliary current switches or signaling contacts, there are virtually no limits to the type of monitoring tasks that can be carried out.

The GSM alarm module can be easily parameterized using the accompanying PC configuration software, which has a simple and clear structure. Parameters can also be assigned OTA (Over The Air) after the initial installation. The firmware can be updated either in this way or via a PC.

Note:

Because the availability of mobile networks cannot be guaranteed, GSM alarm modules should not be used for safety-relevant control functions.

Benefits

- Mobile monitoring and controlling of electrical installations and system components
- Quick and reliable alarm messages via SMS or e-mail
- Easy parameter assignment and operation by means of configuration software and SMS

Design

- 8 multifunctional analog / digital inputs: 0 ... 10 V AC, 24 V DC
- 4 relay outputs change-over contacts 250 V / 5 A
- LED status displays for all I/Os

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5TT7 GSM alarm modules

Technical specifications

		5TT7210-0
Inputs		
8 multifunctional inputs (analog/digital)		
• Analog	V AC	0 ... 10
- Resolution/accuracy (0 ... 10 V)	mV	20 / ±(20 + 0.3 %)
• Digital	V DC	24 (4 ... 30)
- Threshold value for digital inputs, for Low	V	< 2
- Threshold value for digital inputs, for High	V	> 4
Outputs		
4 relay outputs		4 x CO universal contacts, 250 V AC
• Continuous/inrush current with ohmic load	A	5 / 5
• Max. switching capacity for 240 V AC, 5 A	VA	1200
GSM data		
Frequency	MHz	850/900/1800/1900
Antenna		
• Antenna impedance	Ω	50
• Antenna connector		SMA connector
General data		
Power supply	V DC	10 ... 30
Power consumption at 24 V DC	mA DC	275
Internal emergency power supply		Internal maintenance-free SuperCap capacitor
Operating/storage temperature	°C	-20 … +50 / -20 …+70
Max. relative humidity	%	80, non-condensing
Conductor cross-section	mm^2	0.2 ... 2.5 screw-type terminal
Stripped length	mm	6
Mounting/installation position		Standard mounting rail TS35 / any
Dimensions L x W x H (TS 35 / direct)	mm	88 x 95 x 70 (without antenna)
Material / combustion class		Enclosure: Noryl, connecting terminals: Polyamide 6.6 V0 / UL94-V0
Safety class (DIN 40050)		IP20

Selection and ordering data

	U_c	I_e	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V DC	mA DC	MW							kg
	GSM alarm module For GSM network operation with eight alarm inputs and four switching outputs with a backup battery for signaling in the event of a power failure									
	10 ... 30	275 (at 24 V DC)	5	►	**5TT7210-0**		1	1 unit	1BK	0.229
	Electronic power supply unit SELV, short-circuit-proof For supplying power to the GSM alarm module 5TT7210-0 in the line voltage range from 150 to 230 V AC For more information, see Chapter "Transformers, Power Supply Units and Socket Outlets"				**4AC2402**		1	1 unit	1BK	0.096

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Overview

Fault signaling units are used in small plants where the installation of complex fault signaling systems would be too labor-intensive and too expensive. In the event of a fault, they enable fast fault localization of all monitoring devices and limit monitors installed in a plant from a central location. This increases plant availability. With the correct sensor configuration, they also provide the option of preventative maintenance.

- 4 fault signal inputs with LED
- 1 LED as centralized fault indicator
- Units for centralized fault indication and acoustic signaling
- With acknowledgment for acoustic indicators
- Open-/closed-circuit principle to the 4 inputs can be adjusted via jumpers X1 - X2
- A maximum of 39 5TT3461 expansion fault signaling units can be connected to the 5TT3460 centralized fault signaling unit
- The maximum possible cable length between 5TT3460 centralized fault signaling units and 5TT3461 expansion fault signaling units is approx. 100 m with a conductor cross-section of 1.5 mm^2

Benefits

- Ultra compact device designs that only require the smallest of spaces in distribution boards
- The modular design means that it is easy to add devices as your system expands.

Technical specifications

			5TT3460	5TT3461
Standards			IEC 60255; DIN VDE 0435-110, -303	
Rated control voltage U_c		V AC	230	
Primary operating range		× U_c	0.8 ... 1.1	
Rated frequency f_n		Hz	50/60	
Fault signaling inputs S1 ... S4		V AC	230	
Signal voltage		V	7 ... 10	
To terminals S and H				
Noise pulse duration		ms	≥ 100	
Acknowledgment pulse duration		ms	≥ 200	
Contacts				
• Rated operational voltage U_e		V AC	230	--
• Rated operational current I_e		A	5	--
• Minimum contact load		V; mA	10; 100	--
Connections				
• Terminals	± screw (Pozidriv)		PZ 1	
• Conductor cross-sections				
- Rigid, max.		mm^2	2 × 2.5	
- Flexible, with end sleeve, min.		mm^2	1 × 0.5	
Permissible ambient temperature		°C	-20 ... +60	
Humidity class	Acc. to IEC 60068-2-30		F	

Selection and ordering data

	U_e	I_e	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V AC	A AC	V AC	MW							kg
Centralized fault signaling units with transparent cap											
	230	5	230	2		5TT3460		1	1 unit	1BK	0.147
Expansion fault signaling units with transparent cap											
	230	--	--	2		5TT3461		1	1 unit	1BK	0.125

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Overview

EMERGENCY STOP circuits are common safety measures in all laboratory equipment and industrial plants. The EMERGENCY STOP modules used here must meet the most rigorous demands with regard to functional reliability. Benchmark is the degree of self-monitoring.

Benefits

- The electrical isolation between electric circuit and control meets the requirements of the standard
- An LED for the operating and switching state provides constant information on the operating state

Technical specifications

				5TT5200
Standards				IEC 60204-1; EN 60204-1 (VDE 0113-1)
Supply				
• Rated control voltage U_c - Primary operating range			V AC × U_c	230 0.8 ... 1.1
• Rated frequency f_n			Hz	50
• Rated power dissipation P_v	Coil/drive Contact per pole		VA	3.5 0.8
Control voltage	Terminal Y1		V AC/DC	24
Control current	Terminal Y1		mA DC	45
Recovery time			ms	500
Safety				
• Electrical isolation, creepage distances and clearances, actuator/contact			mm	3
• Rated impulse withstand voltage U_{imp} drive/contact			kV	> 4
Contacts				
• Contacts	NO contacts NC contacts NO contact/NC contact	AC-15 AC-15 AC-1	A A A	3 2 5
• Contact gap			mm	> 1
• Electrical service life	AC-15, 2 A, 230 V AC		Switching cycles	10^5
• Reliable switching frequency			Switching cycles/h	600
Vibration resistance Amplitude	Acc. to EN 60068-2-610	Up to 55 Hz	mm	0.35
Connections				
• Terminals	± screw (Pozidriv)			PZ 1
• Conductor cross-sections of main current paths - Rigid - Flexible, with end sleeve	Max. Min.		mm^2 mm^2	2 × 2.5 1 × 0.5
Permissible ambient temperature			°C	0 ... +50
Resistance to climate	Acc. to EN 60068-1			0/55/04

Selection and ordering data

	U_e	I_e	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	V AC	A AC	V AC	MW							kg
	EMERGENCY STOP modules										
	400	5	230	4		**5TT5200**		1	1 unit	1BK	0.304

* You can order this quantity or a multiple thereof.

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Overview

Level relays are used for the monitoring and control of conductive, non-combustible liquids and powders. They ensure overflow and dry run protection. Due to their sensor performance, the devices can also be used for general resistance monitoring.

LED displays:

- Green LED: Lights up when operational voltage is applied
- Yellow LED: Lights up if MIN output relay is activated
- Red LED: Lights up if MAX output relay is activated

Benefits

The measuring range up to 450 kΩ enables a differentiation between foam and liquid. It also increases the universal application for resistance measurements.

Due to its low-frequency, electrically isolated measuring circuit, the device has a high immunity to interference against system coupling, which enables cable lengths of up to 1500 m and suppresses the effects of electrolysis in the liquid.

- The two outputs for minimum and maximum control can also be used for the advance warning and tripping of limit values
- 3 electrode connections for 1-step and 2-step level control
- All standard products can be used as electrodes
- High immunity to interference of the measuring circuit isolated from the system
- Programmable for open-circuit principle (with bridge X2 COM) or closed-circuit principle (without jumper)
- Separately adjustable delay times for $t_{v\,min}$ and $t_{v\,max}$, 0.2 s to 2 s

Technical specifications

			5TT3435
Standards			IEC 60255; DIN VDE 0435-110
Supply			
• Rated control voltage U_c		V AC	230
- Primary operating range		$\times U_c$	0.8 ... 1.1
• Rated frequency f_n		Hz	50/60
Setting range of the liquid level		kΩ	2 ... 450
Switching point hysteresis of set value			
• At 450 kΩ		%	3
• At 2 kΩ		%	6
Voltage temperature influence	From set value	%	< 2
Max. cable length to the Electrodes at 100 µF/km	Set value kΩ		
	450	m	50
	100	m	200
	35	m	500
	10	m	1500
	5	m	3000
Electrode voltage	Max.	V AC	Approx. 10
Electrode current	Max.	mA AC	Approx. 1.5
Response delay	Adjustable	s	0.2 ... 20
OFF-delay	Adjustable	s	0.2 ... 20
Rated operational voltage U_e		V	250
Rated operational current I_e		A	5
Test voltage			
	Input/auxiliary circuit	kV	4
	Input/output circuit	kV	4
	Auxiliary/output circuit	kV	4
Connections			
• Terminals	± screw (Pozidriv)		PZ 2
• Conductor cross-sections			
- Rigid	Max.	mm^2	2 × 2.5
- Flexible, with end sleeve	Min.	mm^2	1 × 0.5
Permissible ambient temperature		°C	-20 ... +60
Resistance to climate	Acc. to EN 60068-1		20/60/4

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Selection and ordering data

		U_e	I_e	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A AC	V AC	MW							kg
	Level relays											
		230	4	230	2		**5TT3435**		1	1 unit	1BK	0.182
	Immersion electrodes • Made of stainless steel, with PG13 sealing cap • Temperature range 0 ... 60 °C • Suitable for pure water in open containers											
	With terminal connection						**5TG8223**		1	1/24 units	1BK	0.082

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* You can order this quantity or a multiple thereof.

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Overview

Line circuit relays are used to interrupt circuits and prevent electromagnetic fields in circuits where there are currently no active loads.
If the loads are disconnected, and the line circuit relay measures a usage of only 2 to 20 VA – adjustable – it disconnects the cable to the supply voltage and switches over to extra-low voltage.
As soon as loads are reconnected, the line circuit relay detects the increase in usage and switches back to the supply voltage.
While the line circuit relay switches off any unnecessary system components, it is not a device for ensuring isolation in the sense of safe disconnection.

The line circuit relay is unable to detect consumers with electronic power supply units, e.g. electronically controlled vacuum cleaners. It is expedient to connect such devices to a base load resistor (PTC resistor) so that the line circuit relay is reset to supply voltage.

Benefits

- High availability to a wide range of loads, as all resistive, capacitive and inductive loads are detected
- Adjustable from 2 VA to 20 VA
- With status display for contact adjustment
- With switch continuously ON
- With safety information on stickers for socket outlets and distribution boards

Technical specifications

			5TT3171
Standards			IEC 60255; DIN VDE 0435-110
Rated control voltage U_c		V AC	230
Primary operating range		$\times U_c$	0.85 ... 1.15
Rated frequency		Hz	50/60
Rated power dissipation P_v	Electronics Contacts	VA VA	5 2.6
Monitoring voltage		V	3
Response value	Adjustable	VA	2 ... 20
Release value	% of the response value		70
Rated impulse withstand voltage U_{imp}	Input/output	kV	> 4
Rated operational voltage U_e		V AC	250
Rated operational current I_e	AC-1 AC-11	A A	16 3
Contacts			μ contact
Electrical service life	In switching cycles at 3 A	AC-11	5×10^5
Terminals	+/- Screw (Pozidriv)		PZ 1
Conductor cross-sections			
• Rigid • Flexible, with end sleeve	Max. Min.	mm^2 mm^2	2×2.5 1×0.5
Permissible ambient temperature		°C	-20 ... +45
Degree of protection	Acc. to IEC/EN 60529		IP20, with connected conductors
Safety class	Acc. to EN 61140/VDE 0140-1		II
Humidity class	Acc. to IEC 60068-2-30		F

Selection and ordering data

	Contacts	U_e	I_e	U_c	Mounting width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC	A AC	V AC	MW							kg
	Line circuit relays											
	For disconnecting the voltage of electrical systems even when loads are disabled											
	1 NC	250	16	230	1		5TT3171		1	1 unit	1BK	0.081
	Base load resistors for electronic devices											
	With 15 cm connection wires, end sleeves and shrink sleeving						5TG8222		1	1 unit	1BK	0.009

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Introduction

Overview

IEC/EN 61851 describes the safety requirements that must be met by conductive charging systems for electric vehicles. Standard-compliant AC charging in charging mode 3 requires a charging station with safety-relevant functions.

Application

Our charging units are system-tested, CE-compliant charging stations for charging electric vehicles in operational mode 3 according to IEC/EN 61851 und IEC/EN 62196 for indoor and outdoor use, such as carports, garages, workshops, underground parking garages or multistory parking garages.

Design

Charging unit for wall mounting

The modern functional design of the WB140A combines with its ease of handling to provide an optimal solution. It complies with the revised standard IEC 62196-2 and comes with the new charging coupler Type 2 Generation 2. This ensures compatibility with future generations of electric vehicles.

Installing electric vehicle chargers in older buildings can be a challenge. With the WB140A charging unit, the maximum value for the charging current can be adjusted by an electrical expert to match facility capability. The settings range from a maximum current of 32/20 A to 10 A. The charging unit cable can be connected optionally from the rear or from below. The delay function supports setting a charging delay in two-hour increments (2/4/6/8 hours) up to a max. of 8 hours. This allows charging with PV current or utilizing off-peak tariffs. The charging process starts automatically after the time delay has elapsed.

Large LEDs at top right and top left in the housing indicate the current operational status even from a distance. The following states are displayed:
"Ready-to-charge" / "Charging" / "Fault".

Charging cable for home and travel

Charge flexibly and safely

Charging with the new CC100A charging cable in charging mode 2 in compliance with IEC 61851-1 is a safe and convenient alternative to using charging stations or posts. The mobile charging station for home and travel can be simply connected to common household plug-and-socket devices. The intuitive control box enables fast and easy adaptation of the charging current to any building installation. The integrated type A RCCB circuit breaker meets the requirements for safe charging of electric vehicles in compliance with IEC 61851.

Functions for more safety

The clearly arranged LED indications on the control box indicate faults that cause automatic interruption of charging. Multiple-level temperature management interrupts charging if temperatures are too high or too low. Multiple-level temperature management therefore prevents a thermal overload. Charging is continued automatically once the temperature returns to a normal level. During the self-test before the start of every charging operation, wiring faults and welded contacts are also detected and are indicated to users by LEDs. The circuit is interrupted immediately in the event of a fault, thus providing comprehensive protection for users and electric vehicles.

Practical, robust enclosure

The CC100A charging cable's functional and ergonomic design permits easy operation and space-saving storage. The enclosure and the charging coupler are resistant to vehicles passing over them and also to soiling, moisture and temperature fluctuations. The control box even achieves the high IP67 degree of protection.

Universal in use

The range includes versions that cater for most common plug sockets in Europe. and e.g. the internationally used camping plug (CEE blue 6h) enables faster single-phase charging at 16 A (charging power 3.7 kW). The new CC100A charging cable is available with type-1 or type-2 vehicle charging couplers, enabling connection to virtually any commercially available vehicle.

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Technical specifications

		WB140A		
		5TT3201-1KK25	**5TT3201-1KK27**	**5TT3201-1KK37**
Standards		IEC/EN 61851-1; IEC/EN 61851-22; IEC/EN 62196-1; IEC 62196-2		
Operational voltage	V AC	230	230/400	
Rated frequency	Hz	50/60		
Rated current	A	1 x 20	3 x 20	3 x 32
Degree of protection		IP44		
Safety class		I		
Touch protection according to EN 50274		Finger and back-of-hand safe		
Ambient conditions				
• Ambient temperature	°C	-25 ... +40		
• Storage temperature	°C	-30 ... +60		
• Relative humidity	%	≤ 95		
• Installation location		Suitable for interior and exterior use		
Mains connection		Bottom/rear		
Conductor cross-sections	mm^2	1.50 ... 6		2.5 ... 10
Enclosure				
• Material		Plastic		
• Color		RAL 7035 (light gray)		
• Dimensions (H x W x D)	mm	420 x 420 x 483		
• Weight	kg	5.5	5.8	6.6
• Door/hinged lid		Plastic		
• Lock		--		
Charging outlet				
• Charging mode according to IEC 61851-1		3		
• Connection type according to IEC 62192		C, charging cable with charging coupler Type 2 Gen 2		
Charging outlet contactor				
• Rated operating current	A	40	40	40
• Number of poles		2 NO	4 NO	4 NO
Residual current protective device				
• RCCBs		--		
• Version		--		
• Rated current	A	--		
• Rated residual current	mA	--		
Conductor protection				
• Miniature circuit breaker		--		
• Tripping characteristic		--		
• Rated current	A	--		
• Rated breaking capacity	kA	--		
Operator controls		PAUSE (STOP/START charging process) DELAY 2, 4, 6, 8 hours (charging process delay)		
Displays		LED, green, orange, red, blue		
Length of charging cable	m	4		

Selection and ordering data

	Rated current	Plug type	Rated operational voltage	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A		V AC							kg
	WB140A charging unit with charging cable and charging coupler									
	20	2 Gen 2	230		**5TT3201-1KK25**		1	1 unit	1DA	7.180
	20	2 Gen 2	230/400		**5TT3201-1KK27**		1	1 unit	1DA	7.900
	32	2 Gen 2	230/400		**5TT3201-1KK37**		1	1 unit	1DA	9.000

*** You can order this quantity or a multiple thereof.**

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CC100A charging cable

Overview

1 Adjustment of max. charging current
2 Display of selected charging current
3 Status display for electric vehicles
4 Status display for building infrastructure

CC100A charging cable

Benefits

User-friendliness

- Intuitive operation with self-explanatory symbols and unambiguous display elements.
- The large keys for setting the maximum load current are easy to operate, even when wearing gloves.
- Following a power failure, the charging process continues automatically. No action is necessary on the part of the user.
- The charging cable can be used in extreme environmental conditions without issue. Temperatures down to -32 °C, snow, salt or moisture are not a problem for the cable or control box - and they can also cope with water jets, such as from a garden hose (degree of protection IP65). The control box is even certified to withstand temporary immersion in up to 1 m of water (IP67).
- The durable, rugged housing is resistant to the considerable strains of everyday use on the move. The electronic circuitry is protected even if a vehicle inadvertently rolls over it, in accordance with the requirements of IEC 62335.
- The rounded design of the control box makes it easy to roll up the cable.

Automatic temperature control

In the event of inadmissible heat development due to a defect in the building socket (e.g. worn plug contacts or loose screw connections) or during charging in a hot environment, the unit and the socket are protected against damage by a temperature sensor in the plug and in the control box:

- The charging current is reduced automatically if an excess temperature is detected in the control box or in the plug.
- During active current reduction, the charging process is continued with the minimum current (6 A) and users are informed by a flashing LED. The operation is continued with the set charging current as soon as the temperature is within the normal temperature range again.
- Camping plugs and camping sockets are designed for continuous operation with loads of 16 A, and as such, these cable versions do not require temperature monitoring in the camping plug. The temperature is nevertheless still monitored in the control box, even for these versions.

Safety features

- The maximum charging current can be adjusted to country-specific restrictions or older building installations in which only low charging currents are allowed. This avoids any dangerous overloading of the building's electrical installation.
- The control box contains an electronic RCCB to also ensure that persons are protected - regardless of the local electrical system. This ensures compliance with IEC 61851 for charging mode 2.
- When the integrated RCCB is triggered, the relay contacts of the L, N and PE cables open. The inclusion of the PE cable in residual-current protection ensures that persons are also protected in the event of certain hazardous wiring faults (e.g. protection against electrocution in the event that the L and PE contacts in the building socket have been inadvertently swapped during wiring and so PE is live).
- A fully automatic self-test of the cable, which checks all safety attributes - including the continuity of the PE conductor connection in the on-site infrastructure - is performed during commissioning and before the start of every charging operation.
- Users are warned immediately by a red LED fault indication if relay contacts are welded.
- If a fault occurs during charging, e.g. if the vehicle PE conductor is defective, charging is interrupted and the relay contacts are opened. Users are warned straight away by a red LED fault indication.

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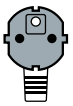
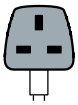
Technical specifications

CC100A charging cable		5TT3201-...						
		-1KK80	-1KK81	-1KK82	-1KK83	-1KK84	-1KK85	-1KK88
Line-side plug type								
• with SCHUKO R combination plug 90° (CEE 7/7)		✔	✔	--	--	--	--	--
• with camping plug (CEE blue 6 h)		--	--	✔	✔	--	--	--
• with type G / BS 1363 plug		--	--	--	--	✔	✔	--
• with type I plug (GB 1002)		--	--	--	--	--	--	✔
Charging coupler (on vehicle)								
• with type 1 charging coupler		--	✔	--	✔	--	✔	--
• with type 2 charging coupler		✔	--	✔	--	✔	--	--
• with GB/T 20234 charging coupler		--	--	--	--	--	--	✔
Length of cable								
• Total length of cable	m	4	8			4	8	4
• Cable length (building end)	m	1.4		0.3				
Charging mode in acc. with IEC 61851-1		Charging mode 2, keys for setting the charging current						
Standards		IEC/EN 61851-1; IEC/EN 62196; IEC 62335						GB/T 18487; GB 20044
Supply voltage	V AC	230						
Frequency	Hz	50 Hz						
Line system configuration		TN, TNC, TNS, TT						
Max. rated current	A	13		16		10		
Adjustable charging current	A	6, 8, 10, 13		6, 8, 10, 13, 16		6, 8, 10		
Max. charging power	kW	3		3.7		2.3		
Power loss	W	< 9						
Rated fault current	mA	30						
RCCB (electronic)	Type	A						
Degree of protection acc. to IEC/EN 60529								
• Control box		IP67						
• Charging coupler (on vehicle)		IP44						
• Plug (line-side)		IP44				IP20		
Safety class		II						
Overvoltage category		CAT II						
Touch protection in acc. with DIN EN 50274		Finger and back-of-hand safe						
Ambient conditions								
• Operating temperature	°C	-32 ... +40						
• Storage temperature	°C	-40 ... +75						
• Relative humidity	%	Max. 95						
• Installation location		Suitable for interior and exterior use						
Enclosure								
• Material		Plastic						
• Color		Light gray (RAL 7035) and black						
• Dimensions (H x W x D)	mm	52 x 240 x 100						
• Weight	kg	2.5	2.9	3.2	2.8	2.4	2.9	2.4
Display elements		LEDs, green and red						

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CC100A charging cable

Selection and ordering data

Rated current (max. charging current)	Charging coupler Type	Rated operational voltage	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
A		V AC							kg
CC100A charging cable with SCHUKO combination plug									
13	2	230		5TT3201-1KK80		1	1 unit	1DA	2.472
13	1	230 NEW		5TT3201-1KK81		1	1 unit	1DA	2.937
CC100A charging cable with camping plug NEW									
16	2	230		5TT3201-1KK82		1	1 unit	1DA	3.171
16	1	230		5TT3201-1KK83		1	1 unit	1DA	2.799
CC100A charging cable with BS 1363 plug NEW									
10	2	230		5TT3201-1KK84		1	1 unit	1DA	2.421
10	1	230		5TT3201-1KK85		1	1 unit	1DA	2.923
CC100A charging cable with type I plug NEW									
10	GB/T 20234	230		5TT3201-1KK88		1	1 unit	1DA	2.385

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* You can order this quantity or a multiple thereof.

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13/2 **Introduction**

Planning the power distribution system with SIMARIS planning tools
13/3 General data
13/4 SIMARIS design
13/5 SIMARIS project
13/6 SIMARIS curves

SIMARIS ConFiguration planning and configuration tool
13/7 SIMARIS ConFiguration Basic

Configuring, visualizing and controlling with SIMATIC
13/8 General data
13/9 PAC/3WL/3VA Library for SIMATIC PCS 7
13/11 Library 7KM PAC3200 for SIMATIC WinCC

Configuring, visualizing and controlling with SENTRON
13/12 General data
13/15 powermanager
13/17 powerconfig

NEW

Direct reference to the products in the Industry Mall from the selection and ordering data tables:

Article No.
www.siemens.com/product?Article No.
3VA2025-5HL36-0AA0

Paper catalog:
To get more product information enter the Web address plus Article No.

PDF catalog:
Get more product information with just a mouse click.

For further technical product information:

Siemens Industry Online Support:
www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
Download
FAQ
Manual
Product note
Software archive
Technical data

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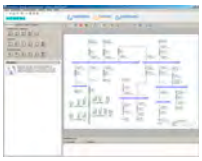
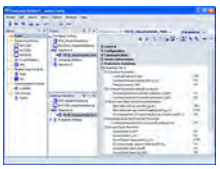
Introduction

Overview

	Article No.	Page
Planning the power distribution system with SIMARIS planning tools		
 **SIMARIS design** SIMARIS design supports the electrical planner in network calculations and the dimensioning of electrical power distribution systems.	--	13/4
SIMARIS project SIMARIS project supports the electrical planner in the calculation of space requirements and the electrical power distribution budget. Specifications for the systems planned for a specific project can be generated automatically.	--	13/5
SIMARIS curves SIMARIS curves visualizes tripping characteristics and let-through current and let-through power characteristics of low-voltage protective equipment and fuses (IEC). SIMARIS curves is available both as a PC version and also as an app for use on a tablet PC or a smartphone.	--	13/6
SIMARIS ConFiguration planning and configuration tool		
SIMARIS ConFiguration Basic SIMARIS ConFiguration Basic is specially designed to support control cabinet builders and installation engineers with configuration of ALPHA distribution boards up to SIVACON S4 low-voltage switchboards and with generation of corresponding quotations.	--	13/7
Configuring, visualizing and controlling with SIMATIC		
PAC/3WL/3VA LIBRARY for SIMATIC PCS 7 The PAC/3WL/3VA function block library enables seamless integration of 3WL/3VA/3VL circuit breakers and 7KM PAC3200/4200 measuring devices into the PCS 7 process world.	3ZS2	13/9
Library 7KM PAC3200 for SIMATIC WinCC The function block libraries enable seamless integration of the 7KM PAC3200/4200 measuring devices into WinCC.	3ZS2	13/9
Configuring, visualizing and controlling with SENTRON		
powermanager Powermanager power monitoring software for the power monitoring system with the following main points: • Identify savings potential • Reduce power costs • Ensure power availability	3ZS2	13/12
 **powerconfig** Commissioning and service tool for communication-capable measuring devices and circuit breakers with the following main points: • Parameterization, documentation, operation and monitoring of 3WL, 3VA and 3VL circuit breakers and 7KM PAC3100/3200/4200 measuring devices using various communication interfaces	--	13/17

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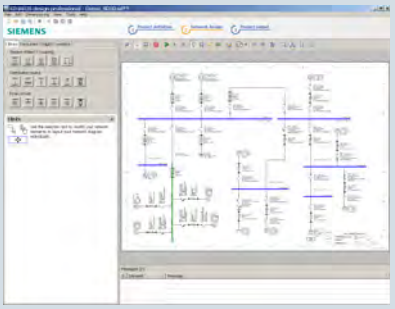
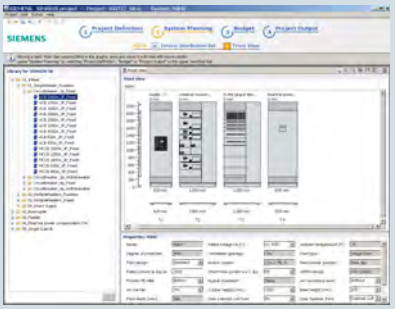
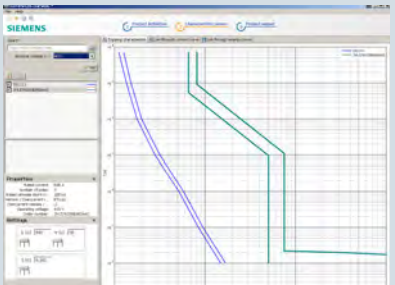
Overview







SIMARIS design

Planning tool for quick and effective network calculations and dimensioning of electrical power distribution systems for non-residential and industrial buildings from the medium-voltage supply to the load:

- Dimensioning of electrical networks on the basis of real products according to acknowledged rules of technology and the applicable standards (VDE, IEC)
- Automatic selection of the appropriate components from the integrated product database
- Calculation of short-circuit current, load flow, voltage drop and energy balance
- Possibility of storing frequently used modules in the favorites library
- High planning reliability combined with flexibility in the planning and realization process
- Possibility of automatic selectivity evaluation with the professional version: in addition to the time/current characteristic curve and the respective envelope curves, selectivity limits are automatically displayed

SIMARIS project

Planning tool for fast calculation of space requirements and electrical power distribution system budgets for non-residential and industrial buildings, and for preparing specifications:

- Automatic selection and placement of the appropriate systems based on the parameters entered
- Fast overview of space requirements and budget
- Thorough planning from the medium voltage supply to the distribution board
- Easy adaptation of project planning possible not only at the time of implementation, but also in the event of changes in use or expansions
- Storing of planned systems in the favorites library for further use in similar projects
- Automatic generation of specifications for the planned systems

SIMARIS curves

Planning tool for visualizing and evaluating characteristic curves of low-voltage protection equipment and fuses (IEC), including the possibility of simulating instrument settings:

- Visualization of tripping characteristics and let-through current and let-through power characteristics
- Device selection via article number or by entering known technical specifications using the selection aid
- Storing of frequently used devices as favorites
- Saving of several characteristic curves including selected settings as a complete project

More information about SIMARIS

You can find more information and downloads on the Internet at:

www.siemens.com/simaris

If you have any questions, please contact your Siemens Customer Support Center:

Tel.: +49 70 00 7 46 27 47

e-mail: technical-assistance@siemens.com

SIMARIS
Mobile Web

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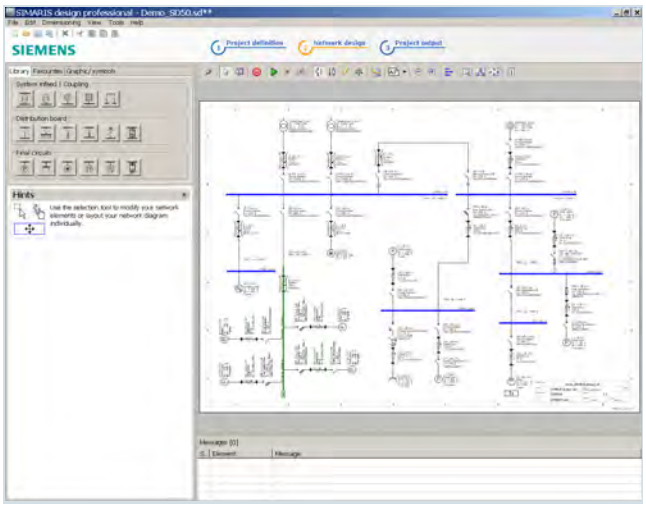
SIMARIS design

Overview



SIMARIS design is a planning tool for quick, effective network calculations and dimensioning of electrical power distribution systems for non-residential and industrial buildings.

As early as the planning phase, the power distribution network required for the project to be handled can be structured and dimensioned on the basis of real products. The network structure is first assembled from the stored modules for feeder units, couplings, distribution boards and branch circuits. It is also possible to re-use stored favorites, such as those developed in previous, similar projects. Exactly the right components and distribution systems for the case in question are then selected automatically from the product database stored in SIMARIS design, based on the parameters and technical specifications selected specifically for the project. This avoids any additional costs which might be generated by uncoordinated systems in the implementation phase before they are incurred.

Every time an electrical power distribution system is configured, changes and the adaptations they require occur in both the planning and the implementation phases. SIMARIS design makes it easy to incorporate such changes into the supply concept and automatically check its reliability with regard to the acknowledged rules of technology and the standards currently applicable.

SIMARIS design professional, a program version with additional useful functions which is available for a fee. An analysis of selectivity, for example as required for safety power supply installations, can be performed and also documented. Similarly, the energy efficiency of the planned network can be analyzed and optimized.

The wide range of output options allow the project structure and the data gathered to be documented precisely in each phase of the project.

To support and facilitate system planning, it is also possible to export the project data for further processing of the planned project in SIMARIS project.

Benefits

- Reduction in workloads for projects
- Dimensioning of electrical networks on the basis of real products according to acknowledged rules of technology and the applicable standards (VDE, IEC)
- Automatic selection of the appropriate components from the integrated product database, from the medium voltage supply to connection of loads, so no detailed knowledge of products and systems is required
- Free definition of network operation modes and switching states
- Calculation of short-circuit current, load flow, voltage drop and energy balance
- Provision for the necessary personal, short-circuit and overload protection
- Possibility of providing for any necessary maintenance of functions in the calculation
- Displaying and dimensioning of the cables and busbar trunking systems for power transmission and distribution
- High planning reliability combined with flexibility in the planning and realization process
- Changes can be tracked by means of a change index
- Easy adaptation in the event of changes in use or expansion
- Possibility of storing frequently used modules in the favorites library
- Output of the network plan developed, together with detailed parts and data lists
- Country-specific product ranges taken into account
- Comprehensive documentation of planning results with simple data transfer (Office, CAD etc.)

Application

SIMARIS design is suitable for network calculations and dimensioning of electrical power distribution systems in all non-residential and industrial buildings. Whether you are planning a shopping mall, a hospital or a production building, with SIMARIS design it is possible to considerably reduce the amount of work required for the overall planning of power distribution systems and hence the time spent on selecting and dimensioning the necessary equipment.

More information

You can find more information and downloads on the Internet at:

www.siemens.com/simarisdesign

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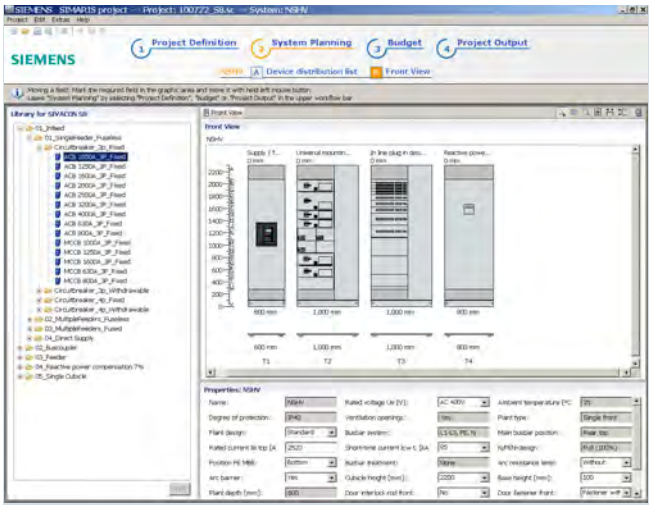
Overview



SIMARIS project is a planning tool for fast calculation of space requirements and electrical power distribution system budgets for non-residential and industrial buildings, and for generating specifications automatically.

The following is determined in SIMARIS project based on the pre-defined project structure and the basic technical specifications selected:

- For medium-voltage switchboards: selection of the required system and the required fields, then presentation of a front view with dimensions.
- After system selection for transformers, the required quantity is selected. Selected transformers are presented as a parts list.
- For low-voltage switchboards and distribution boards: selection of the required protection devices and switching devices per system. The most suitable distribution system is determined automatically based on the list of distribution devices thus created, is equipped with the devices and presented graphically in an automatically generated front view including dimensions.
- After system selection for busbar trunking systems: specification of the length and selection of the additionally required components, e.g. infeeds, junction units and tap-off units. All the resulting components are listed in a parts list.

Detailed information about Siemens units or their article numbers are not needed because SIMARIS project makes the selection automatically on the basis of the parameters entered. For each item of switchboard or each distribution board, SIMARIS project takes the wiring, control and measurement etc. into account.

A system plan drawn up in SIMARIS design can also be imported into SIMARIS project, which means that selecting devices becomes redundant and SIMARIS project builds up the project structure automatically.

Convenient output variants are available to document the results, including the automatic generation of specifications for the planned systems.

Typical versions of a system planned with SIMARIS project can be saved and imported continually into new projects from the favorites library. Automatically created systems can also be subsequently optimized or changed. This is particularly relevant if planning becomes more detailed and the budget needs to be reinforced as a result.

For detailed calculation of costs – on an up-to-date and regional basis – and for more project support please contact your Siemens representative.

Benefits

- Intuitive and easy to operate
- Automatic selection and placement of matching distribution systems
- Fast calculation of space requirements and budget for electrical power distribution systems
- Seamless planning, from the medium-voltage switchboard through transformers, low-voltage switchboards and busbar trunking systems to the distribution boards
- Easy adaptation of planning as requirements become more concrete in the course of a project, and also in the event of changes in use or expansion of the systems
- Saving planned systems for similar projects individually in the favorites library and importing them from there into new projects
- Possibility of providing for the necessary maintenance of functions for busbar systems
- Convenient output types for documentation purposes, such as graphic views, lists and specifications
- Importing of a project drawn up in SIMARIS design

Application

SIMARIS project is suitable for quickly establishing space requirements and budget, and for preparing specifications for electrical power distribution systems in non-residential and industrial buildings. From shopping malls to hospitals and production buildings – with SIMARIS project it is possible to considerably reduce the amount of work required for the overall planning of power distribution systems and hence the time spent on selecting and dimensioning the necessary equipment.

More information

You can find more information and downloads on the Internet at:
www.siemens.com/simarisproject

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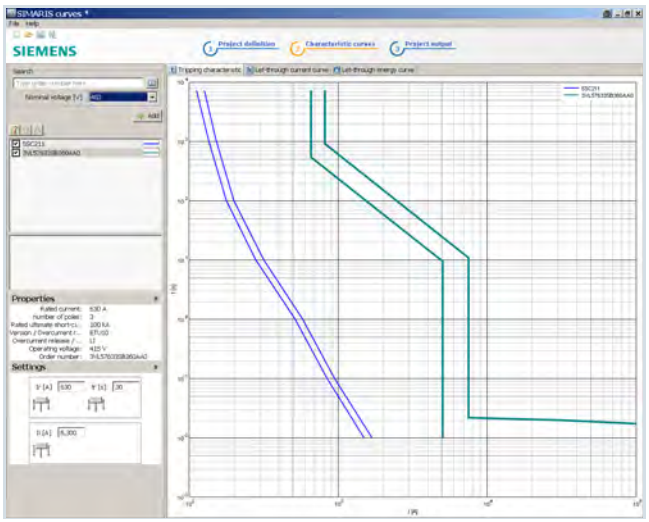
SIMARIS curves

Overview



SIMARIS curves is a planning tool for visualizing and evaluating characteristic curves of Siemens low-voltage protection equipment and fuses (IEC) quickly and easily, including the possibility of simulating instrument settings.

With SIMARIS curves it is possible to simulate parameter settings on protective devices. The respective characteristic curve is selected by direct entry of the Siemens article number, or with the aid of a user-friendly selection tool by entering known technical specifications. Individual products with default attributes can be stored as favorites and called up again.

In addition to simply displaying tripping characteristics with tolerance ranges, it is also possible to simulate parameter settings for the subsequent setting of the devices. In addition, the associated let-through current and let-through power characteristics can be displayed. A printout summary documents the characteristic curves selected and each of their settings.

Benefits

- Visualization and evaluation of tripping characteristics of low-voltage protection equipment and fuses (IEC), including the possibility of simulating instrument settings
- Visualization of let-through current and let-through power characteristics
- Clear product selection using article numbers or with the aid of technical specifications in the selection tool
- Saving of selected devices as favorites
- Saving of several characteristic curves including settings as complete project
- Country-specific product ranges taken into account
- User-friendly documentation
- SIMARIS curves is available both as a PC version and also as an app for use on a tablet PC or a smartphone

Application

SIMARIS curves is suitable for displaying tripping characteristics, let-through current and let-through power characteristics of Siemens low-voltage protective equipment and fuses.

From shopping malls through hospitals to production buildings – SIMARIS curves lets you call up the devices required and their characteristic curves quickly and documents them accordingly.

More information

You can find more information and downloads on the Internet at:

www.siemens.com/simariscurves

If you have any questions, please contact our Siemens Customer Support Center:

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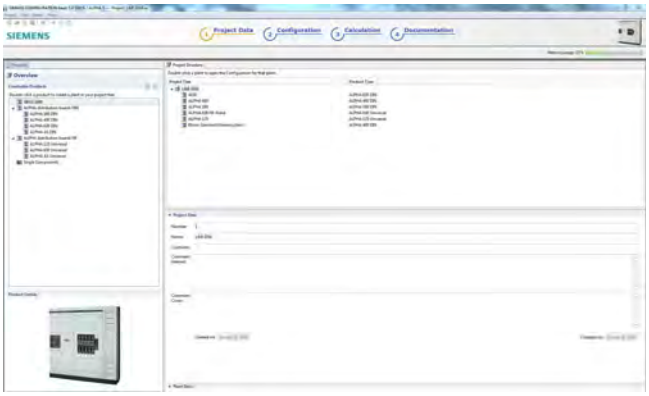
Overview

Easy generation of quotations

SIMARIS ConFiguration Basic is designed to support control cabinet builders and installation engineers with configuration of ALPHA distribution boards up to SIVACON S4 low-voltage switchboards and with generation of corresponding quotations.

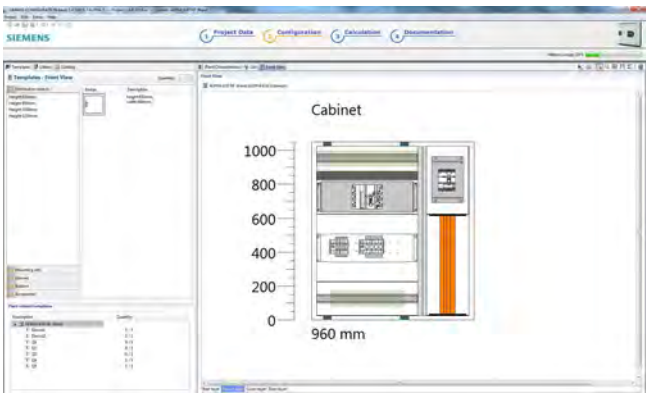
1. Project data

A project can comprise several subsystems with different technical data. A subsystem is made up of one or several sections.



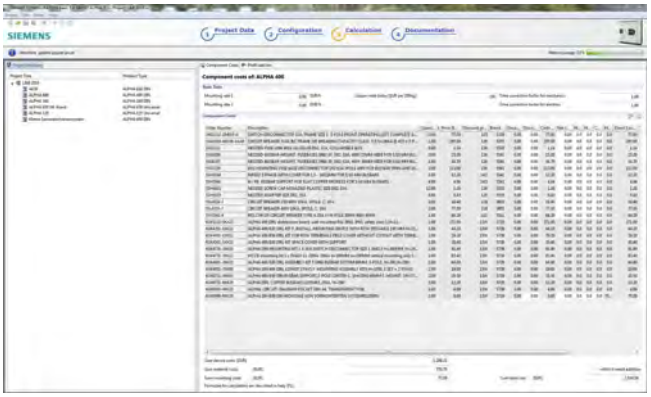
2. Configuration

SIMARIS ConFiguration Basic enables selection of devices for main and control circuits. The automatic placement function is used to create a system configuration. The configuration can be further processed in the graphics display, i. e. it can be shifted, deleted or supplemented. The graphics display of the sections and the auxiliary functions such as the library function, the template function and the copy function enable efficient working without detailed system knowledge.



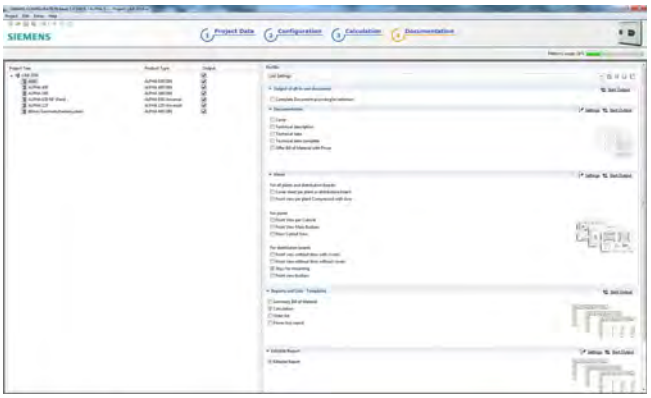
3. Calculation

Pricing is possible in SIMARIS CFB using databases for list prices, discounts, installation times and numerous factors and surcharges. Easy-to-use import and export functions enable comparison with the legacy databases of goods management systems.



4. Documentation

SIMARIS ConFiguration Basic offers extensive output options for system descriptions in text format, views of individual sections and systems as CAD graphics, and parts lists in any configuration in tabular format.



Benefits

- Integrated product database, updating by download
- Rule-based configuration through selection of product-dependent features
- Detailed knowledge of products and systems not required
- Easy implementation of changes in the quotation and realization phase
- Comprehensive output options
- Distribution board and power distribution board in one software tool

More information

You can find more information and downloads on the Internet at:

www.siemens.com/scfb

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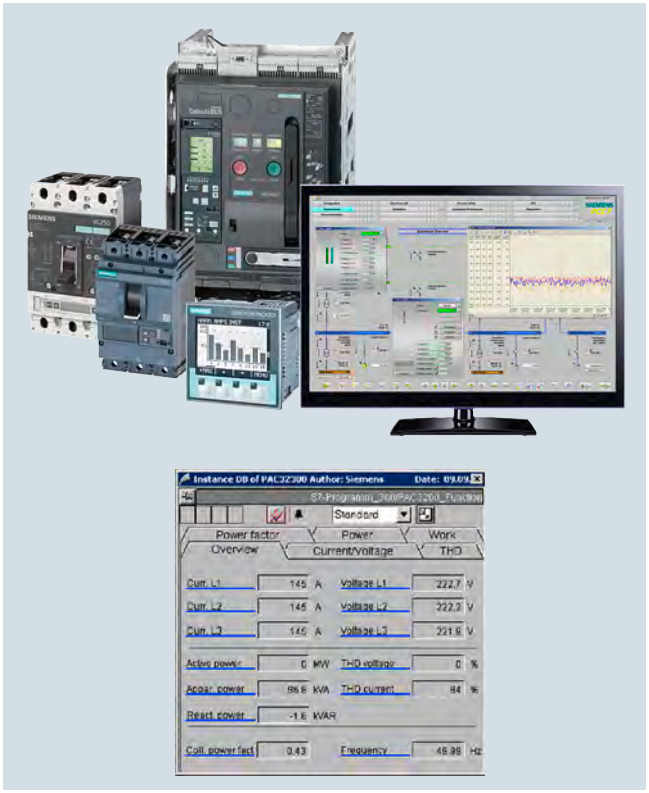
Overview



PAC/3WL/3VA Library for SIMATIC PCS 7

The PAC/3WL/3VA function block library enables seamless integration of 3WL/3VA/3VL circuit breakers and 7KM PAC3200/4200 measuring devices into the PCS 7 process world.

Library 7KM PAC3200 for SIMATIC WinCC

The function block libraries enable seamless integration of the 7KM PAC3200/4200 measuring devices into WinCC.

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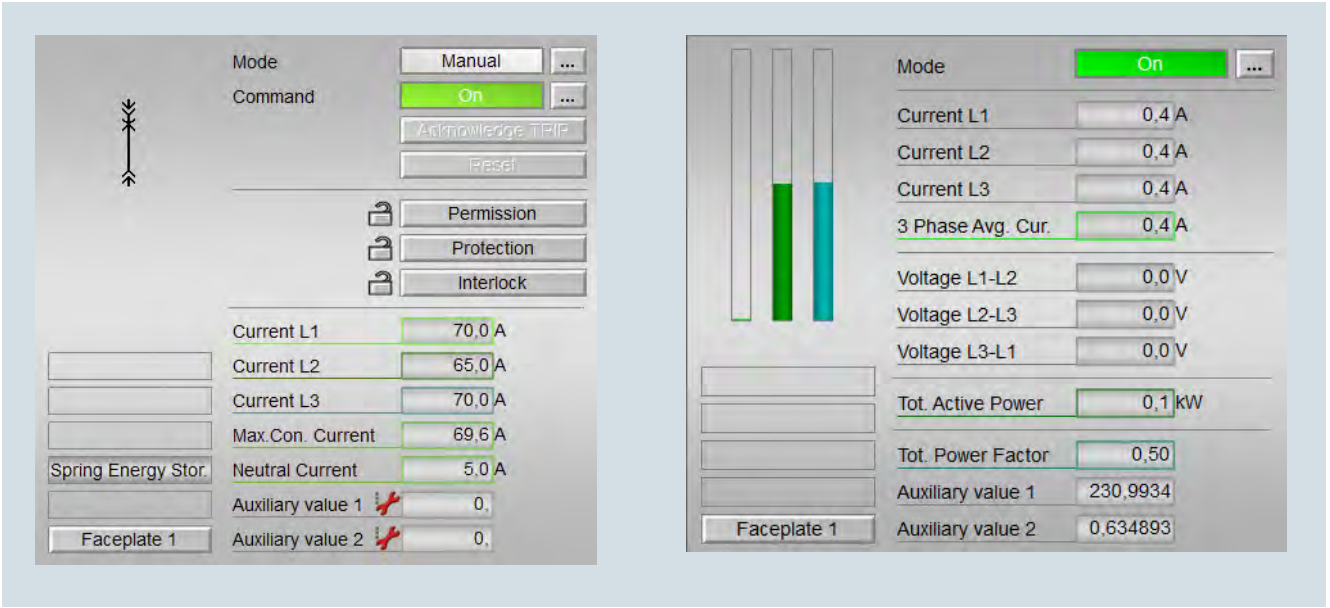
Overview



Faceplates for circuit breakers (left) and measuring devices (right)

With a driver block, diagnostics block and faceplates, the PAC/3WL/3VA function block library for SIMATIC PCS 7 enables seamless integration of 3WL/3VA/3VL circuit breakers and 7KM PAC3200/4200 measuring devices into the SIMATIC PCS 7 process control system.

The blocks that run in the CPUs of the controllers supply the faceplates in the operator stations of the process control system with, for example, energy and status data, and they generate signals and manage the connection to the SIMATIC PCS 7 Maintenance Station.

Note:

The PAC/3WL/3VA Library for SIMATIC PCS 7 can be used together with SIMATIC PCS 7 V7.1, V8.0 and V8.1. It supports all operating systems of these system versions.

Faceplates

The faceplates of the PAC/3WL/3VA function block library for SIMATIC PCS 7 are used in the operator stations of the process control system as the user interface for the supported measuring devices and circuit breakers. The technologically relevant values and functions of these devices can thus be displayed and operated as SIMATIC PCS 7 objects.

System-side bidirectional communication connections between faceplates and blocks, as well as between blocks, measuring devices and circuit breakers, support display of values in the faceplates and forwarding of input data to the devices.

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Benefits

- Full integration of the 7KM PAC3200/4200 measuring devices and 3WL/3VA/3VL circuit breakers into the SIMATIC PCS 7 process control system
- Connection of all devices via PROFIBUS DPV1 possible
- 7KM PAC3200/4200 measuring devices and 3VA circuit breakers can also be integrated via PROFINET
- 7KM PAC4200 measuring device can be used within the function range of the 7KM PAC3200 measuring device
- Cyclic and acyclic communication (for pure visualization tasks)
- Inputting limit values for monitoring through the driver block
- Resetting values on the device (min/max values)
- Remote switching of the 3WL and 3VL circuit breakers
- Device monitoring and readout of maintenance information
- Automatic information in case of overload, short-circuit and faults
- Reading out and displaying device data

Application

The PAC/3WL/3VA Library for SIMATIC PCS 7 is used in all industries where PCS 7 is used. Full integration in PCS 7 means that there is no need for a special system environment. Predefined modules and symbols give you the assurance of building on tested and certified product components.

For challenging measurements the 7KM PAC4200 can also be used in the functional scope of the 7KM PAC3200.

In addition to the cyclic connection, there is also an acyclic connection for pure visualization tasks. The process image of the SIMATIC CPUs can be used more efficiently with the acyclic connection.

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Selection and ordering data

SIMATIC PCS 7 V 8.0, V 8.1, SIMATIC PCS 7 V 7.1

Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Function block library for 7KM PAC3200/4200 measuring devices and 3WL/3VA/3VL circuit breakers [1]							
PAC/3WL/3VA Library for SIMATIC PCS 7 • AS blocks and faceplates for integrating the 3WL/3VA/3VL circuit breakers into SIMATIC PCS 7 V7.1, V8.0 and V8.1 (one required for each SIMATIC PCS 7 Operator Station of the single station/server version), with: - Engineering license for one SIMATIC PCS 7 Operator Station of the single station/server version - Runtime license for one automation system (1 required per automation system, further AS runtime licenses can be ordered separately) • Engineering and runtime software, software class A, 2-language (German, English), single license for one installation • Type of delivery: Software and electronic documentation on CD, engineering and runtime license as Certificate of License		3ZS2787-1CC30-0YG0		1	1 unit	1DD	0.100
AS Runtime license for PAC/3WL/3VA Library for SIMATIC PCS 7 • For one automation system in each case • Runtime software, software class A, 2-language (German, English), single license for one installation • Type of delivery: Runtime license as Certificate of License without software and documentation		3ZS2787-1CC30-6YH0		1	1 unit	1DD	0.100

[1] For currently supported SIMATIC PCS 7 versions, see http:/support.automation.siemens.com

More information

Send support requests to

Siemens AG
Energy Management Division
Low Voltage & Products
Nuremberg
Tel.: +49 911 895-7222
Fax: +49 911 895-7223

www.siemens.com/lowvoltage/technical-support

You can find more information on the Internet at:

www.siemens.com/lowvoltage

* You can order this quantity or a multiple thereof.

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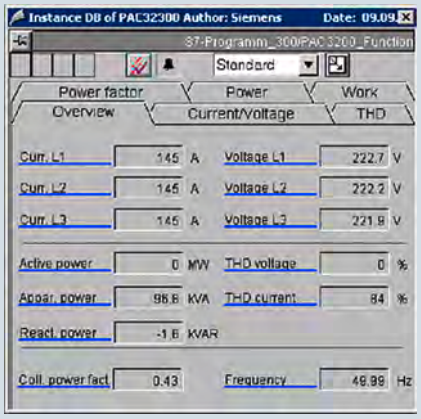
Overview



Library 7KM PAC3200 for SIMATIC WinCC is a function block library for the 7KM PAC3200 and 7KM PAC4200 measuring devices. It enables the seamless integration of the measuring devices into the WinCC process world.

Library 7KM PAC3200 for SIMATIC WinCC comprises a driver block, a diagnostics block and the faceplates. The blocks in the SIMATIC S7 supply energy data to the faceplates in the user interface of WinCC, generate signals and guarantee connection to the maintenance system of WinCC.

Faceplates

Faceplates serve as a user interface for operating and monitoring and enable technologically important values and functions of the 7KM PAC3200/4200 measuring device to be displayed and performed in WinCC.

Both between the faceplates and the function blocks and between the function blocks and the 7KM PAC3200/4200 measuring devices, on the system side there are bidirectional communication connections that support the display of values in the faceplates and the forwarding of input data to the device.

This makes the 7KM PAC3200/4200 measuring devices an integral component of WinCC.

System requirements

Library 7KM PAC3200 for SIMATIC WinCC is released for WinCC V 7.0.

WinCC options AS-OS Engineering and Basic Process Control must be installed. The function block library is available for S7-300, S7-400 and WinAC RTX.

At least one S7 CPU317-2DP is required for use in the S7-300 area. At least one S7 CPU414-2 is required for use in the S7-400 area.

Supported operating systems are the same as for SIMATIC WinCC.

Benefits

- Full integration of the 7KM PAC3200/4200 measuring devices in SIMATIC WinCC through PROFIBUS DPV1. The library is a certified optional add-on for WinCC
- Reading out and displaying device data
- Inputting limit values for monitoring through the driver block
- Resetting values on the device (min/max values)

Application

Library 7KM PAC3200 for SIMATIC WinCC is used in all areas in which WinCC is used. Predefined function blocks and symbols give you the assurance of building on tested and certified product components.

In addition to the cyclic connection, there is also an acyclic connection for pure visualization tasks. The process image of the SIMATIC CPUs can be used more efficiently with the acyclic connection.

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Selection and ordering data

SIMATIC WinCC V 7.0 and V7.2

Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Library 7KM PAC3200 for SIMATIC WinCC [1]							
Engineering license • For operation on one WinCC OS (single workstation system or server) and an automation system (AS). • When using additional WinCC OS devices, you need an engineering license for each WinCC OS.		3ZS2791-1CC11-0YG0		1	1 unit	1DD	0.211
Runtime license • For operation on an additional AS		3ZS2791-1CC10-6YH0		1	1 unit	1DD	0.011

[1] Can also be used for 7KM PAC4200.
Currently supported SIMATIC WinCC versions, see http://support.automation.siemens.com.

*** You can order this quantity or a multiple thereof.**

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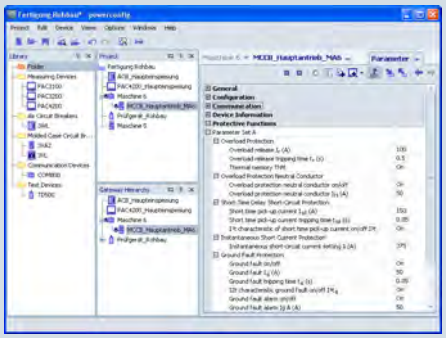
Overview



powermanager

Together with the 7KT/7KM PAC measuring devices, the powermanager power monitoring software forms the technical basis for a corporate energy management system in accordance with ISO 50001, and these are some of the functions it offers:

- Identifying savings potential
- Transparency of energy flows
- Cutting energy costs
- Ensuring power availability

powerconfig

Commissioning and service tool for communication-capable measuring devices and circuit breakers from the SENTRON product family with the following advantages:

- Facilitates parameterization of the devices, resulting in considerable time savings, particularly when several devices have to be set up.
- With powerconfig, the 3WL, 3VA, 3VL circuit breakers and the 7KM PAC3100/3200/4200 measuring devices, as well as the ATC5300 transfer control device can be parameterized, documented, operated and monitored using various communication interfaces, as well as tested in the case of the 3VA.

More information

You can find more information on the Internet at:

www.siemens.com/lowvoltage/powermonitoring

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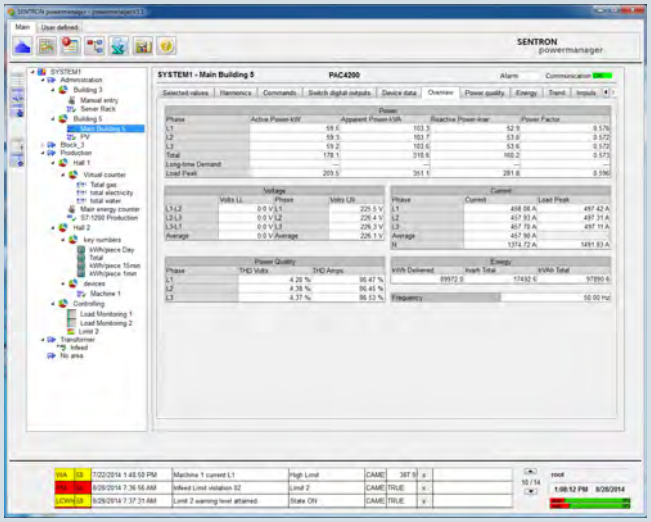
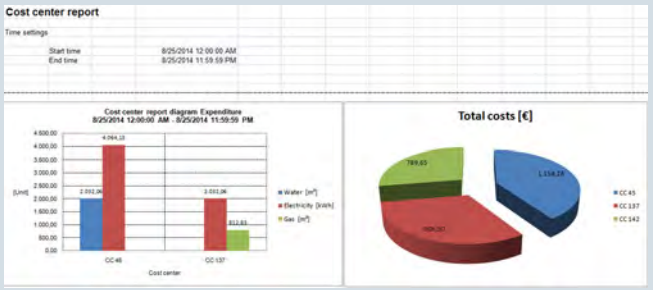
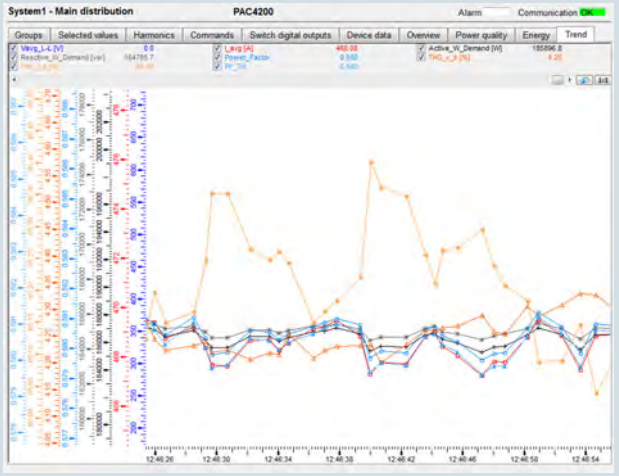
Overview



7KM PAC4200 measuring device view in powermanager.



Cost center reports show consumption and accrued costs for each cost center.



In trend analyses, load peaks can be quickly detected and traced back to individual loads.

The powermanager power monitoring software reliably and precisely processes and monitors the measured data of the 7KT/7KM PAC measuring devices and the communication-capable 3WL/3VA/3VL circuit breakers. Potential energy savings can be identified thanks to the transparency of the energy flows.

The power monitoring software has been tested by the TÜV Rheinland, Germany, for its suitability to support an energy management system in accordance with ISO 50001.

The new version of the power monitoring software offers improved scalability, enhanced report templates, response plans, dimension parameterization, and virtual measuring points for calculating customer-specific parameters. Another innovative feature is: load monitoring, which can be used to monitor preset power limits for freely definable time periods. The system outputs appropriate switching recommendations when a limit is about to be exceeded. Remote switching of circuit breakers is also possible.

Benefits

- Transparency of energy flows
- Exact knowledge of the consumption profile
- Increased power efficiency
- Optimization of power supply agreements
- Compliance with contractual terms
- Allocation of power costs to cost centers
- Optimization of plant maintenance
- Identification of critical plant conditions

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Application

Basic license (standard package, basic package)

The basic license of the powermanager power monitoring software offers the following basic functionality:

- Collection of measured quantities from the devices
- Presentation of the measured quantities from the devices in a predefined standard view for the 7KT PAC1500, 7KM PAC3100, 7KM PAC3200, 7KM PAC4200 and PAC5100 measuring devices, the PAC5200 measuring devices for power supply quality, and the 3WL/3VA/3VL circuit breakers
- Free presentation of measured quantities possible, including from non-Siemens measuring devices using generic Modbus drivers
- Archiving of measured quantities
- Monitoring of status and limits, with generation of corresponding signals
- Load curve display for visualizing the archived data and online data
- Cost center reports based on predefined tariffs and archived consumption data
- OPC server
- User administration
- Load monitoring for complying with power limits
- Virtual computation

Standard package and option packs

Even in the standard package, powermanager covers the normal requirements. This package provides users with easy-to-operate power monitoring software which enables the data detected by the measuring devices to be read out, displayed, archived, monitored and processed in basic analyses, such as cost center allocation, consumption comparison, and duration curve presentation. Reporting is Excel-based and easy to use. The data is accessible here either via a web view using standard web browsers, or via the engineering client within the scope of a full installation.

The "Expert" option pack gives users full flexibility for presentation of individual graphical interfaces (e.g. single line presentations). E-mails and SMS texts can be sent automatically, and users can develop their own scripts for any functions.

The number of available web and engineering clients can be expanded with the "Client" option pack. The maximum number here is 256.

With the "Distributed Systems" option pack it is possible to connect several distributed powermanager servers to form one complete system. This means, firstly, that distributed sites can be managed from a single location and, secondly, that the number of usable devices can thus be increased.

The system is, of course, expandable to the extent that it allows the customer to begin with the basic functionality of the powermanager, and then expand the system with the option packs at a later date. Existing data and configurations can still be used after upgrading.

The same also applies as regards the number of devices, which can be increased at any time.

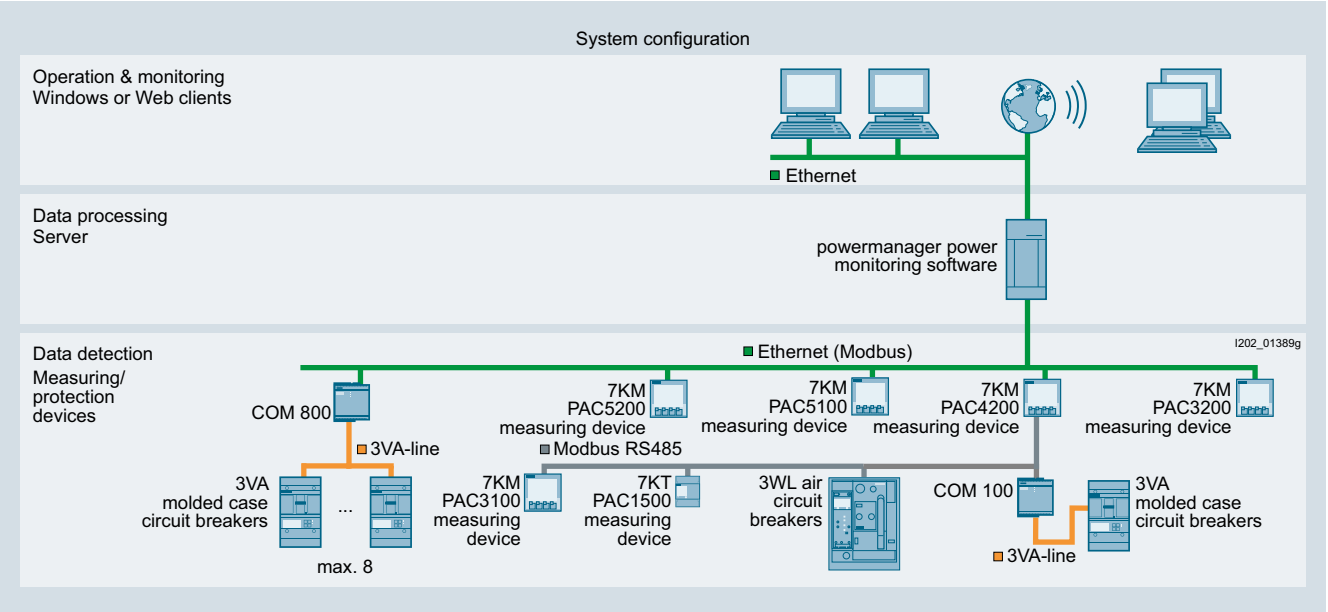
Industries

An energy-efficient production system enhances both the image and the productivity of a company, and thus its competitiveness.

Power monitoring as the technical basis for energy management for increasing a company's energy efficiency is thus of interest to all areas, from industrial applications to infrastructure, and buildings in the service sector.

System configuration

- Integration of measuring devices by means of predefined device templates for the 7KT/7KM PAC measuring devices and the 3WL/3VA/3VL circuit breakers
- Integration of existing Modbus-capable detecting devices is easy
- Communication via standard Ethernet (Modbus TCP)
- Integration of devices with RS485 interface (ModbusRTU) through Modbus gateway, e.g. the 7KM PAC4200 measuring device can be used as the gateway



Typical topology of a power monitoring system

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Selection and ordering data

Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
powermanager V3.2							
• **Basic package** Full product license up to 10 devices, installation for client/server, web access		3ZS2711-0CC30-0YA0		1	1 unit	1DD	0.222
• **Trial license** up to 10 devices including "Expert" and "Web" option packs Full product license limited to 60 days		3ZS2711-0CC30-0YA7		1	1 unit	1DD	0.213
V3.x device expansions							
• **Device pack (20)** device expansion license for up to 20 devices		3ZS2711-0CC30-0YD0		1	1 unit	1DD	0.139
• **Device pack (50)** Device expansion license for up to 50 devices		3ZS2712-0CC30-0YD0		1	1 unit	1DD	0.123
• **Device pack (100)** device expansion license for up to 100 devices		3ZS2713-0CC30-0YD0		1	1 unit	1DD	0.140
• **Device pack (200)** Device expansion license for up to 200 devices		3ZS2714-0CC30-0YD0		1	1 unit	1DD	0.141
• **Device pack (500)** Device expansion license for up to 500 devices		3ZS2715-0CC30-0YD0		1	1 unit	1DD	0.144
• **Device pack (1000)** Device expansion license for up to 1000 devices		3ZS2716-0CC30-0YD0		1	1 unit	1DD	0.133
Option packs							
• **Option pack "Expert"** Option for creating/presenting any number of freely configured images		3ZS2710-2CC20-0YH0		1	1 unit	1DD	0.142
• **Option pack "Client (5)"** Expansion for up to 5 clients		3ZS2710-3CC00-0YD0		1	1 unit	1DD	0.140
• **Option pack "Distributed Systems (2)"** Option for connection of 2 autonomous powermanager systems for the exchange of measured values and alarms		3ZS2718-1CC00-0YH0		1	1 unit	1DD	0.142
• **"Distributed Systems (5)" option pack** Option for the connection of 5 autonomous powermanager systems for the exchange of measured values and alarms		3ZS2718-2CC00-0YH0		1	1 unit	1DD	0.142
• **Option package "Distributed Systems (10)"** Option for the connection of 10 autonomous powermanager systems for the exchange of measured values and alarms		3ZS2718-3CC00-0YH0		1	1 unit	1DD	0.145
Update powermanager V2.0 to V3.2							
• **Update license** from V2.0 Lean to V3.2 (10)		3ZS2711-0CC30-0YE0		1	1 unit	1DD	0.234
• **Update license** from V2.0 Standard to V3.2 (50)		3ZS2712-0CC30-0YE0		1	1 unit	1DD	0.227
• **Update license** from V2.0 Advanced to V3.2 (100)		3ZS2713-0CC30-0YE0		1	1 unit	1DD	0.231
• **Update license** from V2.0 Maximum to V3.2 (200)		3ZS2714-0CC30-0YE0		1	1 unit	1DD	0.226
System packages							
• **System 1** Package comprising - 1 x powermanager Basic Package - 1 x 7KM PAC4200 (+RS 485 module) and - 1 x 7KM PAC3100		3ZS2812-5CC20-0AY0		1	1 unit	1DD	1.310
• **System 2** Package comprising - 1 x powermanager Basic Package - 1 x 7KM PAC4200 (+RS 485 module) and - 1 x 7KT PAC1500 (+Modbus module)		3ZS2812-6CC20-0YA0		1	1 unit	1DD	1.230
• **System 3** Package comprising - 1 x powermanager Basic Package - 3 x 7KM PAC 3200		3ZS2813-2CC20-0YA0		1	1 unit	1DD	1.610

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More information

System packages

The powermanager system packages are an easy and low-cost way to get started in a power monitoring system. At the same time the system provides a good basis for additional expansion using numerous 7KM/7KT PAC measuring devices and/or further extended versions of powermanager.

The following system packages are available:

- powermanager System 1 for applications in infrastructure, comprising:
  - powermanager Basic Package (3ZS2711-0CC30-0YA0)
  - 7KM PAC4200 (7KM4212-0BA00-3AA0)
  - 7KM PAC3100 (7KM3133-0BA00-3AA0)
  - 7KM PAC RS 485 (7KM9300-0AM00-0AA0)
- powermanager System 2 for applications in buildings, comprising:
  - powermanager Basic Package (3ZS2711-0CC30-0YA0)
  - 7KM PAC4200 (7KM4212-0BA00-3AA0)
  - 7KT PAC1500 (7KT1540)
  - 7KM PAC RS 485 (7KM9300-0AM00-0AA0)
  - 7KT PAC RS 485 (7KT1907)
- powermanager System 3 for applications in industry, comprising:
  - powermanager Basic Package (3ZS2711-0CC30-0YA0)
  - 3x 7KM PAC3200 (7KM2112-0BA00-3AA0)

System requirements

Hardware requirements

- Processor: Intel core i3, 2 GHz (or higher)
- RAM: at least 2 GB
- Hard disk: at least 10 GB free
- Graphics: VGA with at least 1280 x 1024 pixels and 16-bit color intensity

Supported operating systems

- Windows 8.1: Enterprise (64-bit)
- Windows 7: Ultimate/Enterprise/Professional with SP1 (64-bit)
- Windows Server 2012: Server 2012 (64-bit)
- Windows Server 2008 R2: Server 2008 R2 (64-bit)

Supported Excel versions (required for reporting)

Excel 2007 (32-bit), Excel 2010 (32-bit), Excel 2013 (32-bit)

Internet

For the free download for powermanager trial license, see http://support.automation.siemens.com/WW/view/en/64850998

For more information, see www.siemens.com/powermanager.

TÜV Certificate of Conformity with ISO 50001

The TÜV Certificate of Conformity confirms that 7KM/KT PAC measuring devices, 3VL molded case circuit breakers, 3WL air circuit breakers and the powermanager power monitoring software support the introduction of a corporate power management system in accordance with ISO 50001. The energy saving standard ISO 50001 provides companies with a definition of compulsory criteria for sustainable energy management.

The TÜV certificate is available from

www.siemens.com/tuev-certificate-of-conformity

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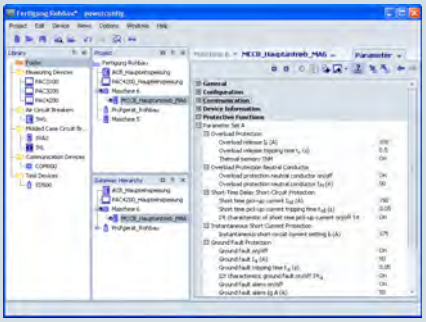
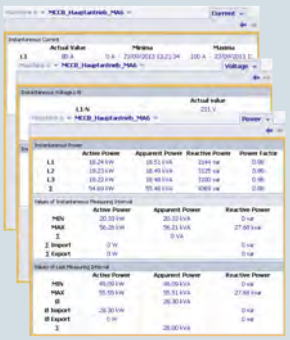
Overview

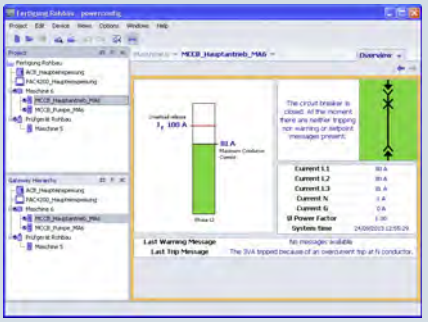
The powerconfig software for commissioning	
	Software tool for the efficient commissioning and diagnosis of communication-capable SENTRON components
License	Free use
Supported devices	7KM PAC3100/3200/4200 measuring devices, incl. expansion modules 3WL/3VL/3VA/ATC5300 circuit breakers
General range of functions	The PC-based tool facilitates parameterization of the devices, resulting in substantial time savings, particularly when several devices have to be set up. The device settings can be stored in the PC and printed out. The tool enables monitoring of instantaneous measured quantities, which can be printed out if required. Execution of specific device functions, such as resetting of devices and setting of energy counters
Supported languages	German, English, Chinese, Spanish, Portuguese
Service functions	Firmware updates and switching of language packs for 7KM PAC measuring devices
Functional scope with 7KM PAC4200 and 3VA	Readout of data stored in the device (events; load profile history; daily energy counters), which are saved in csv format



Setting of parameter values



Display of actual measured quantities



Display of the circuit breaker state

The powerconfig software is the combined commissioning and service tool for communication-capable measuring devices and circuit breakers from the SENTRON product family.
The PC-based tool facilitates parameterization of the devices, resulting in substantial time savings, particularly when several devices have to be set up.

With powerconfig, the 3WL, 3VA and 3VL circuit breakers and the 7KM PAC 3100/3200/4200 measuring devices with expansion modules and the ATC5300 transfer control device can be parameterized, documented, operated, and monitored using various communication interfaces.

Benefits

- Parameterization, documentation, operation and monitoring in one software, and also testing in the case of the 3VA
- User-friendly documentation of measured values and settings
- Clear presentation of the available parameters including validity testing of the inputs
- Display of the available device statuses and measured values in standardized views
- Parameterization of all electronic 3VA2 components, e.g.
  - ETUs 5-series and 8-series
  - COM800/COM100 breaker data servers
  - EFB300 (External Function Box)
- Support of test functions for 3VA2 using the TD500 test device for all ETUs
- Full support for 3WL air circuit breakers, that is, including display and triggering of curve shapes and all other functions
- Support for the ATC5300 transfer control device
- Project-oriented storage of device data
- Consistent operation and usability
- Support of the various communication interfaces (Modbus RTU, Modbus TCP, PROFIBUS, PROFINET)
- Communication with the 3VA2 circuit breaker via the TD500 at the USB interface, as a further possibility for Modbus TCP, PROFIBUS and PROFINET
- Supported languages: German, English, Chinese, Spanish, and Portuguese
- Read-out and saving of message lists, load profiles and characteristic curves (device-dependent)
- Overview of circuit breaker states with currents and events
- Individually designable system documentation
- Update of the device firmware and loading of language packs (device-dependent)
- No programming knowledge required for operation
- powerconfig can be started on the PC as follows, with communication possible via PROFIBUS and PROFINET:
  - Directly from Windows
  - From STEP 7, V5.5 SP1
  - From TIA Portal with STEP 7 V13

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Application

System requirements

Hardware requirements

- Processor: Intel Pentium III, 1 GHz (or higher)
- RAM: at least 512 MB
- Hard disk: at least 1 GB free
- Color monitor with a minimum resolution of 1024 x 768 pixels

Supported operating systems

- Windows XP: XP with SP3 (32 bit)
- Windows 7 Professional SP1 (32 bit, 64 bit)
- Windows 7 Ultimate SP1 (32 bit, 64 bit)
- Windows 2008 Server (32 bit)
- Windows 8.1 (64 bit)

Required framework

- Microsoft .NET Framework acc. to readme file, currently V4.0

More information

powerconfig is available free of charge at
http://support.automation.siemens.com/WW/view/en/63452759
You can find more information on the Internet at:
www.siemens.com/sentron

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14/2 **Introduction**

SIVACON S8 power distribution boards and motor control centers

14/4 General data

SIVACON S4 power distribution boards

14/6 System overview
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Frame and enclosure

Frame
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14/77 3K switch disconnectors
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14/81 3NJ4 in-line fuse switch disconnectors
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ALPHA modular installation system
14/112 Frame
14/114 Enclosure

For assembly kits, please refer to Chapters 17.2 to 17.5

Accessories
14/120 Fasteners
14/121 Mechanical accessory parts
14/121 Tools

NEW

Direct reference to the products in the Industry Mall from the selection and ordering data tables:

Article No.
www.siemens.com/product?Article No.
3VA2025-5HL36-0AA0

Paper catalog: To get more product information enter the Web address plus Article No.

PDF catalog: Get more product information with just a mouse click.

For further technical product information:

Siemens Industry Online Support:
www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
Download
FAQ
Manual
Product note
Software archive
Technical data

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Introduction

Overview

SIVACON S8 power distribution boards and motor control centers up to 7000 A
Reliable, economical, flexible and communication-capable
For all applications in infrastructure and process industry
In circuit breaker design
In 3NJ4 in-line design, fixed-mounted
In 3NJ6 in-line design, plugged in
In fixed-mounted design (infrastructure)
In universal mounting design for the combination of: • Withdrawable unit design • Fixed-mounted design • 3NJ6 in-line design, plugged in
Degree of protection up to IP54
Design-verified according to IEC 61439-1/2 (type-tested according to IEC 60439-1)
Tested for resistance to internal arcing faults in compliance with IEC/TR 61641
Tested for resistance to earthquakes
Approval for marine and offshore applications

SIVACON S4 power distribution boards up to 4000 A
Reliable, economical and flexible for all infrastructure applications
Flexible module system for • 3WL circuit breaker design • 3VA, 3VL, 3VT molded case circuit breakers • 3NJ4 in-line design - fixed • 3NJ6 in-line design - plugged in • Modular devices • ALPHA 8GK modular installation system • 19" racks • Mounting plates
Degree of protection up to IP55
Form of internal separation up to 4b
Design verification according to IEC 61439-1/2
Main busbar tested for resistance to internal arcing faults in compliance with IEC 61641

For additional specific information, see Catalogue LV 56.

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Design

Low-voltage switchboards form the link between the equipment used to produce electricity (generators), transmit it (cables, overhead lines) and transform it (transformers) on the one hand and loads such as motors, solenoid valves, actuators and devices for heating, lighting and air conditioning on the other.

As the majority of applications are supplied with low voltage, the low-voltage switchboard is of special significance in both public supply systems and industrial plants.

Reliable power supplies depend on good availability, flexibility to allow for changes and process-related modifications, and high operational reliability.

Power distribution in a low-voltage system usually takes place via a main switchboard (power center or main distribution board) and a number of sub-distribution boards. These sub-distribution boards are often motor distribution boards, which are also known as motor control centers (MCC) (see example opposite).

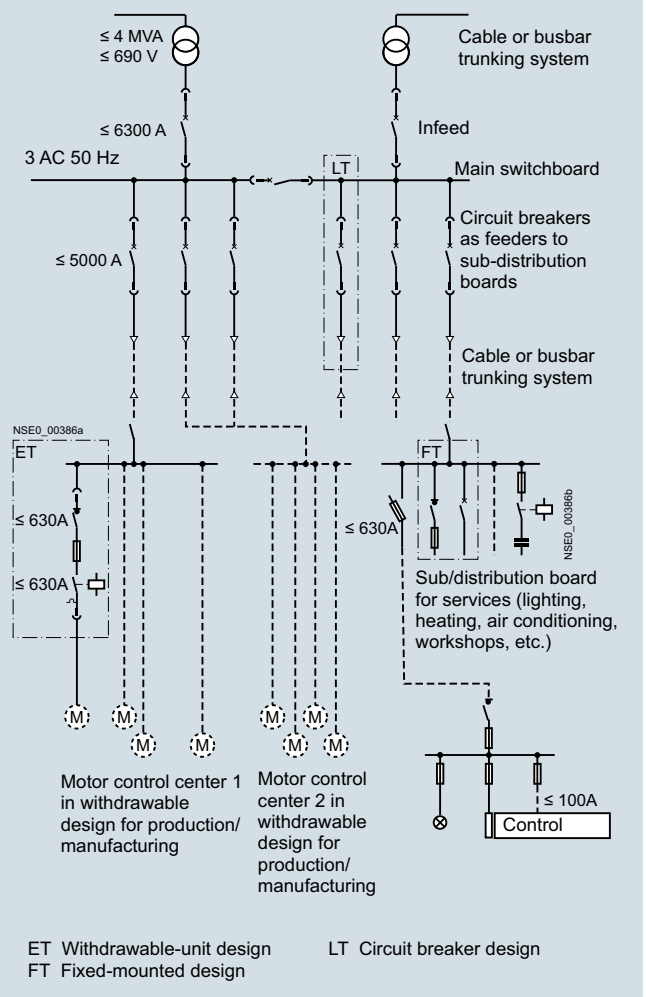
The SIVACON S4 and SIVACON S8 low-voltage power distribution boards offer optimal solutions for applications up to 7000 A.

The SIVACON S8 low-voltage power distribution board is produced by Siemens or nearby by our SIVACON technology partner.

The most important selection criteria are shown in the table below.

You can find more information on the Internet at:

www.siemens.com/sivacon



Power distribution in a low-voltage system

Technical specifications

Selection criteria	SIVACON S8		SIVACON S4	
Busbar position	**Top**	**Rear**	**Top**	**Bottom**
Rated currents				
• Busbars up to	6300 A	7010 A	4000 A	3200 A
• Infeed up to	6300 A	6300 A	4000 A	3200 A
Short-circuit strength				
• Rated short-time withstand current I_{cw} (1 s)	150 kA	150 kA	100 kA	100 kA
• Rated peak withstand current I_{pk}	330 kA	330 kA	220 kA	220 kA
Mounting design				
• Fixed-mounted design	✓[1)]	✓[1)]	✓[1)]	✓[1)]
• In-line design, fixed-mounted	✓	✓	✓	✓
• In-line design, plugged in	✓	✓	✓	✓
• Withdrawable unit design	✓	✓	--	--
Type of installation				
• Free-standing/against wall	✓	✓	✓	✓
• Back to back	✓	✓	✓	✓
• Double-fronted	--	✓	--	--
Use				
• Motor control centers	✓	✓	--	--
• Power distribution boards	✓	✓	✓	✓
Manufactured by SIVACON Technology Partner	✓	✓	--	--

✓ Available
-- Not available

[1)] Circuit breakers optionally in withdrawable unit design or on a plug-in base.

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Overview

SIVACON S8 low-voltage switchboard

The SIVACON S8 low-voltage switchboard sets new standards as a power distribution board or motor control center (MCC) for industrial applications or in infrastructure. The power distribution board system up to 7000 A for simple and consistent distribution of power ensures a high degree of personal and plant safety and, thanks to its optimal design, offers a wide range of possible uses.

SIVACON S8 is custom configured and constructed using design-verified functional modules.

We or our authorized contractual partners take care of the following:

- Customized configuration
- Mechanical and electrical construction
- Verification

Documentation specified by us serves as the basis for our authorized contractual partners.

Standards and regulations

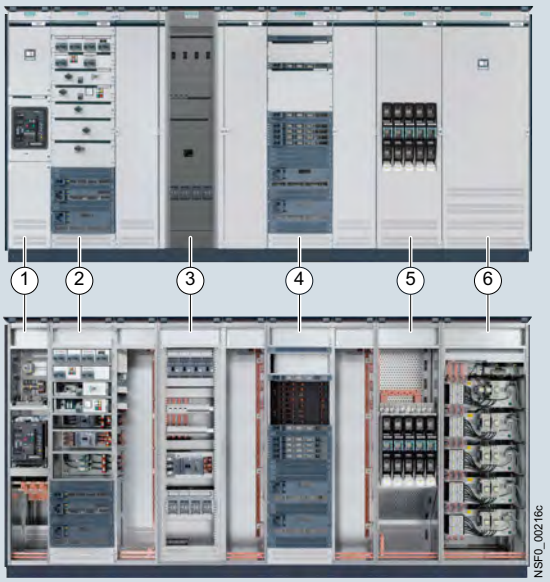
The SIVACON S8 low-voltage power distribution board is a design-verified low-voltage controlgear assembly according to IEC 61439-1/2 (formerly IEC 60439-1 TTA). The switchboard is designed to be resistant to arc faults according to IEC/TR 61641, EN 60439 (VDE 0660 part 500), supplement sheet 2.

SIVACON S8 can be used as a design-verified power distribution board and motor control center up to 7000 A.

Mounting designs

The SIVACON S8 low-voltage power distribution board consists of standardized and typified components which can be flexibly combined as a cost-effective overall solution.

The following mounting designs are available:



(1) Circuit breaker section with 3WL air circuit breakers up to 6300 A or 3V. molded case circuit breakers up to 1600 A
(2) Universal mounting design for motor and cable feeders up to 630 A, withdrawable design with combination options with fixed-mounted design (modular door) and plug-in design
(3) Fixed-mounted design with front covers for cable feeders up to 630 A and modular installation devices
(4) In-line design section, plugged-in, for cable feeders up to 630 A in plug-in design
(5) In-line design section, fixed-mounted, for cable feeders up to 630 A
(6) Reactive power compensation section up to 600 kvar

SIVACON S8 low-voltage power distribution board with standardized and typified components

Universal mounting design

In many applications it is necessary for space reasons to integrate various mounting designs in one and the same section.

The universal mounting design from SIVACON S8 offers high efficiency, safety and high variability through the combination of

- withdrawable design,
- fixed-mounted design with modular doors and
- plug-in design.

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Design

Withdrawable unit design

The flexible withdrawable unit design is suitable for different applications, e.g. as a motor control center. Following features are offered to improve personal and machine safety:

- Uniform operation for all withdrawable unit sizes
- Integrated operating error protection for all withdrawable units
- Unambiguous indication of withdrawable unit positions
- Separate actuation for main control switch and withdrawable unit position
- Test and disconnected position with door closed, without interruption of degree of protection
- Lockable disconnected position
- Withdrawable unit coding prevents swapping of withdrawable units of same size
- Swiveling instrument panel on standard withdrawable units for making settings during operation
- Small withdrawable units for motor and cable feeders up to 63 A

The withdrawable units are ergonomically designed and offer the required flexibility where requirements change frequently. Changing requirements include e.g. a new motor rating or adding new loads.

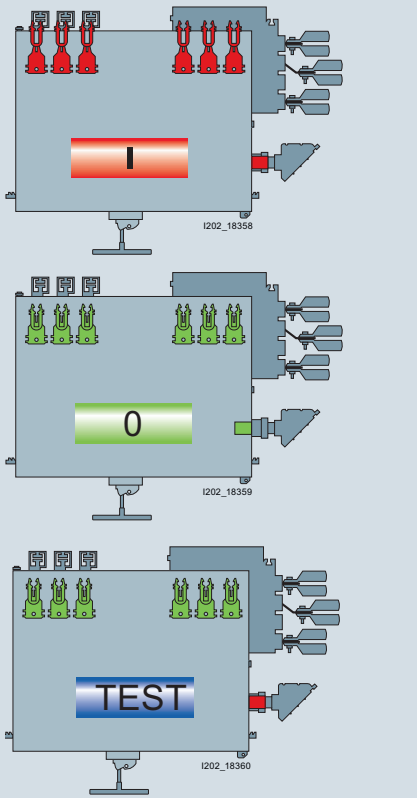
Simple and safe handling as well as fast changeover times ensure the high availability of the plant.

Withdrawable unit positions

Connected position
In the connected position, both power and control contacts are closed.

Disconnected position
Withdrawable units in the disconnected position are disconnected on the line side, the output side, and the control side.

Test position
The test position is used for testing the withdrawable units without load.



Withdrawable unit versions

Small withdrawable units:
- Size ¼ and ½
- Height 150 mm and 200 mm
- Up to 48 withdrawable units per section

Small withdrawable unit size 1/4 (left) and size 1/2 (right)

Standard withdrawable units:
- Height 100 mm to 700 mm
- Up to 18 withdrawable units per section

Standard withdrawable unit

Operating error protection

The operating error protection prevents movement of the isolating contacts with main control switch "ON".

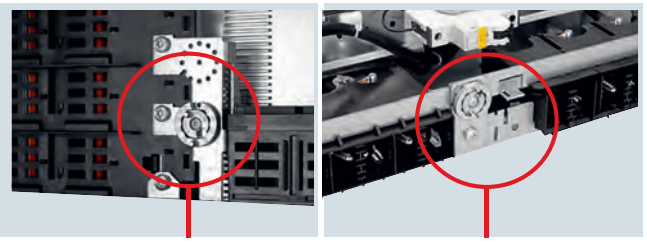
Operating error protection enabled, main control switch in position "0"

Operating error protection disabled, main control switch in position "1"

Lockable disconnected position

Withdrawable unit coding

The mechanical withdrawable unit coding with 96 (optionally up to 9216) coding variants prevents swapping of withdrawable units of the same size.



Withdrawable unit coding in the compartment

Withdrawable unit coding on the unit

More information

More information can be found on the Internet at www.siemens.com/sivacon-S8

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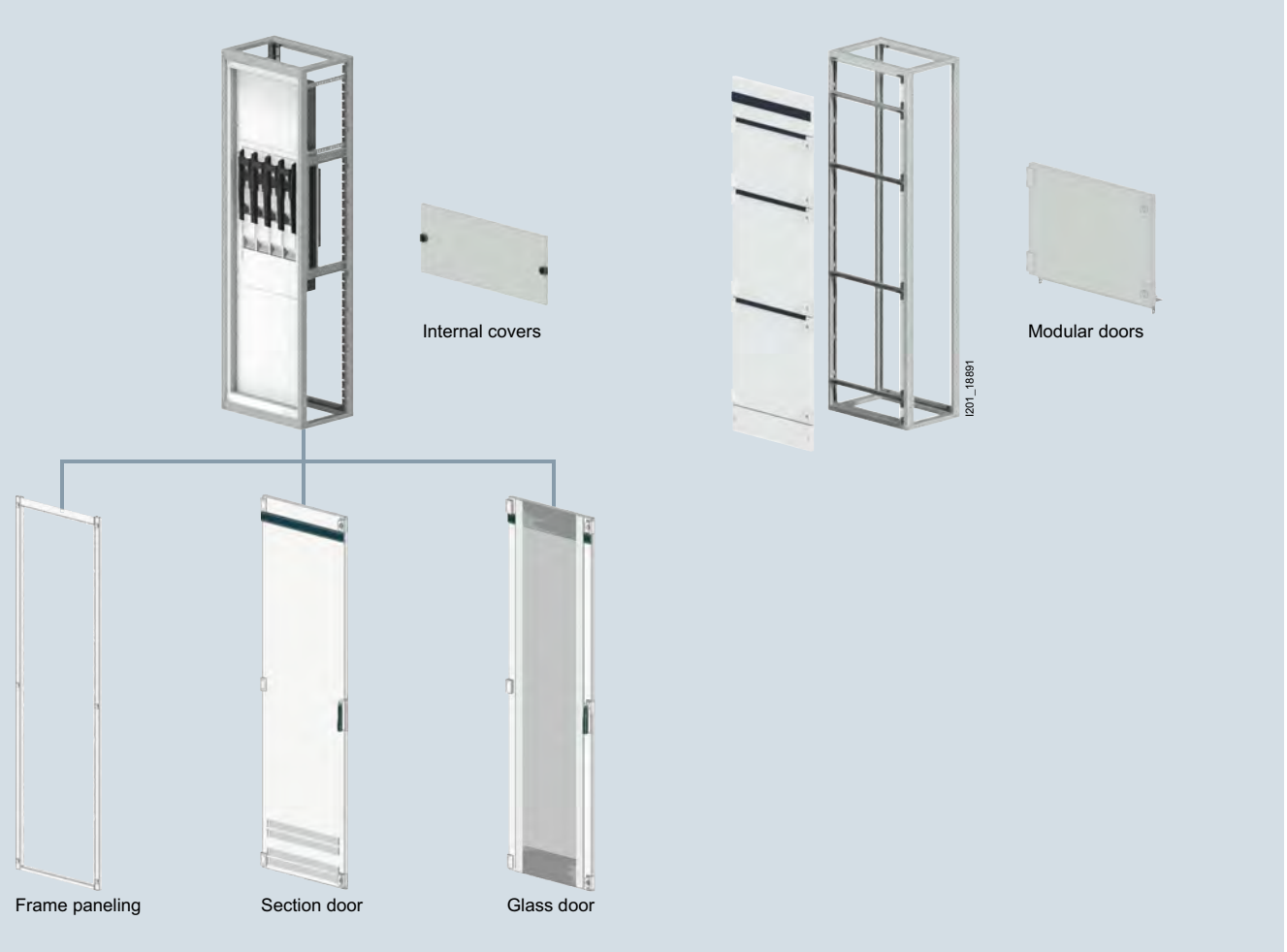
Overview



SIVACON S4 is a switchgear and controlgear system with design verification according to IEC 61439-1/2, for infrastructural power supply applications in administrative and utility buildings, in industrial and service sector facilities, as well as in public buildings such as schools and hospitals. The concept of the SIVACON S4 low-voltage power distribution board is characterized by a high level of personal and plant safety.

SIVACON S4 low-voltage power distribution boards are constructed according to a modular design system. Thanks to the use of requirements-based, standardized and series-produced assembly kits and the wide range of possible combinations offered by SIVACON S4 modular technology, all needs in connection with low-voltage power distribution can be optimally met.

Paneling for control elements

The front paneling can be realized in different ways depending on customers' wishes. Section doors can be additionally fitted with internal covers. In this variant, the devices installed are covered for protection against electric shock hazard even when the door is open. Frame paneling elements enable direct access to control elements.

It is also possible to create a separate compartment with modular doors for each device. Thanks to the various systems, SIVACON S4 can be adapted flexibly to customers' needs.

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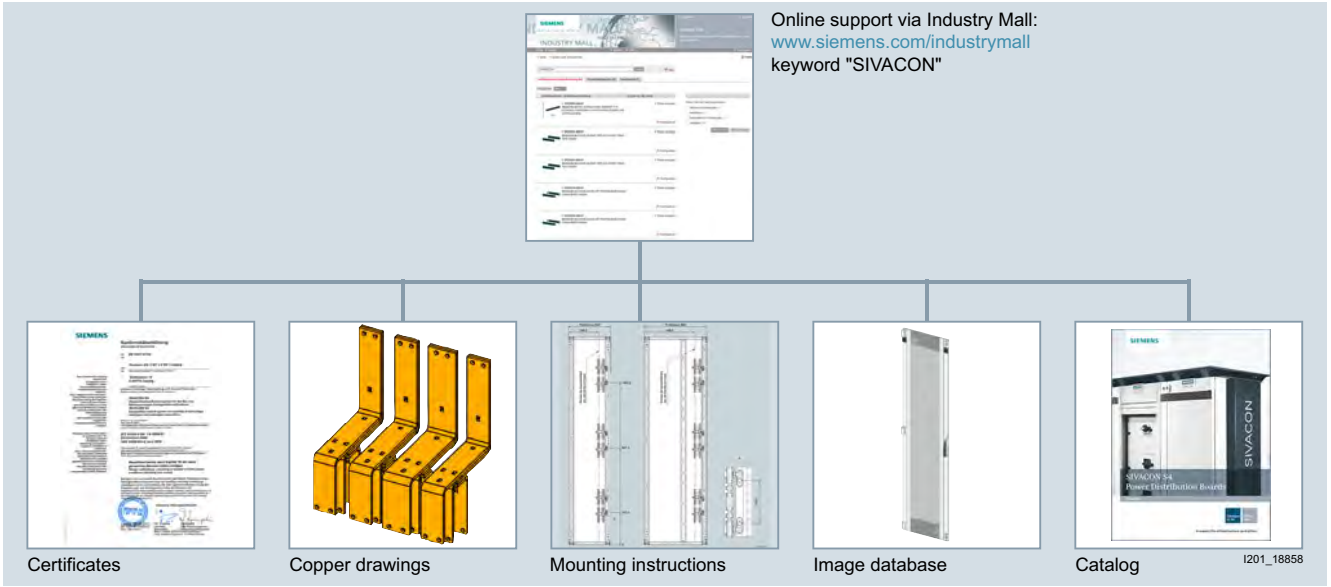
System

SIVACON S4 is a system of low-voltage power distribution boards for indoor use, paneled on four sides by sheet steel, suitable for self-standing or wall-mounted installation.

Online support via Industry Mall

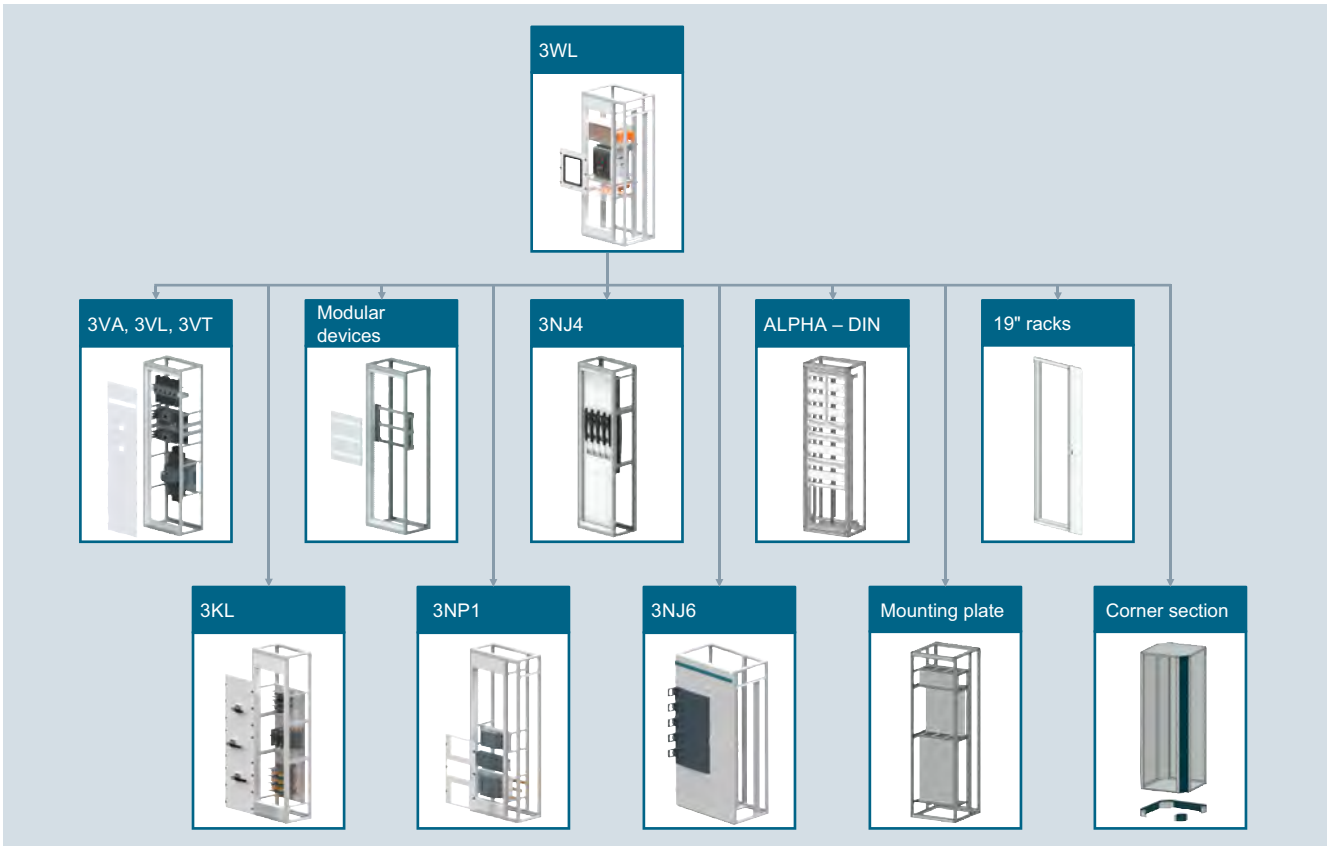
Can be contacted at
www.siemens.com/industrymall

Components for which copper drawings are available in the Industry Mall are marked with the following symbol:



Online support via Industry Mall

Program overview



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Benefits

Features at a glance

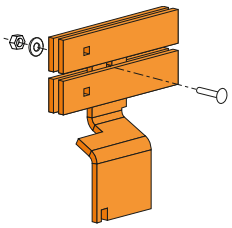
- Controlgear assembly design-verified in accordance with IEC 61439-1/2, EN 61439-1/2
- High flexibility and simple implementation
- Attractive design, innovative ventilation and closing system
- Copper drawings for users' own production of connection modules
- Online support via Industry Mall www.siemens.com/industrymall
- Color RAL 7035
- Doors with universal stops
- Degree of protection IP30, IP31, IP40, IP41 and IP55
- Busbar systems up to 4000 A, I_{cw} up to 100 kA (1 s), I_{pk} up to 220 kA
- Internal separation form 1, 2, 3 and 4
- Easy design and configuration with the SIMARIS CFB software tool
- RoHS-compliant

Construction and testing modalities

Switchboard engineers must observe the manufacturer's construction and mounting instructions when constructing and mounting the low-voltage switchboard.

The installation and individual testing of the low-voltage switchboards must be performed in accordance with IEC 61439-1/2 and EN 61439-1/2.

Innovative busbar concept



The phases of the main busbar always consist of several sub-conductors. This results in the following advantages for the user

- Mounting mostly without the need to drill holes
- Increased current carrying capacity
- Lower use of copper
- Simplified handling of one or more cubicles

Comprehensive product support

- Free configuration software SIMARIS ConFiguration Basic
- SITRAIN training courses - code: LV-SIVA-S4:
- Industry Mall: www.siemens.com/industrymall
- Main catalog LV56: www.siemens.com/LV56

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Overview

Standards and regulations	Design-verified low-voltage switchgear and controlgear assembly	IEC 61439-1/2 EN 61439-1/2
Key electrical data		
	Rated operational voltage (U_e) Type of current Rated frequency	Up to 690 V AC 50/60 Hz
	Rated impulse withstand voltage (U_{imp}) Pollution degree Material group Rated insulation voltage (U_i)	Up to 12 kV 3 II 1000 V
	Rated current (I_n) Rated peak withstand current (I_{pk}) Rated short-time withstand current (I_{cw})	Up to 4000 A Up to 220 kA Up to 100 kA, 1s
Arcing fault testing Main busbar in compliance with IEC 61641	Rated operational voltage Rated short-time alternating current Length of internal arc Length of internal arc with barrier	400 V 50 kA 100 ms 300 ms
Safety class	According to IEC 61140, EN 61140	I
Degree of protection	According to IEC 60529, EN 60529 Ventilated Non-ventilated	 IP30, IP31, IP40, IP41 IP55
Form of internal separation		1 - No separation 2b - Separation, main busbars 3b - Separation, devices 4b - Separation, connections
Resistance to impacts	According to IEC 62262, Paragraph 9.6 Front frame with quick-closing covers Top plate Door, side panel, rear panel	 IK08 IK09 IK10
Static loads on enclosure parts		
Front frame	Swivel Fixed	1.0 kg 5.0 kg
Cover with quick-closing screws	Height 50-300 mm Height 350-550 mm Height 600-800 mm	0.5 kg 1.0 kg 2.0 kg
Inner door		2.5 kg
Section door/double door	Width 400-600 mm Width 800 mm Width 1000-1200 mm	10.0 kg 5.0 kg 2.5 kg
Modular door	Height 150-200 mm Height 250-350 mm Height 400-800 mm	0.5 kg 1.5 kg 3.0 kg
Outer cover		10.0 kg
Max. construction weight According to IEC 62208, Paragraph 9.3, 9.4	Static load	1200 kg
Operating conditions		
Observe correction factors for other conditions		
Ambient temperature Installation altitudes	24 hour mean value	≤ 35 °C ≤ 2000 m
Installation Operating personnel		Indoor installation Electrically skilled persons
Plate thickness	Frame Enclosure Covers	2.5 mm 1.5 mm 1.0 mm
Surface treatment		
Frame components and interior components Enclosure parts	Sendzimir-galvanized Epoxy polyester resin Iron phosphating Total thickness of coating	Min. 20 µm RAL 7035 Min. 70 µm
Dimensions		
Frame exterior dimensions	Height in mm Width in mm Depth in mm	2000 350, 400, 600, 800, 850, 1000, 1200 400, 600, 800
Hole pattern in frame acc. to DIN 43660	in mm	25
Base	Height in mm	100, 200

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Without main busbar

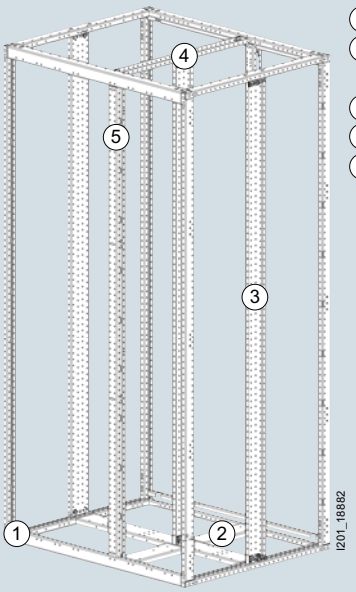
Overview

Features

Standardized grid dimensions

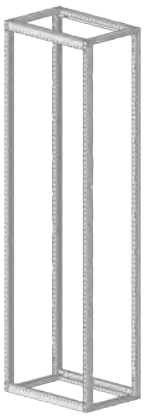
- Frame divisions: possible every 200 mm
- Assembly kits: 400, 600 and 800 mm
- Cable compartments: 200, 400 mm
- Vertical busbar: 200, 400 mm

Equipment height for assembly kits: 1800 mm



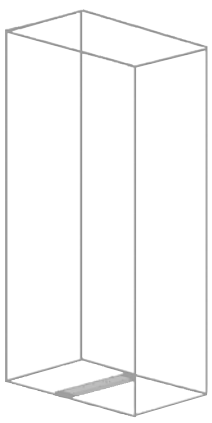
1 Frame
2 Bottom plate partition crossbar
3 Interior side upright
4 Section division
5 Exterior intermediate upright

Selection and ordering data



① **Frame**
Height: 2000 mm

Width in mm	Depth in mm	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
400	400	8PQ1204-4BA01	1 unit
	600	8PQ1204-6BA01	1 unit
	800	8PQ1204-8BA01	1 unit
600	400	8PQ1206-4BA01	1 unit
	600	8PQ1206-6BA01	1 unit
	800	8PQ1206-8BA01	1 unit
800	400	8PQ1208-4BA01	1 unit
	600	8PQ1208-6BA01	1 unit
	800	8PQ1208-8BA01	1 unit
1000	400	8PQ1201-4BA02	1 unit
	600	8PQ1201-6BA02	1 unit
	800	8PQ1201-8BA03	1 unit
1200	400	8PQ1202-4BA02	1 unit
	600	8PQ1202-6BA02	1 unit
	800	8PQ1202-8BA02	1 unit



② **Bottom plate partition crossbars**
For width 600 to 1200 mm

Depth in mm	Quantity	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
400	1 ×	8PQ3000-1BA38	1 unit
600	1 ×	8PQ3000-1BA40	1 unit
800	2 ×	8PQ3000-1BA38	1 unit

* You can order this quantity or a multiple thereof.

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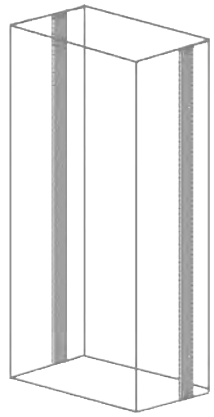
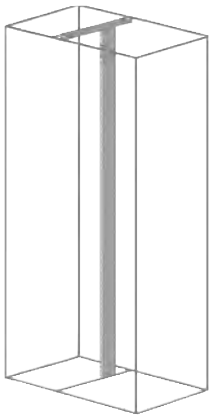
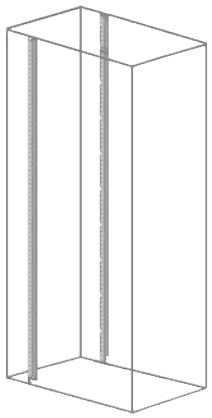
	Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	③ **Interior side uprights** • For width from 400 to 1200 mm • For depth from 600 to 800 mm • Not required for depth 400 mm		
	Depth in mm		
	600	**8PQ3000-0BA03**	1 unit
	800		
	④ **Section division** • Not required for depth 400 mm		
	Depth in mm		
	600	**8PQ3000-1BA36**	1 unit
	800	**8PQ3000-1BA37**	1 unit
	⑤ **Exterior intermediate uprights** For fitting • Outer covers • Section doors • Modular doors	**8PQ3000-1BA43**	1 unit

14

* You can order this quantity or a multiple thereof.

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Main busbar at top

Overview

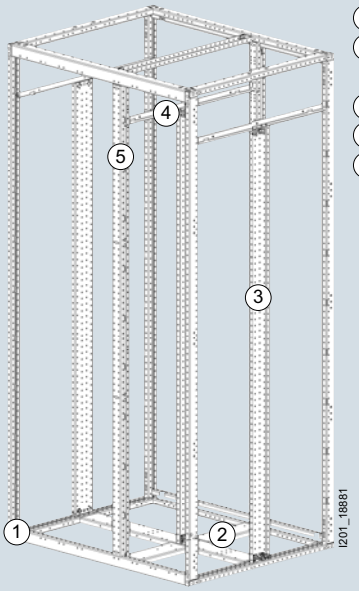
Frame divisions in a grid size of 200 mm are possible.

Features

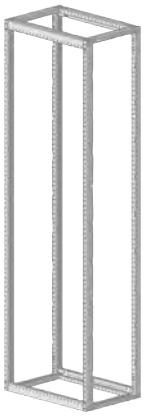
Standardized section widths

- Frame divisions: possible every 200 mm
- Assembly kits: 400, 600 and 800 mm
- Cable compartments: 200, 400 mm
- Vertical busbar: 200, 400 mm

Equipment height for assembly kits: 1600 mm

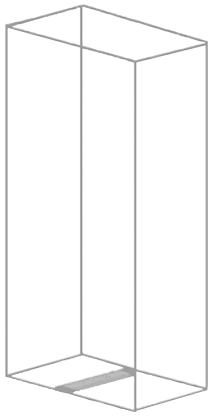


Selection and ordering data



① **Frame**
Height: 2000 mm

Width in mm	Depth in mm	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
400	400	8PQ1204-4BA01	1 unit
	600	8PQ1204-6BA01	1 unit
	800	8PQ1204-8BA01	1 unit
600	400	8PQ1206-4BA01	1 unit
	600	8PQ1206-6BA01	1 unit
	800	8PQ1206-8BA01	1 unit
800	400	8PQ1208-4BA01	1 unit
	600	8PQ1208-6BA01	1 unit
	800	8PQ1208-8BA01	1 unit
1000	400	8PQ1201-4BA02	1 unit
	600	8PQ1201-6BA02	1 unit
	800	8PQ1201-8BA03	1 unit
1200	400	8PQ1202-4BA02	1 unit
	600	8PQ1202-6BA02	1 unit
	800	8PQ1202-8BA02	1 unit



② **Bottom plate partition crossbars**
For width 800 to 1200 mm

Depth in mm	Quantity	Article No.	PS*/ P. unit
400	1 ×	8PQ3000-1BA38	1 unit
600	1 ×	8PQ3000-1BA40	1 unit
800	2 ×	8PQ3000-1BA38	1 unit

* You can order this quantity or a multiple thereof.

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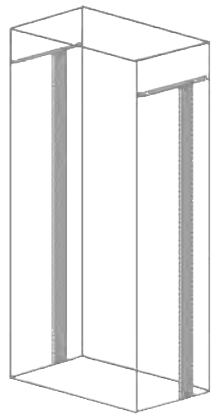
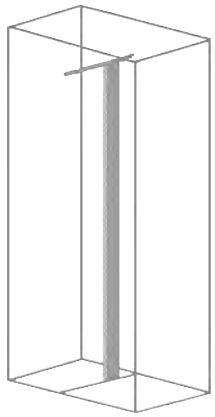
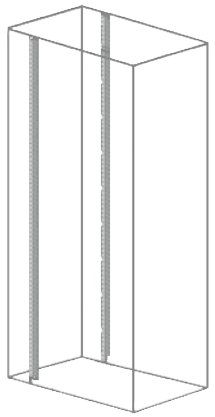
	Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	③ **Interior side uprights** For width from 800 to 1200 mm		
	Depth in mm		
	400	**8PQ3000-0BA65**	1 unit
	600	**8PQ3000-0BA01**	1 unit
	800	**8PQ3000-0BA02**	1 unit
	④ **Section division**		
	Depth in mm		
	400	**8PQ3000-1BA31**	1 unit
	600	**8PQ3000-1BA32**	1 unit
	800	**8PQ3000-1BA34**	1 unit
	⑤ **Exterior intermediate uprights** For fitting • Outer covers • Section doors • Modular doors	**8PQ3000-1BA43**	1 unit

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Main busbar at bottom

Overview

Features

Standardized grid dimensions

- Frame divisions possible every 200 mm
- Assembly kits: 400, 600, 800 mm
- Cable compartments: 400, 600 mm
- Vertical busbar: 200, 400 mm

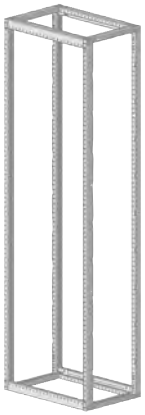
Equipment height for assembly kits 1600 mm

Configuration

Main busbar at bottom conditionally at least form 2b.

1 Frame
2 Interior side upright
3 Section division
4 Exterior intermediate upright

Selection and ordering data



Version		Article No. www.siemens.com/product?Article No.	PS*/ P. unit
① **Frame** Height: 2000 mm			
Width in mm	Depth in mm		
400	400	**8PQ1204-4BA01**	1 unit
	600	**8PQ1204-6BA01**	1 unit
	800	**8PQ1204-8BA01**	1 unit
600	400	**8PQ1206-4BA01**	1 unit
	600	**8PQ1206-6BA01**	1 unit
	800	**8PQ1206-8BA01**	1 unit
800	400	**8PQ1208-4BA01**	1 unit
	600	**8PQ1208-6BA01**	1 unit
	800	**8PQ1208-8BA01**	1 unit
1000	400	**8PQ1201-4BA02**	1 unit
	600	**8PQ1201-6BA02**	1 unit
	800	**8PQ1201-8BA03**	1 unit
1200	400	**8PQ1202-4BA02**	1 unit
	600	**8PQ1202-6BA02**	1 unit
	800	**8PQ1202-8BA02**	1 unit

* You can order this quantity or a multiple thereof.

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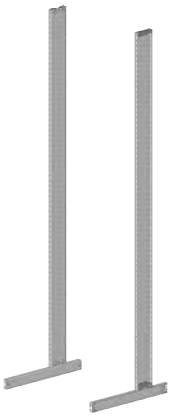
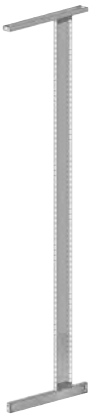
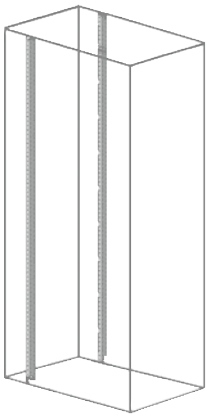
	Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	② **Interior side uprights**		
	Depth in mm		
	400	**8PQ3000-0BA10**	1 unit
	600	**8PQ3000-3BA10**	1 unit
	800	**8PQ3000-3BA11**	1 unit
	③ **Section division**		
	Depth in mm		
	400	**8PQ3000-0BA10**	1 unit
	600	**8PQ3000-3BA47**	1 unit
	800	**8PQ3000-3BA48**	1 unit
	④ **Exterior intermediate uprights** For fitting • Outer covers • Section doors • Modular doors	**8PQ3000-1BA43**	1 unit

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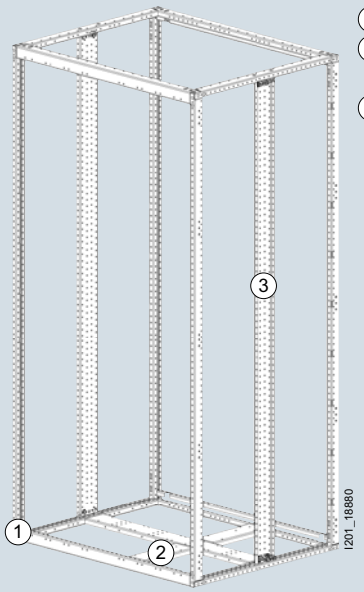
Overview

Features

Standardized section widths

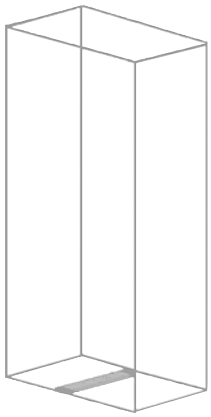
- Frame divisions: possible every 200 mm
- Assembly kits: 400, 600 and 800 mm
- Cable compartments: 200, 400 mm
- Vertical busbar: 200, 400 mm



Selection and ordering data

① **Frame**
Height: 2000 mm

Depth in mm	Width in mm	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
800	400	**8PQ1204-8BA01**	1 unit
	600	**8PQ1206-8BA01**	1 unit
	800	**8PQ1208-8BA01**	1 unit
	1000	**8PQ1201-8BA03**	1 unit
	1200	**8PQ1202-8BA02**	1 unit



② **Bottom plate partition crossbars**
For width 600 to 1200 mm

Depth in mm	Quantity	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
800	2 ×	**8PQ3000-1BA38**	1 unit

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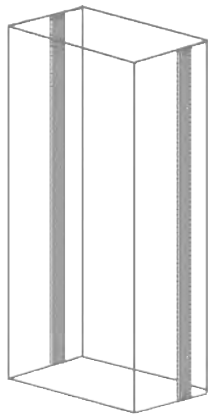
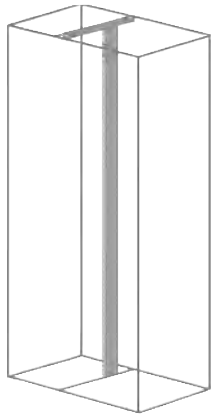
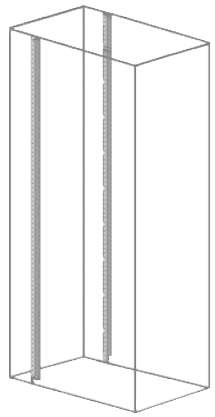
	Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	③ **Interior side uprights** • Equipment height: 1800 mm • For width from 400 to 1200 mm		
	Depth in mm		
	800	**8PQ3000-0BA03**	1 unit
	**Section division**		
	Depth in mm		
	800	**8PQ3000-1BA37**	1 unit
	**Exterior intermediate uprights** For fitting • Outer covers • Section doors • Modular doors	**8PQ3000-1BA43**	1 unit

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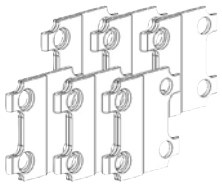
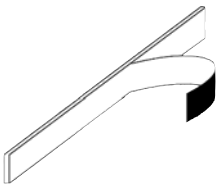
Selection and ordering data

	Version		Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	Frame reinforcements • Recommended for frame widths from 1000 mm • 1 set = 2 units		**8PQ9400-0BA35**	1 unit
	Crossbars • 1 set = 2 units			
	Frame width			
	For frame width in mm	Crossbar length in mm		
	400	350	**8PQ3000-0BA12**	1 unit
	600	550	**8PQ3000-0BA71**	1 unit
	800	750	**8PQ3000-0BA72**	1 unit
	1000	950	**8PQ3000-0BA84**	1/2 units
	1200	1150	**8PQ3000-0BA85**	1/2 units
	Frame depth without side uprights ③			
	For frame depth in mm	Crossbar length in mm		
	400	300	**8PQ3000-0BA10**	1 unit
	600	500	**8PQ3000-1BA24**	1/2 units
	800	700	**8PQ3000-1BA25**	1/2 units
	Frame depth with side uprights ③			
	For frame depth in mm	Crossbar length in mm		
	600	300	**8PQ3000-0BA10**	1 unit
	800			
	Universal brackets • For mounting expansion elements		**8MF1000-2CP**	10 units
	**Board coupling kits** 1 set = 6 units including fasteners		**8PQ1204-4BA05**	1 unit
	**Board coupling gasket kits** • 5.5 m gasket roll included in delivery • To maintain IP55 degree of protection		**8PQ1204-4BA04**	1 unit
	Self-tapping screws • For use with frame and crossbars			
	Cylinder-head screws			
T30	External diameter × length in mm			
	M6 × 10		**8PQ9500-0BA34**	1 unit
	M6 × 16		**8PQ9500-0BA32**	1 unit
	M6 × 20		**8PQ9500-0BA31**	1 unit
	Cap, RAL 7035		**8PQ9400-0BA14**	1 unit
T30	***Countersunk screws***			
	External diameter × length in mm			
	M6 × 12		**8PQ9500-1BA07**	1 unit

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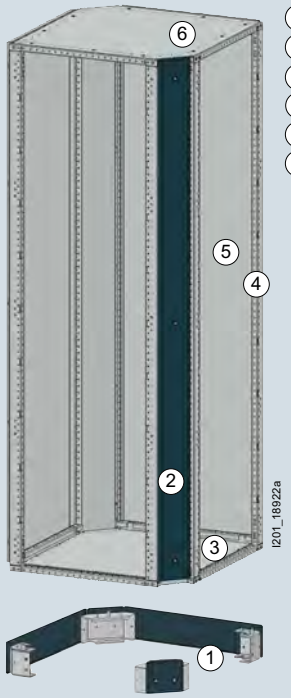
Overview

Features

- Corner section consisting of a standard frame and special conversion kits for corner sections
- Incl. copper drawing for the main busbar

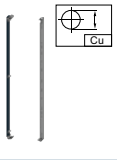
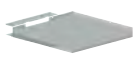
Configuration

The overall length of the unit's front increases by 100 mm in both room axes



1 Base
2 Corner section conversion kit
3 Bottom plate
4 Frame
5 Rear panel
6 Top plate

Selection and ordering data

Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
① Base corner pieces						
Depth in mm	**Height 100 mm**		**Height 200 mm**			
400	**8PQ1010-0BA04**	1 unit	**8PQ1024-4BA01**	1 unit		
600	**8PQ1010-0BA05**	1 unit	**8PQ1026-6BA01**	1 unit		
800	**8PQ1018-8BA01**	1 unit	**8PQ1028-8BA01**	1 unit		
② Corner section conversion kits Incl. copper drawing						
	Assembly kit					
	8PQ1200-0BA03	1 unit				
③ Bottom plates						
Depth in mm	**IP55** **Main busbar at top**		**IP20** **Main busbar at bottom**			
400	**8PQ2304-4BA12**	1 unit	**8PQ2300-4BA25**	1 unit		
600	**8PQ2306-6BA12**	1 unit	**8PQ2300-6BA27**	1 unit		
800	**8PQ2308-8BA08**	1 unit	**8PQ2300-8BA14**	1 unit		

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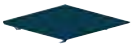
Corner sections

Version		Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
④ **Frame** Height: 2000 mm							
Depth in mm	Width in mm	**Frame**					
400	400	8PQ1204-4BA01	1 unit				
600	600	8PQ1206-6BA01	1 unit				
800	800	8PQ1208-8BA01	1 unit				
⑤ **Rear panels** Two units required for each corner section							
Width in mm		**IP40**		**IP55**			
400		8PQ2420-4BA02	1 unit	8PQ2420-4BA01	1 unit		
600		8PQ2420-6BA02	1 unit	8PQ2420-6BA01	1 unit		
800		8PQ2420-8BA02	1 unit	8PQ2420-8BA01	1 unit		
⑥ **Top plates**							
Depth in mm		**IP40**		**IP55**		**IPX1**	
400		8PQ2304-4BA10	1 unit	8PQ2304-4BA08	1 unit	8PQ2304-4BA11	1 unit
600		8PQ2306-6BA10	1 unit	8PQ2306-6BA08	1 unit	8PQ2306-6BA11	1 unit
800		8PQ2308-8BA06	1 unit	8PQ2308-8BA05	1 unit	8PQ2308-8BA07	1 unit

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Overview

1 Base
2 Bottom plate
3 Rear panel
4 Side panel
5 Top plate
6 Doors / Alternatively, frame paneling

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Selection and ordering data

Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
① Base corner pieces with front cover		
Height in mm / Width in mm		
100 / 400	**8PQ1014-0BA01**	1 unit
600	**8PQ1016-0BA01**	1 unit
800	**8PQ1018-0BA01**	1 unit
1000	**8PQ1011-0BA01**	1 unit
1200	**8PQ1012-0BA01**	1 unit
Height in mm / Width in mm		
200 / 400	**8PQ1024-0BA01**	1 unit
600	**8PQ1026-0BA01**	1 unit
800	**8PQ1028-0BA01**	1 unit
1000	**8PQ1021-0BA01**	1 unit
1200	**8PQ1022-0BA01**	1 unit
Base covers, side		
Height in mm / Depth in mm		
100 / 400	**8PQ1010-4BA01**	1 unit
600	**8PQ1010-6BA01**	1 unit
800	**8PQ1010-8BA01**	1 unit
Base reinforcements for transport Height: 100 mm		
Frame width or depth in mm		
400	**8PQ1014-0BA02**	1 unit
600	**8PQ1016-0BA02**	1 unit
800	**8PQ1018-0BA02**	1 unit
1000	**8PQ1011-1BA01**	1/2 units
1200	**8PQ1012-2BA01**	1/2 units

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Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit

② **Bottom plates**
For a frame depth of 800 mm, the bottom plates with a depth of 400 mm are needed **twice**.

• Main busbar at top

Depth in mm	Width in mm	Quantity	**IP55**		**IP40, for cable entry**	
400	200		8PQ2302-4BA04	1 unit	--	
	400		8PQ2304-4BA05	1 unit	8PQ2304-4BA06	1 unit
	600		8PQ2306-4BA05	1 unit	8PQ2306-4BA06	1 unit
	800		8PQ2308-4BA05	1 unit	8PQ2308-4BA06	1 unit
	1000		8PQ2301-4BA04	1 unit	--	
600	200		8PQ2302-6BA04	1 unit	--	
	400		8PQ2306-4BA05	1 unit	8PQ2306-4BA06	1 unit
	600		8PQ2306-6BA05	1 unit	8PQ2306-6BA06	1 unit
	800		8PQ2308-6BA05	1 unit	8PQ2308-6BA06	1 unit
800	200	2 ×	8PQ2302-4BA04	1 unit	--	
	400	2 ×	8PQ2304-4BA05	1 unit	8PQ2304-4BA06	1 unit
	600	2 ×	8PQ2306-4BA05	1 unit	8PQ2306-4BA06	1 unit
	800	2 ×	8PQ2308-4BA05	1 unit	8PQ2308-4BA06	1 unit
	1000	2 ×	8PQ2301-4BA04	1 unit	--	

• Main busbar at bottom

Depth in mm	Width in mm	**IP20**	
400	400	8PQ2304-4BA14	1 unit
	600	8PQ2306-4BA10	1 unit
	800	8PQ2308-4BA13	1 unit
	1000	8PQ2301-4BA06	1 unit
	1200	8PQ2302-4BA05	1 unit
600	400	8PQ2304-6BA11	1 unit
	600	8PQ2306-6BA16	1 unit
	800	8PQ2308-6BA13	1 unit
	1000	8PQ2301-6BA05	1 unit
	1200	8PQ2302-6BA05	1 unit
800	400	8PQ2304-8BA05	1 unit
	600	8PQ2306-8BA05	1 unit
	800	8PQ2308-8BA10	1 unit
	1000	8PQ2301-8BA04	1 unit
	1200	8PQ2302-8BA04	1 unit

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Paneling sections

Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
③ **Rear panels**				
Width in mm	**IP40**		**IP55**	
400	**8PQ2420-4BA02**	1 unit	**8PQ2420-4BA01**	1 unit
600	**8PQ2420-6BA02**	1 unit	**8PQ2420-6BA01**	1 unit
800	**8PQ2420-8BA02**	1 unit	**8PQ2420-8BA01**	1 unit
1000	**8PQ2420-1BA02**	1 unit	**8PQ2420-1BA01**	1 unit
1200	**8PQ2420-2BA02**	1 unit	**8PQ2420-2BA01**	1 unit
④ **Side panels** 1 set = 2 units				
Depth in mm	**IP55**		**IP40 with design strip**	
400	**8PQ2520-4BA02**	1 unit	**8PQ2520-4BA01**	1 unit
600	**8PQ2520-6BA02**	1 unit	**8PQ2520-6BA01**	1 unit
800	**8PQ2520-8BA02**	1 unit	**8PQ2520-8BA01**	1 unit

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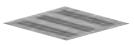
Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
⑤ **Top plates**								
								
Depth in mm	Width in mm	**IP40**		**IPX1 upgrade**		**IP55**		**IP40, for cable entry**	
400	400	8PQ2304-4BA02	1 unit	8PQ2304-4BA04	1 unit	8PQ2304-4BA01	1 unit	8PQ2304-4BA03	1 unit
	600	8PQ2306-4BA02	1 unit	8PQ2306-4BA04	1 unit	8PQ2306-4BA01	1 unit	8PQ2306-4BA03	1 unit
	800	8PQ2308-4BA02	1 unit	8PQ2308-4BA04	1 unit	8PQ2308-4BA01	1 unit	8PQ2308-4BA03	1 unit
	1000	8PQ2301-4BA02	1 unit	8PQ2301-4BA03	1 unit	8PQ2301-4BA01	1 unit	--	
	1200	8PQ2302-4BA02	1 unit	8PQ2302-4BA03	1 unit	8PQ2302-4BA01	1 unit	--	
600	400	8PQ2304-6BA02	1 unit	8PQ2304-6BA04	1 unit	8PQ2304-6BA01	1 unit	8PQ2304-6BA03	1 unit
	600	8PQ2306-6BA02	1 unit	8PQ2306-6BA04	1 unit	8PQ2306-6BA01	1 unit	8PQ2306-6BA03	1 unit
	800	8PQ2308-6BA02	1 unit	8PQ2308-6BA04	1 unit	8PQ2308-6BA01	1 unit	8PQ2308-6BA03	1 unit
	1000	8PQ2301-6BA02	1 unit	8PQ2301-6BA03	1 unit	8PQ2301-6BA01	1 unit	--	
	1200	8PQ2302-6BA02	1 unit	8PQ2302-6BA03	1 unit	8PQ2302-6BA01	1 unit	--	
800	400	8PQ2304-8BA02	1 unit	8PQ2304-8BA04	1 unit	8PQ2304-8BA01	1 unit	8PQ2304-8BA03	1 unit
	600	8PQ2306-8BA02	1 unit	8PQ2306-8BA04	1 unit	8PQ2306-8BA01	1 unit	8PQ2306-8BA03	1 unit
	800	8PQ2308-8BA02	1 unit	8PQ2308-8BA04	1 unit	8PQ2308-8BA01	1 unit	8PQ2308-8BA03	1 unit
	1000	8PQ2301-8BA02	1 unit	8PQ2301-8BA03	1 unit	8PQ2301-8BA01	1 unit	--	
	1200	8PQ2302-8BA02	1 unit	8PQ2302-8BA03	1 unit	8PQ2302-8BA01	1 unit	--	

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Paneling sections

Selection and ordering data

Version		Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
⑥ **Doors with two-way interlocking system**							
Hinge position	Width in mm	**IP40**		**IP55**		**IP55 glass doors**	
Left	400	**8PQ2197-4BA08**	1 unit	**8PQ2197-4BA05**	1 unit	**--**	
	600	**8PQ2197-6BA06**	1 unit	**8PQ2197-6BA03**	1 unit	**8PQ2197-6BA10**	1 unit
	800	**8PQ2197-8BA06**	1 unit	**8PQ2197-8BA03**	1 unit	**8PQ2197-8BA10**	1 unit
	1000	**8PQ2197-1BA06**	1 unit	**8PQ2197-1BA03**	1 unit	**8PQ2197-1BA10**	1 unit
Right	400	**8PQ2197-4BA11**	1 unit	**8PQ2197-4BA10**	1 unit	**--**	
	600	**8PQ2197-6BA13**	1 unit	**8PQ2197-6BA12**	1 unit	**8PQ2197-6BA14**	1 unit
	800	**8PQ2197-8BA13**	1 unit	**8PQ2197-8BA12**	1 unit	**8PQ2197-8BA14**	1 unit
	1000	**8PQ2197-1BA18**	1 unit	**8PQ2197-1BA17**	1 unit	**8PQ2197-1BA20**	1 unit
Doors with rotary handle Suitable for installing semi-cylindrical profiles (available separately), see accessories from page 14/27 onwards							
Hinge position	Width in mm	**IP40**		**IP55**		**IP55 glass doors**	
Left	400	**8PQ2197-4BA06**	1 unit	**8PQ2197-4BA03**	1 unit	**--**	
	600	**8PQ2197-6BA04**	1 unit	**8PQ2197-6BA01**	1 unit	**8PQ2197-6BA07**	1 unit
	800	**8PQ2197-8BA04**	1 unit	**8PQ2197-8BA01**	1 unit	**8PQ2197-8BA07**	1 unit
	1000	**8PQ2197-1BA07**	1 unit	**8PQ2197-1BA04**	1 unit	**8PQ2197-1BA11**	1 unit
Right	400	**8PQ2197-4BA07**	1 unit	**8PQ2197-4BA04**	1 unit	**--**	
	600	**8PQ2197-6BA05**	1 unit	**8PQ2197-6BA02**	1 unit	**8PQ2197-6BA08**	1 unit
	800	**8PQ2197-8BA05**	1 unit	**8PQ2197-8BA02**	1 unit	**8PQ2197-8BA08**	1 unit
	1000	**8PQ2197-1BA08**	1 unit	**8PQ2197-1BA05**	1 unit	**8PQ2197-1BA12**	1 unit
Outer covers Covering for cable compartment or vertical busbar							
Hinge position	Width in mm	**IP40**		**IP55**			
--	200	**8PQ2197-2BA15**	1 unit	**8PQ2197-2BA14**	1 unit		
	400	**8PQ2197-4BA02**	1 unit	**8PQ2197-4BA01**	1 unit		
Frame paneling Only in conjunction with internal covers							
Hinge position	Width in mm	**IP30**					
--	600	**8PQ2197-6BA11**	1 unit				
	800	**8PQ2197-8BA11**	1 unit				

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	Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
Accessories			
	Flat cylinders/two-way interlocking mechanism		
	Versions		
	Rotary handles with flat cylinder • Identical key type • Including key	**8PQ9400-0BA07**	1 unit
	Rotary handles with two-way interlocking mechanism	**8PQ9400-0BA08**	1 unit
	Coupling bars	**8PQ9400-0BA27**	1 unit
	Locking rods	**8PQ9400-0BA37**	1 unit
	Bar guides	**8PQ9400-0BA36**	1 unit

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Paneling sections

	Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	Semi-cylindrical profiles		
	Versions		
	Rotary handles with semi-cylindrical profile	**8PQ9400-0BA41**	1 unit
	Coupling bars	**8PQ9400-0BA28**	1 unit
	Locking rods	**8PQ9400-0BA38**	1 unit
	Bar guides	**8PQ9400-0BA36**	1 unit
	Semi-cylindrical profiles • Acc. to DIN 18252/18254 • 8 × 45° adjustable • Identical key type (key number 333) • Including key	**8PQ9400-0BA26**	1 unit
	Door hinge 1 set = 2 units	**8PQ9400-0BA55**	1/2 units
	Cubicle keys • 3 mm double bit • 1 pack = 10 units	**8PQ9400-0BA12**	1 unit
	Inner door struts • For use with section doors • Height 1975 mm	**8PQ2197-0BA10**	1 unit
SIVACON designed by SIEMENS	**Cubicle ID plates** SIVACON designed by Siemens	**8PQ9400-0BA06**	1 unit

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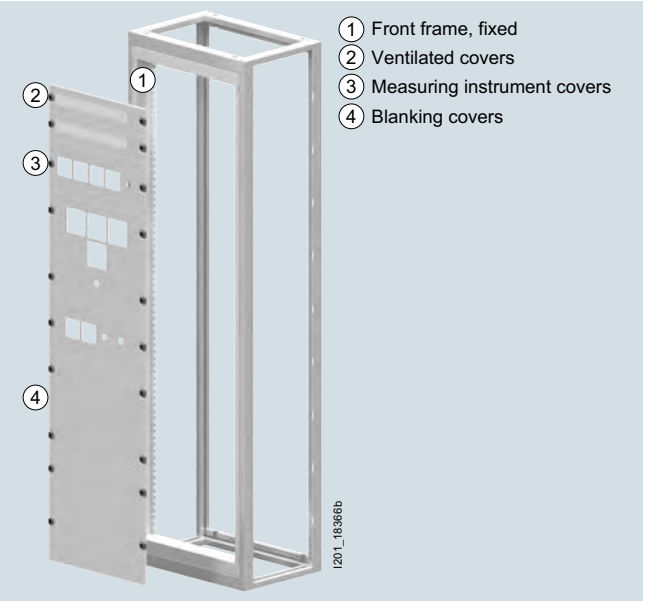
Overview

Configuration

- Can be combined with section doors and glazed doors and also frame paneling
- Internal covers not available in combination with modular doors



Selection and ordering data

Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
Front frames				
① **Without main busbar** Equipment height: 1800 mm				
Width in mm	**Fixed**		**Swivel**	
600	**8PQ2000-6BA04**	1 unit	**8PQ2000-6BA01**	1 unit
800	**8PQ2000-8BA04**	1 unit	**8PQ2000-8BA01**	1 unit
Main busbar at top Equipment height: 1600 mm				
Width in mm	**Fixed**		**Swivel**	
600	**8PQ2000-6BA03**	1 unit	**8PQ2000-6BA02**	1 unit
800	**8PQ2000-8BA03**	1 unit	**8PQ2000-8BA02**	1 unit
Covers				
② **Covers, ventilated**				
Height mm / Width mm				
100 / 600	**8PQ2010-6BA02**	1 unit		
100 / 800	**8PQ2010-8BA02**	1 unit		

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Internal covers

Version		Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
③ **Measuring instrument covers**					
□ 72 × 72 mm ○ 22.5 mm					
Height mm	Width mm	**Cut-out** 2 measuring instruments, 2 selectors		**Cut-out** 4 measuring instruments, 1 selector	
200	600	**8PQ2020-6BA03**	1 unit	**8PQ2020-6BA02**	1 unit
	800	**8PQ2020-8BA03**	1 unit	**8PQ2020-8BA02**	1 unit
□ 96 × 96 mm ○ 22.5 mm					
Height mm	Width mm	**Cut-out** 2 measuring instruments, 2 selectors		**Cut-out** 4 measuring instruments, 1 selector	
400	600	**8PQ2040-6BA04**	1 unit	**8PQ2040-6BA03**	1 unit
	800	**8PQ2040-8BA04**	1 unit	**8PQ2040-8BA03**	1 unit
④ **Blanking covers**					
Height mm	Width mm	**Blanking cover**			
50	600	**8PQ2005-6BA01**	1 unit		
100		**8PQ2010-6BA01**	1 unit		
150		**8PQ2015-6BA02**	1 unit		
200		**8PQ2020-6BA01**	1 unit		
250		**8PQ2025-6BA01**	1 unit		
300		**8PQ2030-6BA01**	1 unit		
350		**8PQ2035-6BA01**	1 unit		
400		**8PQ2040-6BA01**	1 unit		
500		**8PQ2050-6BA01**	1 unit		
550		**8PQ2055-6BA01**	1 unit		
600		**8PQ2060-6BA01**	1 unit		
650		**8PQ2065-6BA01**	1 unit		
800		**8PQ2080-6BA01**	1 unit		
50	800	**8PQ2005-8BA01**	1 unit		
100		**8PQ2010-8BA01**	1 unit		
150		**8PQ2015-8BA02**	1 unit		
200		**8PQ2020-8BA01**	1 unit		
250		**8PQ2025-8BA01**	1 unit		
300		**8PQ2030-8BA01**	1 unit		
350		**8PQ2035-8BA01**	1 unit		
400		**8PQ2040-8BA01**	1 unit		
500		**8PQ2050-8BA01**	1 unit		
550		**8PQ2055-8BA01**	1 unit		
600		**8PQ2060-8BA01**	1 unit		
650		**8PQ2065-8BA01**	1 unit		
800		**8PQ2080-8BA01**	1 unit		

Accessories

	Hinges for cover • Hinge position: left/right • 1 pack = 10 units	**8GK9120-0KK11**	10 units
	1/4 turn screws • 1 pack = 20 units	**8PQ9400-0BA54**	1/20 units

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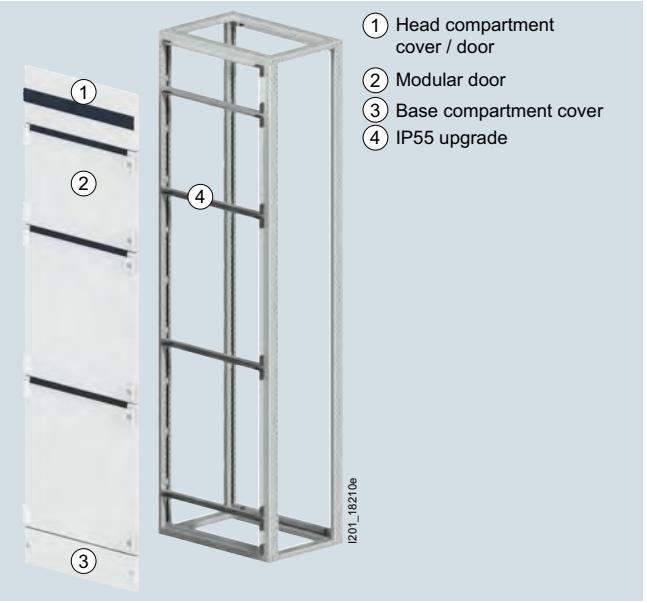
Overview

Configuration

- Modular doors cannot be combined with internal covers
- For load capacity of the doors see Technical Specifications, page 14/9.



Selection and ordering data

Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
Paneling for main busbar				
① **Head compartment covers**				
• For main busbar at top				
Width mm / Height mm	**IP4X**		**IP55 upgrade**	
400 / 225	**8PQ2022-4BA01**	1 unit	**8PQ2022-4BA03**	1 unit
600	**8PQ2022-6BA01**	1 unit	**8PQ2022-6BA02**	1 unit
800	**8PQ2022-8BA01**	1 unit	**8PQ2022-8BA02**	1 unit
• For main busbar at bottom				
Width mm / Height mm	**IP4X**		**IP55 upgrade**	
400 / 175	**8PQ2000-4BA02**	1 unit	**8PQ2022-4BA03**	1 unit
600	**8PQ2000-6BA08**	1 unit	**8PQ2022-6BA02**	1 unit
800	**8PQ2000-8BA08**	1 unit	**8PQ2022-8BA02**	1 unit
Head compartment doors				
Width mm / Height mm	**IP4X**		**IP55 upgrade**	
400 / 225	**8PQ2022-4BA04**	1 unit	**8PQ2022-4BA03**	1 unit
725	**8PQ2072-4BA02**	1 unit	**8PQ2070-4BA06**	1 unit
600 / 225	**8PQ2022-6BA04**	1 unit	**8PQ2022-6BA02**	1 unit
725	**8PQ2072-6BA01**	1 unit	**8PQ2070-6BA11**	1 unit
800 / 225	**8PQ2022-8BA03**	1 unit	**8PQ2022-8BA02**	1 unit

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Modular doors

Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
Compartment paneling				
② **Modular doors**				
Width mm	Height mm	**IP4X**		**IP55 upgrade**	
400	150	8PQ2015-4BA04	1 unit	8PQ2015-4BA05	1 unit
	200	8PQ2020-4BA01	1 unit	8PQ2020-4BA03	1 unit
	250	8PQ2025-4BA01	1 unit	8PQ2025-4BA02	1 unit
	300	8PQ2030-4BA01	1 unit	8PQ2030-4BA02	1 unit
	350	8PQ2035-4BA01	1 unit	8PQ2035-4BA02	1 unit
	400	8PQ2040-4BA01	1 unit	8PQ2040-4BA03	1 unit
	450	8PQ2045-4BA01	1 unit	8PQ2045-4BA02	1 unit
	500	8PQ2050-4BA01	1 unit	8PQ2050-4BA02	1 unit
	550	8PQ2055-4BA11	1 unit	8PQ2055-4BA07	1 unit
	600	8PQ2060-4BA01	1 unit	8PQ2060-4BA03	1 unit
	650	8PQ2065-4BA01	1 unit	8PQ2065-4BA02	1 unit
	700	8PQ2070-4BA07	1 unit	8PQ2070-4BA08	1 unit
	750	8PQ2072-4BA01	1 unit	8PQ2075-4BA01	1 unit
	800	8PQ2080-4BA01	1 unit	8PQ2080-4BA04	1 unit
600	150	8PQ2015-6BA10	1 unit	8PQ2015-6BA12	1 unit
	200	8PQ2020-6BA14	1 unit	8PQ2020-6BA15	1 unit
	250	8PQ2025-6BA07	1 unit	8PQ2025-6BA08	1 unit
	300	8PQ2030-6BA10	1 unit	8PQ2030-6BA12	1 unit
	350	8PQ2035-6BA12	1 unit	8PQ2035-6BA13	1 unit
	400	8PQ2040-6BA12	1 unit	8PQ2040-6BA13	1 unit
	450	8PQ2045-6BA05	1 unit	8PQ2045-6BA06	1 unit
	500	8PQ2050-6BA03	1 unit	8PQ2050-6BA04	1 unit
	550	8PQ2055-6BA04	1 unit	8PQ2055-6BA06	1 unit
	600	8PQ2060-6BA06	1 unit	8PQ2060-6BA07	1 unit
	650	8PQ2065-6BA03	1 unit	8PQ2065-6BA04	1 unit
	700	8PQ2070-6BA03	1 unit	8PQ2070-6BA04	1 unit
	750	8PQ2075-6BA01	1 unit	8PQ2075-6BA02	1 unit
	800	8PQ2080-6BA03	1 unit	8PQ2080-6BA04	1 unit
800	150	8PQ2015-8BA05	1 unit	8PQ2015-8BA07	1 unit
	200	8PQ2020-8BA07	1 unit	8PQ2020-8BA08	1 unit
	250	8PQ2025-8BA04	1 unit	8PQ2025-8BA05	1 unit
	300	8PQ2030-8BA05	1 unit	8PQ2030-8BA06	1 unit
	350	8PQ2035-8BA06	1 unit	8PQ2035-8BA07	1 unit
	400	8PQ2040-8BA12	1 unit	8PQ2040-8BA13	1 unit
	450	8PQ2045-8BA03	1 unit	8PQ2045-8BA04	1 unit
	500	8PQ2050-8BA03	1 unit	8PQ2050-8BA04	1 unit
	550	8PQ2055-8BA03	1 unit	8PQ2055-8BA06	1 unit
	600	8PQ2060-8BA04	1 unit	8PQ2060-8BA05	1 unit
	650	8PQ2065-8BA03	1 unit	8PQ2065-8BA04	1 unit
	700	8PQ2070-8BA01	1 unit	8PQ2070-8BA02	1 unit
	750	8PQ2075-8BA01	1 unit	8PQ2075-8BA02	1 unit
	800	8PQ2080-8BA03	1 unit	8PQ2080-8BA04	1 unit
Modular covers					
Width mm	Height mm	**IP4X**		**IP55 upgrade**	
400	50	8PQ2005-4BA03	1 unit	8PQ2005-4BA01	1 unit
	100	8PQ2010-4BA02	1 unit	8PQ2010-4BA01	1 unit
600	50	8PQ2005-6BA04	1 unit	8PQ2005-6BA03	1 unit
	100	8PQ2010-6BA04	1 unit	8PQ2010-6BA03	1 unit
800	50	8PQ2005-8BA04	1 unit	8PQ2005-8BA03	1 unit
	100	8PQ2010-8BA04	1 unit	8PQ2010-8BA03	1 unit

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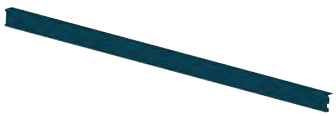
Version		Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
Paneling for PE bar					
③ **Base compartment covers** • Compartment height base compartment = cover height + 25 mm floor clearance					
Width mm	Height mm	**IP4X**		**IP55 upgrade**	
400	150	8PQ2015-4BA01	1 unit	8PQ2015-4BA03	1 unit
600		8PQ2000-6BA07	1 unit	8PQ2015-6BA13	1 unit
800		8PQ2000-8BA07	1 unit	8PQ2015-8BA08	1 unit
Base compartment doors • Compartment height base compartment = door height + 25 mm floor clearance					
Width mm	Height mm	**IP4X**		**IP55 upgrade**	
400	700	8PQ2070-4BA01	1 unit	8PQ2070-4BA05	1 unit
600		8PQ2070-6BA05	1 unit	8PQ2070-6BA10	1 unit
Accessories					
	Door hinges 1 set = 2 units	8PQ9400-0BA55	1/2 units		
	Door locks with two-way interlocking mechanism	8PQ9400-0BA40	1 unit		
	**ID strips** 1 pack = 6 units				
	Width in mm				
	400	8PQ5000-3BA42	1/6 units		
	600	8PQ5000-3BA43	1/6 units		
	800	8PQ5000-3BA46	1 unit		
	Inner door struts • 1 pair = 2 units				
	Height in mm				
	400	8PQ2040-0BA06	1 unit		
	550	8PQ2055-0BA05	1 unit		
	600/625	8PQ2060-0BA14	1 unit		
	700/725	8PQ2070-0BA02	1 unit		
	800	8PQ2080-0BA07	1 unit		
	Cubicle keys • 3 mm double bit • 1 pack = 10 units	8PQ9400-0BA12	1 unit		
	Modular door grounding straps 1 pack = 10 units • Conductor cross-section = 6 mm² • Sum of rated operational currents $I_b \leq 63$ A	8PQ9400-0BA15	1/10 units		

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Overview

Features

- Appropriate scaling of rated currents, matched to standard transformers
- Division of the phases into bars enables installation without the need to drill holes and increased current carrying capacity
- Simplified handling of one or more cubicles

Configuration

- Compatible network configurations TN-C, TN-S, IT and TT

Type	Positioning	Equipment height mm	Rated current A	Frame depth mm	Rated impulse withstand voltage U_{imp} kv
Top	--	1600	Up to 3200	400	8
	Front	1600	Up to 3200	600	12
		1600	Up to 3200	800	12
	On two sides	1600	Up to 4000	800	12
Rear	--	1800	Up to 3200	800	8

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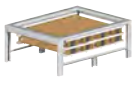
Main busbar top and bottom

Number of bars per phase	Cross-section	Rated operational current I_e 1)					
		Section depth 400 mm		Section depth 600 mm		Section depth 800 mm	
	mm	IP ≤ IP41	IP55	IP ≤ IP41	IP55	IP ≤ IP41	IP55
2	20 × 10 30 × 10	1190 1630	965 1310	1190 1630	965 1310	1190 1630	965 1310
4	20 × 10 30 × 10 40 × 10 50 × 10	1920 2470 3010 3270	1480 1870 2250 2450	1920 2490 3040 3320	1540 1950 2350 2570	1930 2510 3100 3410	1650 2110 2560 2820
2 × 4 	20 × 10 30 × 10	--	--	--	--	3700 4660	3000 3680

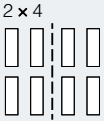
Main busbar at rear

Number of bars per phase	Cross-section	Rated operational current I_e 1)	
		Section depth 800 mm	
	mm	IP ≤ IP41	IP55
2	20 × 10 30 × 10	1190 1630	965 1310
4	20 × 10 30 × 10 40 × 10 50 × 10	1930 2510 3100 3410	1650 2110 2560 2820

1) With an ambient temperature of 35 °C (average over 24 hours) and 500 W power loss per section.

PE bar cross-section

Depends on the external conductors in accordance with 61439-1, Para. 8.4.3.2.2 Table 3.

Number of bars per phase PE bar	Cross-section PE bar	Number of bars per phase Main busbar	Cross-section Main busbar
	mm		mm
2	20 × 5 20 × 5	2	20 × 10 30 × 10
	20 × 5 30 × 5 40 × 5 30 × 10	4	20 × 10 30 × 10 40 × 10 50 × 10
	40 × 5 30 × 10 40 × 10 50 × 10	2 × 4 	20 × 10 30 × 10 40 × 10 50 × 10

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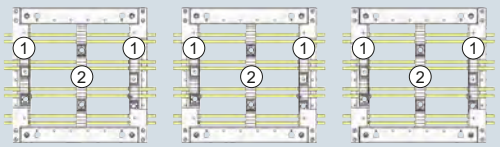
Main busbar

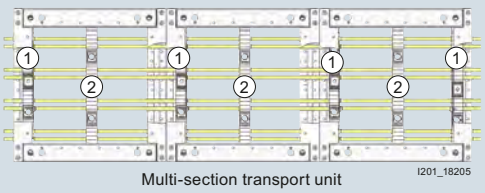
Required busbar reinforcements

- The number of reinforcements (8PQ4000-0BA37) depends on the short-circuit currents and frame widths
- Correct configuration is automatically performed in SIMARIS configuration
- Further information is available in the SIVACON S4 manual.

Busbar size		Section width	Number of reinforcements as a function of I_{pk}, I_{cw} and section width					
Number of bars per phase	Dimensions		I_{cw} = 25 kA I_{pk} = 52.5 kA	I_{cw} = 35 kA I_{pk} = 73.5 kA	I_{cw} = 50 kA I_{pk} = 105 kA	I_{cw} = 65 kA I_{pk} = 143 kA	I_{cw} = 85 kA I_{pk} = 187 kA	I_{cw} = 100 kA I_{pk} = 220 kA
	mm	mm						
2	20 × 10	350	0	0	--	--	--	--
		400	0	0				
		600	0	0				
		800	1	1				
		850	1	1				
		1000	1	1				
		1200	2	2				
	30 × 10	350	--	0	0			
		400		0	0			
		600		0	1			
		800		1	1			
		850		1	1			
		1000		1	2			
		1200		2	2			
4	20 × 10	350		0	0	0		
		400		0	0	0		
		600		0	0	1		
		800		1	1	2		
		850		1	1	2		
		1000		2	2	3		
		1200		2	2	3		
	30 × 10	350		0	0	0	0	
		400		0	0	0	0	
		600		0	0	1	1	
		800		1	1	2	2	
		850		1	1	2	2	
		1000		2	2	3	3	
		1200		2	2	3	3	
	40 × 10	350		--	0	0	0	0
		400			0	0	0	0
		600			0	0	1	1
		800			1	1	2	2
		850			1	1	2	2
		1000			1	1	3	3
		1200			2	2	3	4
	50 × 10	350			0	0	0	0
		400			0	0	0	0
		600			0	0	1	1
		800			1	1	2	2
		850			1	1	2	2
		1000			1	1	3	3
		1200			2	2	3	4
2 × 4	20 × 10	350			--	0	0	0
		400				0	0	0
		600				2 × 1	2 × 1	2 × 1
		800				2 × 2	2 × 2	2 × 2
		850				2 × 2	2 × 2	2 × 2
		1000				2 × 3	2 × 3	2 × 3
		1200				2 × 4	2 × 4	2 × 4
	30 × 10	350				0	0	0
		400				0	0	0
		600				2 × 1	2 × 1	2 × 1
		800				2 × 2	2 × 2	2 × 2
		850				2 × 2	2 × 2	2 × 2
		1000				2 × 3	2 × 3	2 × 3
		1200				2 × 4	2 × 4	2 × 4



Single-section transport unit



Multi-section transport unit

① Main busbar holder

② Reinforcement

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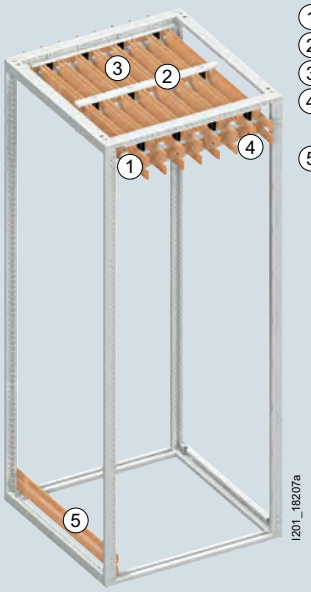
Features

- Compatible busbar profiles

20 × 10
30 × 10
40 × 10
50 × 10

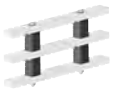
Configuration

Number of required reinforcements ② as a function of frame widths and rated short-time withstand current.



① Busbar holders
② Reinforcements
③ Connecting bar kit
④ Connecting lugs for main busbars
⑤ PE bar

Selection and ordering data

	Version	Busbar cross-section mm × mm	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
Main busbar at top				
	① **Busbar holders** • Up to 3200 A • With PE bar connection to frame • 1 set = 2 units	20 × 10 30 × 10 40 × 10 50 × 10	**8PQ4000-0BA04**	1 unit
	Busbar holders • > 3200 A • With PE bar connection to frame • 1 set = 2 units	20 × 10 30 × 10 40 × 10 50 × 10	**8PQ4000-0BA60**	1 unit
	② **Reinforcements**	20 × 10 30 × 10 40 × 10 50 × 10	**8PQ4000-0BA37**	1 unit
	③ **Connecting bar kits** • For busbar holders >3200 • Without fasteners	--	**8PQ4000-0BA62**	1 unit
	④ **Connecting lugs** • For L1, L2, L3, N or PEN • 1 set = 4 units	20 × 10 30 × 10 40 × 10 50 × 10	**8PQ4000-0BA53** **8PQ4000-0BA54** **8PQ4000-0BA56** **8PQ4000-0BA57**	1 unit 1 unit 1 unit 1 unit
	Frame ground PEN • For grounding the frame with PEN systems • One PE jumper is needed for each frame • Without fasteners • 1 pack = 10 units	--	**8PQ4000-0BA12**	1 unit
	Arcing fault barriers • Length of internal arc at main busbar up to 300 ms. • One needed for each side panel • 1 set = 2 units	20 × 10 30 × 10 40 × 10 50 × 10	**8PQ9400-0BA21**	1/2 units

*** You can order this quantity or a multiple thereof.**

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Main busbar

Main busbar at bottom

Features

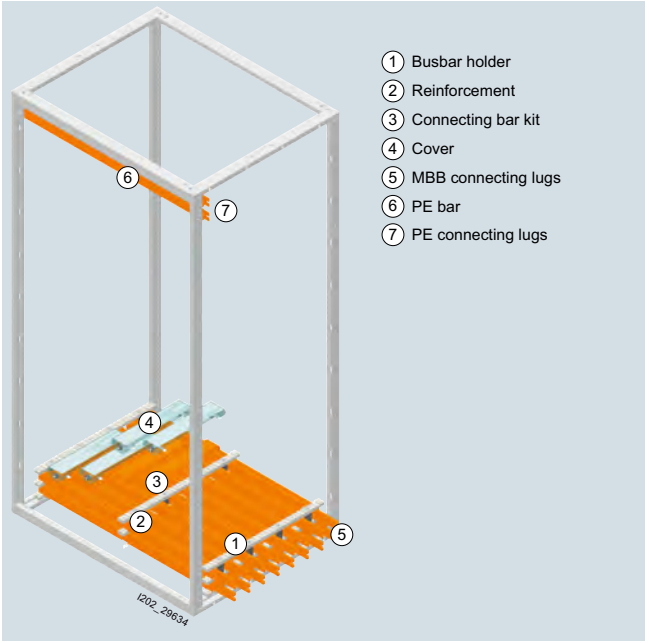
- Compatible busbar profiles

20 × 10
30 × 10
40 × 10
50 × 10

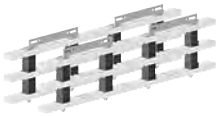
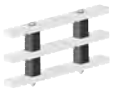
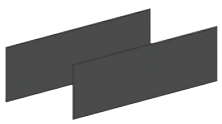
- Up to 3200 A rated current

Configuration

- Main busbar at bottom conditionally at least form 2b.
- Number of required reinforcements ② as a function of frame widths and rated short-time withstand current.



Selection and ordering data

	Version	Busbar cross-section mm × mm	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
Main busbar at bottom				
	① **Busbar holders** • Up to 3200 A • With PE bar connection to frame • 1 set = 2 units	20 × 10 30 × 10 40 × 10 50 × 10	**8PQ4000-0BA04**	1 unit
	**Busbar holders** • > 3200 A • With PE bar connection to frame • 1 set = 2 units	20 × 10 30 × 10 40 × 10 50 × 10	**8PQ4000-0BA60**	1 unit
	② **Reinforcements**	20 × 10 30 × 10 40 × 10 50 × 10	**8PQ4000-0BA37**	1 unit
	③ **Connecting bar kits** • For busbar holders >3200 • Without fasteners	--	**8PQ4000-0BA62**	1 unit
	④ **Covers** • For connecting bar kits • One cover per conductor	--	**8PQ4000-1BA25**	1 unit
	⑤ **Connecting lugs** • For L1, L2, L3, N or PEN • 1 set = 4 units	20 × 10 30 × 10 40 × 10 50 × 10	**8PQ4000-0BA53** **8PQ4000-0BA54** **8PQ4000-0BA56** **8PQ4000-0BA57**	1 unit 1 unit 1 unit 1 unit
	Frame ground PEN • For grounding the frame with PEN systems • One PE jumper is needed for each frame • Without fasteners • 1 pack = 10 units	--	**8PQ4000-0BA12**	1 unit
	**Upgrade for arcing fault protection** • Needed for arcing duration of between 100 ms and 300 ms. • One needed for each side panel • 1 set = 2 units	20 × 10 30 × 10 40 × 10 50 × 10	**8PQ9400-0BA21**	1/2 units

* You can order this quantity or a multiple thereof.

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	Version	Busbar cross-section mm × mm	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
PE bar				
	Frame connection 1 pack = 6 units Note The PE bar connection to the frame is included in the holder kit for the main busbar.	--	**8PQ4000-0BA82**	1 unit
	Connecting lugs • For PE bar • 1 set = 2 units	20 × 5 30 × 5 30 × 10	**8PQ4000-0BA52**	1 unit
		40 × 5 40 × 10 50 × 10	**8PQ4000-0BA67**	1 unit
	Holders, insulated 1 set = 4 units		**8PQ4000-0BA11**	1 unit

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Main busbar

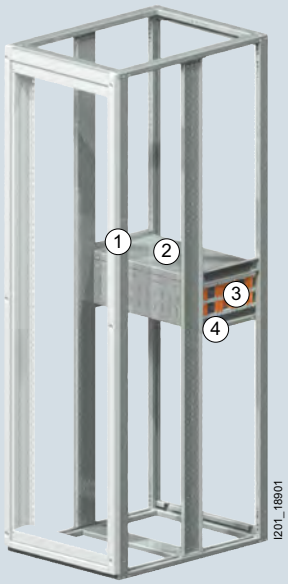
Features

- Compatible busbar profiles

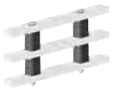
20 × 10
30 × 10
40 × 10
50 × 10

Configuration

Number of required reinforcements ② as a function of frame widths and rated short-time withstand current.



① Busbar holders
② Reinforcement
③ Connecting lugs
④ Crossbar

	Version	Busbar cross-section mm × mm	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
Main busbar at rear				
	① **Busbar holders** • Up to 3200 A • With PE bar connection to frame • 1 set = 2 units	20 × 10 30 × 10 40 × 10 50 × 10	**8PQ4000-0BA04**	1 unit
	② **Reinforcements** Horizontal bar arrangement	20 × 10 30 × 10 40 × 10 50 × 10	**8PQ4000-0BA37**	1 unit
	③ **Connecting lugs** • For L1, L2, L3, N or PEN • 1 set = 4 units	20 × 10 30 × 10 40 × 10 50 × 10	**8PQ4000-0BA53** **8PQ4000-0BA54** **8PQ4000-0BA56** **8PQ4000-0BA57**	1 unit 1 unit 1 unit 1 unit
	④ **Crossbars** • Depth 400 mm • 1 set = 2 units	--	**8PQ3000-0BA10**	1 unit

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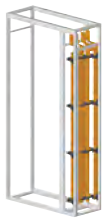
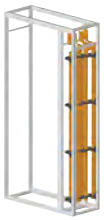
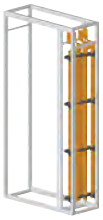
Overview

- The number of busbar holders depends on the short-circuit currents and frame widths
- Correct configuration is automatically performed in SIMARIS configuration
- Further information is available in the SIVACON S4 manual.

Vertical busbars, cascaded

Number of bars per phase	Dimensions	Rated operational current I_e [1]		Required busbar holders			
				I_{cw} = 25 kA	I_{cw} = 35 kA	I_{cw} = 50 kA	I_{cw} = 65 kA
	mm	IP ≤ IP41	IP55	I_{pk} = 52.5 kA	I_{pk} = 73.5 kA	I_{pk} = 105 kA	I_{pk} = 143 kA
1 	30 × 10 40 × 10	910 1100	830 980	4 4	4 4	-- --	-- --
2 	30 × 10 40 × 10	1520 1640	1330 1330	4 4	4 4	4 4	6 6
2 × 2	30 × 10 40 × 10	3040 3280	2660 2660	-- --	-- --	2 × 4 2 × 4	2 × 4 2 × 4
Profiled busbar 	30 × 30 40 × 30	1280 1510	1060 1210	2 2	3 3	4 4	6 6
2 × profiled busbar	30 × 30 40 × 30	2560 3020	2120 2420	-- --	-- --	2 × 2 2 × 2	2 × 3 2 × 3

[1] With an ambient temperature of 35 °C (average over 24 hours) and 500 W power loss per section.

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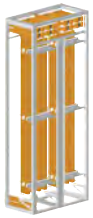
Vertical busbar

Vertical busbars, non-cascaded

Number of bars per phase	Dimensions mm	Rated operational current I_e [1] IP ≤ IP41	Rated operational current I_e [1] IP55	Number of holders per system I_{cw} = 25 kA / I_{pk} = 52 kA	I_{cw} = 35 kA / I_{pk} = 73 kA	I_{cw} = 50 kA / I_{pk} = 105 kA	I_{cw} = 65 kA / I_{pk} = 143 kA	I_{cw} = 85 kA / I_{pk} = 187 kA	I_{cw} = 100 kA / I_{pk} = 220 kA
2	20 × 10	1010	830	2	2	--	--	--	--
	30 × 10	1360	1110	2	2	3	--	--	--
4	20 × 10	1570	1260	2	2	3	4	--	--
	30 × 10	1930	1580	2	2	3	4	4	--
	40 × 10	2300	1880	2	2	2	2	4	4
	50 × 10	2490	2030	2	2	2	2	4	4
2 × 4 	20 × 10	3140	2520	2 x 2	2 x 2	2 x 3	2 x 4	--	--
	30 × 10	3860	3160	2 x 2	2 x 2	2 x 3	2 x 4	2 x 4	--
	40 × 10	4600	3760	2 x 2	2 x 2	2 x 3	2 x 2	2 x 4	2 x 4
	50 × 10	4980	4060	2 x 2	2 x 2	2 x 3	2 x 2	2 x 4	2 x 4

[1] With an ambient temperature of 35 °C (average over 24 hours) and 500 W power loss per section.

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Selection and ordering data

Cascaded

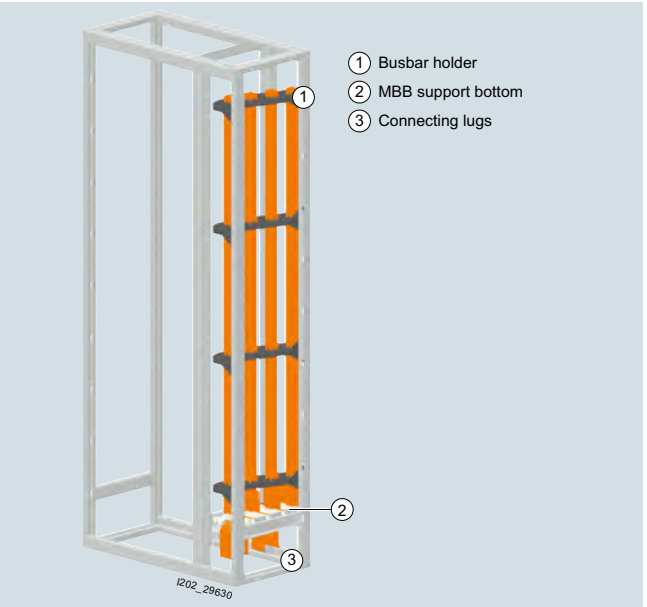
Features

- For mounting on main busbar, top
- Compatible busbar profiles

30 × 30
40 × 30
30 × 10
40 × 10

Configuration

- Number of required busbar holders ① depends on the rated short-time withstand current.



Assembly kits

Cascaded

① Busbar holders

Compartment width mm	Busbar dimensions mm × mm		Article No. www.siemens.com/product?Article No.	PS*/ P. unit
200	30 × 30	Profiled busbar	8PQ4000-0BA32	1 unit
	30 × 10	Flat copper		
	40 × 30	Profiled busbar	8PQ4000-0BA63	1 unit
	40 × 10	Flat copper		

② Copper supports
- For main busbar at bottom

8PQ4000-1BA23 — 1 unit

③ Connecting lugs
- 1 set = 4 units
- Without screws, washers and nuts

Busbar dimensions mm × mm	Position Vertical busbar	Main busbar	Frame depth mm	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
30 × 30 30 × 10	Right	Front	400	8PQ4000-0BA45	1 unit
			600, 800	8PQ4000-0BA46	1 unit
		Rear	800	8PQ4000-0BA50	1 unit
	Left	Front	400	8PQ4000-0BA73	1 unit
			600, 800	8PQ4000-0BA72	1 unit
		Rear	800	8PQ4000-0BA70	1 unit
40 × 30 40 × 10	Right	Front	400	8PQ4000-0BA47	1 unit
			600, 800	8PQ4000-0BA48	1 unit
		Rear	800	8PQ4000-0BA51	1 unit
	Left	Front	400	8PQ4000-0BA75	1 unit
			600, 800	8PQ4000-0BA48	1 unit
		Rear	800	8PQ4000-0BA71	1 unit

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Vertical busbar

	Version		Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	Profiled busbar • 1 set = 4 units			
	Busbar dimensions mm × mm	Length mm		
	30 × 30	1610	8PQ4000-0BA27	1 unit
	40 × 30		8PQ4000-0BA26	1 unit
	T-head screws • For use with profiled busbar • 1 pack = 100 units			
	External diameter × Length in mm			
	M10 × 25		8PQ9500-0BA01	1 unit
	M10 × 35		8PQ9500-0BA02	1 unit
	Busbar clamps • For use with flat copper connection • For M10 screw • 1 pack = 20 units		8PQ9400-0BA02	1 unit
	Saucer-head bolts • For use with busbar clamp • 1 pack = 50 units			
	External diameter × Length in mm			
	M10 × 35		8PQ9500-0BA14	1 unit
	M10 × 45		8PQ9500-0BA16	1 unit
	M10 × 55		8PQ9500-1BA36	1 unit
	M10 × 65		8PQ9500-1BA25	1 unit

*** You can order this quantity or a multiple thereof.**

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Non-cascaded

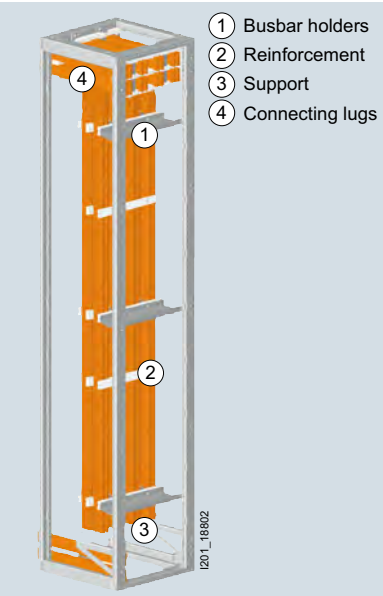
Features

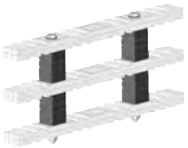
- For mounting on main busbar, top
- Compatible busbar profiles

20 × 10
30 × 10
40 × 10
50 × 10

Configuration

- Number of required busbar holders ② depends on the rated short-time withstand current.



	Version			Article No. www.siemens.com/product?Article No.	PS*/ P. unit
Non-cascaded					
	① **Busbar holders** 1 set = 3 units				
	Compartment width mm	Busbar dimensions mm × mm			
	200	20 × 10 30 × 10 40 × 10 50 × 10	Flat copper	8PQ4000-0BA77	1 unit
	400	20 × 10 30 × 10 40 × 10 50 × 10	Flat copper	8PQ4000-0BA31	1 unit
	② **Reinforcements**				
	Compartment width mm	Busbar dimensions mm × mm			
	--	20 × 10 30 × 10 40 × 10 50 × 10	Flat copper	8PQ4000-0BA37	1 unit
	③ **Supports**				
	Compartment width mm				
	200			8PQ4000-0BA78	1 unit
	400			8PQ4000-0BA61	1 unit
	④ **Connecting lugs** • 1 set = 4 units • Without screws, washers and nuts				
	Busbar dimensions mm × mm	Position of main busbar	Frame depth mm		
	20 × 10 30 × 10	Front	400 600, 800	8PQ4000-0BA38 8PQ4000-0BA40	1 unit 1 unit
		Rear	800	8PQ4000-0BA43	1 unit
	40 × 10 50 × 10	Front	400 600, 800	8PQ4000-0BA41 8PQ4000-0BA42	1 unit 1 unit
		Rear	800	8PQ4000-0BA44	1 unit

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Overview

Technical specifications

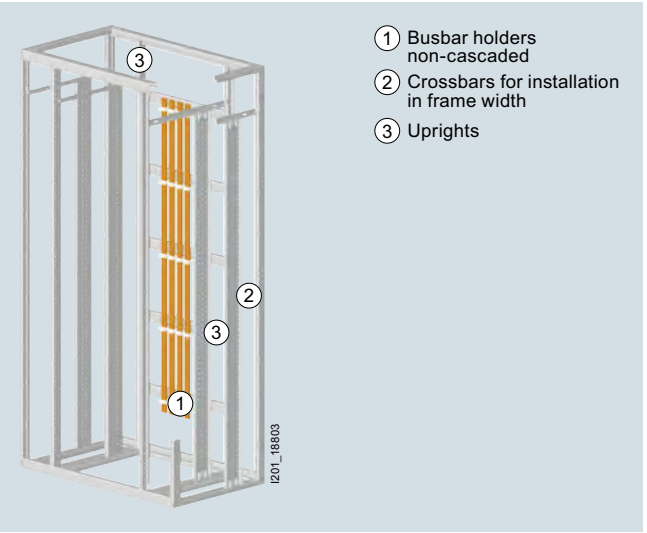
Number of bars per phase	Dimensions	Rated operational current I_e [1]	Holding spacing				
			$I_{cc\ eff}$ = 5 kA	$I_{cc\ eff}$ = 10 kA	$I_{cc\ eff}$ = 15 kA	$I_{cc\ eff}$ = 20 kA	$I_{cc\ eff}$ = 25 kA
	mm	A	mm	mm	mm	mm	mm
1	15 × 5	160	600	400	--	--	--
	20 × 5	250	600	600	400	--	--
	30 × 5	400	700	700	450	325	300
	30 × 10	630	600	400	300	250	--

[1] With an ambient temperature of 35 °C (average over 24 hours) and 500 W power loss per section.

Selection and ordering data

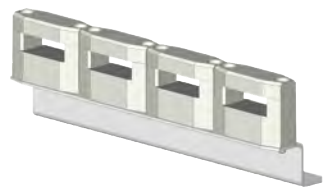
Compact busbar systems, with a pole center distance of 50 mm, can be used in conjunction with the SIKclip quick wiring assembly system for modular devices.

For compact busbar systems, with a pole center distance of 60 mm, a wide range of adapters for SIRIUS and 3VL molded case circuit breakers is available together with many other accessories.



Compact busbar system, non-cascaded

Compact busbar system with 50 mm pole center distance

	Version		Article No. www.siemens.com/product?Article No.	PS*/ P. unit
Non-cascaded				
	① **Linear universal busbar holders** • 4-pole • Rectangular profile • Height: 200 mm			
	Busbar dimensions mm × mm			
	15 × 5 20 × 5 30 × 5		8GF5762	1 unit
	30 × 10		8GF5763	1 unit
	② **Crossbars** 1 set = 2 units			
	For frame width in mm	Crossbar length in mm		
	400	350	8PQ3000-0BA12	1 unit
	600	550	8PQ3000-0BA71	1 unit
	800	750	8PQ3000-0BA72	1 unit
	1000	950	8PQ3000-0BA84	1/2 units
	1200	1150	8PQ3000-0BA85	1/2 units

*** You can order this quantity or a multiple thereof.**

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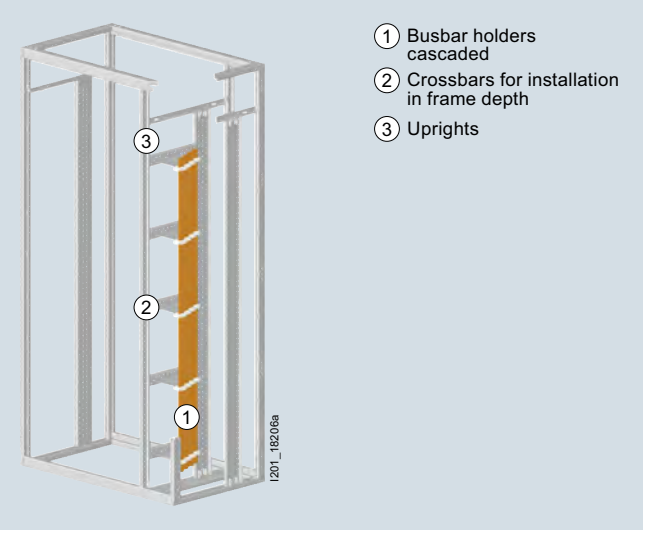

Compact busbar system, cascaded

Compact busbar system with 50 mm pole center distance

	Version		Article No. www.siemens.com/product?Article No.	PS*/ P. unit
Cascaded				
	① **Linear universal busbar holders** • 4-pole • Rectangular profile • Height: 200 mm			
	Busbar dimensions mm × mm			
	15 × 5 20 × 5 30 × 5		**8GF5760**	1 unit
	30 × 10		**8GF5761**	1 unit
	② **Crossbars** 1 set = 2 units			
	• Frame depth without uprights			
	For frame depth in mm	Crossbar length in mm		
	400 600 800	300 500 700	**8PQ3000-0BA10** **8PQ3000-1BA24** **8PQ3000-1BA25**	1 unit 1/2 units 1/2 units
	• Frame depth with uprights			
	For frame depth in mm	Crossbar length in mm		
	600 800	300	**8PQ3000-0BA10**	1 unit
60 mm system				
	Busbar holders • Pole center distance: 60 mm • Busbar dimensions (mm × mm): 15 × 5, 20 × 5, 30 × 5, 30 × 10 • Width: 20 mm Arrangement: Non-cascaded			
	Versions			
	3-pole		**8US1923-3AA01**	10 units
	4-pole		**8US1923-4AA00**	10 units
	Busbar holder end covers Pole center distance: 60 mm			
	Versions			
	3-pole		**8US1922-1AC00**	10 units
	4-pole		**8US1922-1AB00**	1 unit

*** You can order this quantity or a multiple thereof.**

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Fasteners

Overview

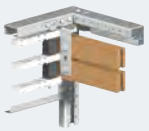
To ensure a reliable connection of the copper busbars, it is important to select quality fasteners, of the right size, suitable and appropriately treated for the task.

Selection and ordering data

The stated quantity of fasteners applies to a 4-pole arrangement.

Rules for calculation of the screw length for different busbar dimensions:

- Length of screw with M8 threading = busbar profile + 15 mm
- Length of screw with M10, M12 threading = busbar profile + 20 mm

Version		Profile	Cross-section mm × mm	Quantity	Article No.	Description
Main busbar system with two bars per phase						
Main busbar to:	Vertical distribution busbar, cascaded	Profiled busbar	30 × 30 40 × 30	4 8 12 12	8PQ9500-0BA14 8PQ9500-0BA01 8PQ9500-0BA60 8PQ9500-0BA05	Non-cascaded T-head screw DIN 603 - M10 x 35 T-head screw M10 x 25 Clamping washer DIN 6796 - 10 Hexagonal nut ISO 4032 - M10
		Flat copper	2 × 30 × 10	4 8 8 12 12	8PQ9500-0BA14 8PQ9500-1BA36 8PQ9400-0BA02 8PQ9500-0BA60 8PQ9500-0BA05	Non-cascaded T-head screw DIN 603 - M10 x 35 Non-cascaded T-head screw DIN 603 - M10 x 55 Busbar clamps Clamping washer DIN 6796 - 10 Hexagonal nut ISO 4032 - M10
			2 × 40 × 10	4 8 8 12 12	8PQ9500-0BA14 8PQ9500-1BA25 8PQ9400-0BA02 8PQ9500-0BA60 8PQ9500-0BA05	Non-cascaded T-head screw DIN 603 - M10 x 35 Non-cascaded T-head screw DIN 603 - M10 x 65 Busbar clamps Clamping washer DIN 6796 - 10 Hexagonal nut ISO 4032 - M10
	Vertical distribution busbar, non-cascaded	Flat copper	2 × 20 × 10 2 × 40 × 10	12 12 12	8PQ9500-0BA14 8PQ9500-0BA60 8PQ9500-0BA05	Non-cascaded T-head screw DIN 603 - M10 x 35 Clamping washer DIN 6796 - 10 Hexagonal nut ISO 4032 - M10
			4 × 40 × 10 4 × 50 × 10	8 8 16 16	8PQ9500-0BA14 8PQ9500-0BA16 8PQ9500-0BA60 8PQ9500-0BA05	Non-cascaded T-head screw DIN 603 - M10 x 35 Non-cascaded T-head screw DIN 603 - M10 x 45 Clamping washer DIN 6796 - 10 Hexagonal nut ISO 4032 - M10
Section-section	L1...3, N (PEN)	Flat copper	2 × 20 × 10 2 × 30 × 10	8 8 8	8PQ9500-0BA16 8PQ9500-0BA60 8PQ9500-0BA05	Non-cascaded T-head screw DIN 603 - M10 x 45 Clamping washer DIN 6796 - 10 Hexagonal nut ISO 4032 - M10
PEN jumper	PEN (per frame) 	Flat copper	--	2 1 1 1	8PQ9500-0BA34 8PQ9500-0BA14 8PQ9500-0BA60 8PQ9500-0BA05	Self-tapping screw DIN 7500 - M6 x 10 Non-cascaded T-head screw DIN 603 - M10 x 35 Clamping washer DIN 6796 - 10 Hexagonal nut ISO 4032 - M10

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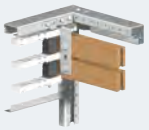
Version		Profile	Cross-section mm × mm	Quan-tity	Article No.	Description
Main busbar system with four bars per phase						
Main busbar to:	Vertical distribution busbar, cascaded	Profiled busbar	30 × 30	4	8PQ9500-0BA16	Non-cascaded T-head screw DIN 603 - M10 x 45
			40 × 30	8	8PQ9500-0BA01	T-head screw M10 x 25
				8	8PQ9400-0BA02	Busbar clamps
				12	8PQ9500-0BA60	Clamping washer DIN 6796 - 10
				12	8PQ9500-0BA05	Hexagonal nut ISO 4032 - M10
		Flat copper	2 × 30 × 10	4	8PQ9500-0BA16	Non-cascaded T-head screw DIN 603 - M10 x 45
				8	8PQ9500-1BA36	Non-cascaded T-head screw DIN 603 - M10 x 55
				8	8PQ9400-0BA02	Busbar clamps
				12	8PQ9500-0BA60	Clamping washer DIN 6796 - 10
				12	8PQ9500-0BA05	Hexagonal nut ISO 4032 - M10
			2 × 40 × 10	4	8PQ9500-0BA16	Non-cascaded T-head screw DIN 603 - M10 x 45
				8	8PQ9500-1BA25	Non-cascaded T-head screw DIN 603 - M10 x 65
				12	8PQ9500-0BA60	Clamping washer DIN 6796 - 10
				12	8PQ9500-0BA05	Hexagonal nut ISO 4032 - M10
	Vertical distribution busbar, non-cascaded	Flat copper	2 × 20 × 10	12	8PQ9500-0BA16	Non-cascaded T-head screw DIN 603 - M10 x 45
			2 × 40 × 10	12	8PQ9500-0BA60	Clamping washer DIN 6796 - 10
				12	8PQ9500-0BA05	Hexagonal nut ISO 4032 - M10
			4 × 40 × 10	16	8PQ9500-0BA16	Non-cascaded T-head screw DIN 603 - M10 x 45
			4 × 50 × 10	16	8PQ9500-0BA60	Clamping washer DIN 6796 - 10
				16	8PQ9500-0BA05	Hexagonal nut ISO 4032 - M10
Section-section	L1...3, N (PEN)	Flat copper	4 × 20 × 10	8	8PQ9500-0BA16	Non-cascaded T-head screw DIN 603 - M10 x 45
			4 × 30 × 10	8	8PQ9500-0BA60	Clamping washer DIN 6796 - 10
				8	8PQ9500-0BA05	Hexagonal nut ISO 4032 - M10
			4 × 40 × 10	16	8PQ9500-0BA16	Non-cascaded T-head screw DIN 603 - M10 x 45
			4 × 50 × 10	16	8PQ9500-0BA60	Clamping washer DIN 6796 - 10
				16	8PQ9500-0BA05	Hexagonal nut ISO 4032 - M10
PEN jumper	PEN (per frame) 	Flat copper	--	2	8PQ9500-0BA34	Self-tapping screw DIN 7500 - M6 x 10
				1	8PQ9500-0BA16	Non-cascaded T-head screw DIN 603 - M10 x 45
				1	8PQ9500-0BA60	Clamping washer DIN 6796 - 10
				1	8PQ9500-0BA05	Hexagonal nut ISO 4032 - M10

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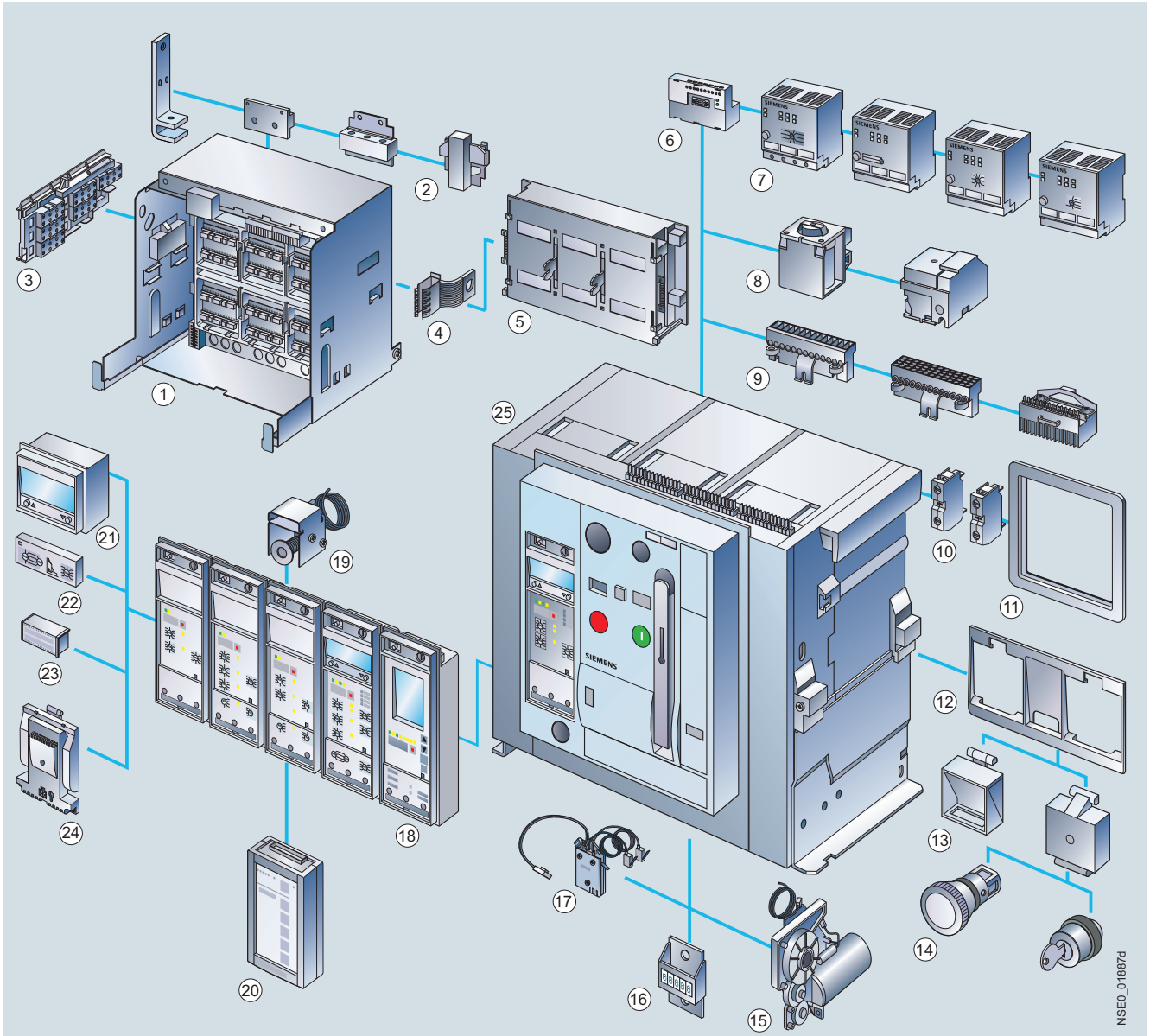
Overview



1 Guide frame
2 Main circuit connection front, flange, horizontal, vertical
3 Position signalling switch
4 Ground connection, leading
5 Shutters
6 COM15 PROFIBUS module or COM16 MODBUS module
7 External **Cubicle**BUS modules
8 Closing coil, auxiliary release
9 Auxiliary conductor plug-in system
10 Auxiliary switch block
11 Door sealing frame
12 Interlocking set for mechanical ON/OFF
13 Transparent panel, function insert
14 EMERGENCY-STOP pushbutton, key operated
15 Motorized operating mechanism
16 Operating cycles counters
17 Breaker Status Sensor (BSS)
18 Protective device with device holder, Electronic Trip Unit (ETU)
19 Remote reset solenoid
20 Breaker Data Adapter (BDA *Plus*)
21 Four-line display
22 Ground-fault protection module
23 Rating plug
24 Measurement function module
25 Air circuit breaker

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Size		**I**		**II**		
Type		**3WL11**		**3WL12**		
Switching capacity class		**N**	**S**	**N**	**S**	**H**
Rated short-circuit breaking capacity						
Rated operating voltage U_e up to 415 V AC						
I_{cu}	kA	55	66	66	80	100
I_{cs}	kA	55	66	66	80	100
I_{cm}	kA	121	145	145	176	220
Rated operating voltage U_e up to 500 V AC						
I_{cu}	kA	55	66	66	80	100
I_{cs}	kA	55	66	66	80	100
I_{cm}	kA	121	145	145	176	220
Rated operating voltage U_e up to 690 V AC						
I_{cu}	kA	42	50	50	75	85
I_{cs}	kA	42	50	50	75	85
I_{cm}	kA	88	105	105	165	187
Rated operating voltage U_e up to 1000 V/1150 V AC						
I_{cu}	kA	--	--	--	--	50
I_{cs}	kA	--	--	--	--	50
I_{cm}	kA	--	--	--	--	105
Rated short-time withstand current I_{cw} of the circuit breakers[3)]						
0.5 s	kA	55	66	66	80	100
1 s	kA	42	50	55	66	80
2 s	kA	29.5	35	39	46	65[1)]/70[2)]
3 s	kA	24	29	32	44	50[1)]/65[2)]
Short-circuit breaking capacity I_{cc} of the non-automatic air circuit breakers						
Up to 500 V AC	kA	55	66	66	80	100
Up to 690 V AC	kA	42	50	50	75	85
Up to 1000 V/1150 V AC	kA	--	--	--	--	50[4)]

1) Size II with $I_{n\,max.} \leq 2500$ A.

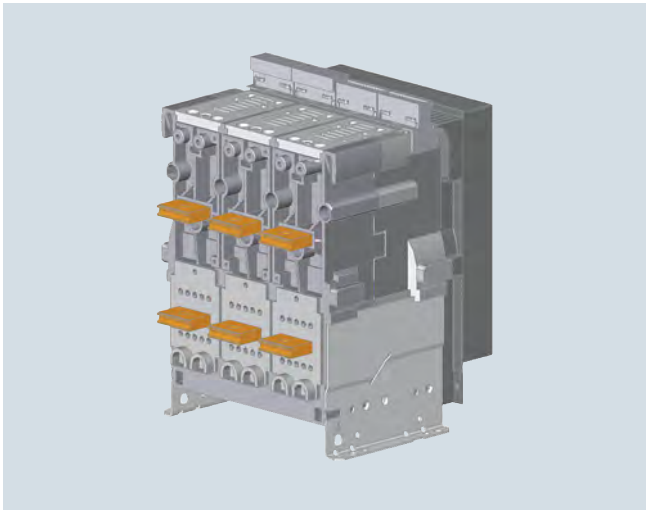
2) Size II with $I_{n\,max.} = 3200$ A and $I_{n\,max.} = 4000$ A.

3) At a rated voltage of ≥ 690 V the I_{cw} value of the circuit breaker cannot be greater than the I_{cu} value or I_{cs} value at 690 V.

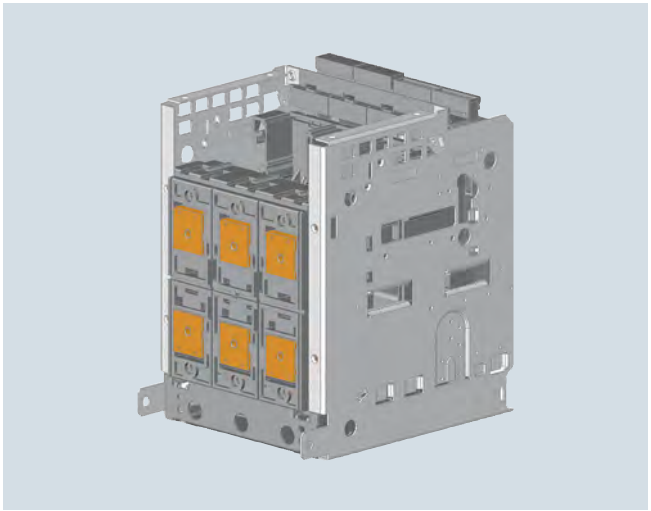
4) Rated operational voltage U_e = 1150 V.

Size		**I**			**II**						
Type		**Up to 3WL1110**	**3WL1112**	**3WL1116**	**3WL1208**	**3WL1210**	**3WL1212**	**3WL1216**	**3WL1220**	**3WL1225**	**3WL1232**
Minimum phase size	Unit(s)	1	2	2	1	1	2	2	3	2	3
Busbars, Cu bare or insulated, black	mm^2	60 × 10	40 × 10	50 × 10	50 × 10	60 × 10	40 × 10	50 × 10	50 × 10	100 × 10	100 × 10

For further information, see the technical documents on 3WL air circuit breakers



3WL air circuit breaker with horizontal connections for fixed-mounted versions



3WL air circuit breaker with flange connections for draw-out versions

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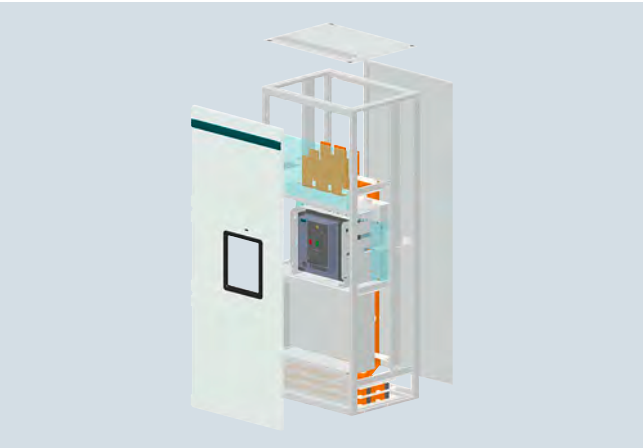
Incoming feeder bays

Main busbar at top

		Rated operational current I_e ventilated in A							Rated operational current I_e non-ventilated in A						
Size	I_n	**20 °C**	**25 °C**	**30 °C**	**35 °C**	**40 °C**	**45 °C**	**50 °C**	**20 °C**	**25 °C**	**30 °C**	**35 °C**	**40 °C**	**45 °C**	**50 °C**
I	1600	1600	1600	1590	**1550**	1510	1460	1420	1370	1340	1310	**1270**	1240	1200	1170
	2000	2000	2000	1990	**1940**	1890	1830	1780	1720	1680	1640	**1590**	1550	1510	1460
II	2000	2000	2000	2000	**2000**	2000	2000	2000	1960	1920	1870	**1820**	1780	1730	1670
	3200	2850	2790	2720	**2650**	2580	2510	2430	2260	2210	2160	**2100**	2050	1990	1930
III	4000	4000	4000	4000	**4000**	3950	3870	3780	3230	3150	3080	**3000**	2920	2840	2750

Main busbar at bottom



		Rated operational current I_e ventilated in A							Rated operational current I_e non-ventilated in A						
Size	I_n	**20 °C**	**25 °C**	**30 °C**	**35 °C**	**40 °C**	**45 °C**	**50 °C**	**20 °C**	**25 °C**	**30 °C**	**35 °C**	**40 °C**	**45 °C**	**50 °C**
I	1600	1540	1500	1470	**1430**	1390	1350	1310	1390	1350	1320	**1290**	1240	1190	1140
	2000	1930	1880	1840	**1790**	1740	1690	1640	1710	1670	1630	**1590**	1530	1470	1410
II	2000	2000	2000	2000	**2000**	1990	1920	1830	2000	1950	1880	**1820**	1750	1680	1610
	3200	2710	2640	2570	**2490**	2400	2300	2200	2320	2250	2180	**2100**	2030	1950	1860

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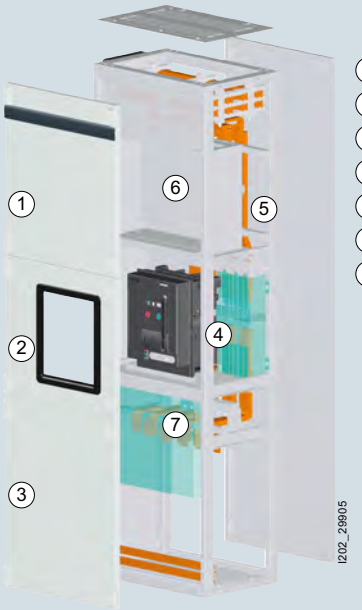
Main busbar at top

Features

- Combined 3-pole/4-pole assembly kits
- Incl. copper drawings

Configuration

- Separation 4b is recommended



1 Head compartment door
2 3WL modular door
3 Base compartment door
4 Mounting plate
5 Main busbar connection
6 Separation 4b
7 Cable connection

Selection and ordering data

Version			Article No. www.siemens.com/product?Article No.	Article No. www.siemens.com/product?Article No.	Article No. www.siemens.com/product?Article No.
① **Head compartment door**					
Size	Width mm	Height mm	**Head compartment door**	**IP55 upgrade**	
I	600	675	8PQ2067-6BA01	8PQ2067-6BA02	
II	800	675	8PQ2067-8BA01	8PQ2067-8BA02	
III	1000	675	8PQ2067-1BA01	8PQ2067-1BA02	
② **Modular door** • Door sealing frame 3WL9111-0AP01-0AA0 suitable for IP4X • Protective cover 3WL9111-0AP02-0AA0 suitable for IP55					
Size	Width mm	Height mm	**Modular door IP4X**	**Modular door IP55**	**IP55 upgrade**
I	600	550	8PQ2055-6BA16	8PQ2055-6BA17	8PQ2055-6BA06
II	800	550	8PQ2055-8BA08	8PQ2055-8BA10	8PQ2055-8BA06
III	1000	550	8PQ2055-1BA03	8PQ2055-1BA04	8PQ2055-1BA06
③ **Base compartment door**					
Size	Width mm	Height mm	**Base compartment door**	**IP55 upgrade**	
I	600	750	8PQ2075-6BA01	8PQ2075-6BA03	
II	800	750	8PQ2075-8BA01	8PQ2075-8BA03	
III	1000	750	8PQ2075-1BA01	8PQ2075-1BA02	

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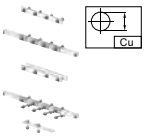
3WL air circuit breakers

Version	Article No. www.siemens.com/product?Article No.
④ **Mounting plate**	

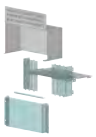
Size	Width mm	Height mm	**Mounting plate**
I	600	550	8PQ6000-5BA26
II	800	550	8PQ6000-5BA24
III	1000	550	8PQ6000-5BA23

⑤ **Main busbar connection**



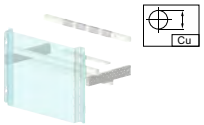
Size	Width mm	Rated current A	**Mechanical system**
I	600	2000	8PQ6000-6BA75
II	800	3200	8PQ6000-6BA76
III	1000	4000	8PQ6000-5BA33

⑥ **Separation 4b**



Size	Width mm	Depth mm	Position of main busbar	**Separation**
I	600	400	Top (front)	8PQ5000-4BA28
		600	Top (front)	8PQ5000-4BA30
		800	Top (front)	8PQ5000-4BA31
II	800	600	Top (front)	8PQ5000-4BA32
		800	Top (front)	8PQ5000-4BA33
III	1000	800	Top (double)	8PQ5000-3BA83

⑦ **Cable connection**
• Suitable for transformer installation



Size	Compartment width mm	Rated current A	Installation type	**Mechanical system**
I	600	2000	Fixed	8PQ6000-5BA81
			Draw-out	8PQ6000-5BA82
II	800	3200	Fixed	8PQ6000-5BA83
			Draw-out	8PQ6000-5BA83
III	1000	4000	Fixed	8PQ6000-5BA84
			Draw-out	8PQ6000-5BA84

⑧ **3WL insulation**

Required for
• Vertical distribution busbars ③, size I in draw-out version
• Cable connection ④, size I in draw-out version

Version	**Insulation**
Insulation for draw-out version	8PQ6000-7BA28

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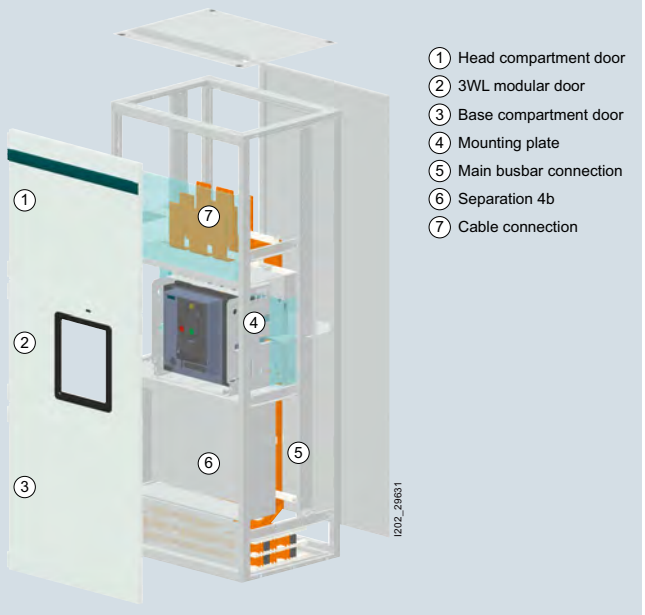
Main busbar at bottom

Features

- Combined 3-pole/4-pole assembly kits
- Incl. copper drawings

Configuration

- Separation 4b is recommended



Selection and ordering data

Version			Article No. www.siemens.com/product?Article No.	Article No. www.siemens.com/product?Article No.	Article No. www.siemens.com/product?Article No.
① **Head compartment door**					
Size	Width mm	Height mm	**Head compartment door**	**IP55 upgrade**	
I	600	675	8PQ2067-6BA01	8PQ2067-6BA02	
II	800	675	8PQ2067-8BA01	8PQ2067-8BA02	
② **3WL modular door** • Door sealing frame 3WL9111-0AP01-0AA0 suitable for IP4X • Protective cover 3WL9111-0AP02-0AA0 suitable for IP55					
Size	Width mm	Height mm	**Modular door IP4X**	**Modular door IP55**	**IP55 upgrade**
I	600	550	8PQ2055-6BA16	8PQ2055-6BA17	8PQ2055-6BA06
II	800	550	8PQ2055-8BA08	8PQ2055-8BA10	8PQ2055-8BA06
③ **Base compartment door**					
Size	Width mm	Height mm	**Base compartment door**	**IP55 upgrade**	
I	600	750	8PQ2075-6BA01	8PQ2075-6BA03	
II	800	750	8PQ2075-8BA01	8PQ2075-8BA03	

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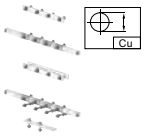
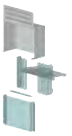
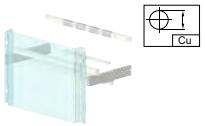
3WL air circuit breakers

Version				Article No. www.siemens.com/product?Article No.
④ **Mounting plate**				
Size	Width mm	Height mm		**Mounting plate**
I	600	550		8PQ6000-5BA26
II	800	550		8PQ6000-5BA24
⑤ **Main busbar connection**				
Size	Width mm	Rated current A		**Mechanical system**
I	600	2000		8PQ6000-6BA75
II	800	3200		8PQ6000-6BA76
⑥ **Separation 4b**				
Size	Width mm	Depth mm	Position of main busbar	**Separation**
I	600	400	Bottom (front)	8PQ5000-4BA34
		600	Bottom (front)	8PQ5000-4BA35
		800	Bottom (front)	8PQ5000-4BA36
II	800	600	Bottom (front)	8PQ5000-4BA37
		800	Bottom (front)	8PQ5000-4BA38
⑦ **Cable connection** • Suitable for transformer installation				
Size	Compartment width mm	Rated current A	Installation type	**Mechanical system**
I	600	2000	Fixed	8PQ6000-5BA81
			Draw-out	8PQ6000-5BA82
II	800	3200	Fixed	8PQ6000-5BA83
			Draw-out	8PQ6000-5BA83

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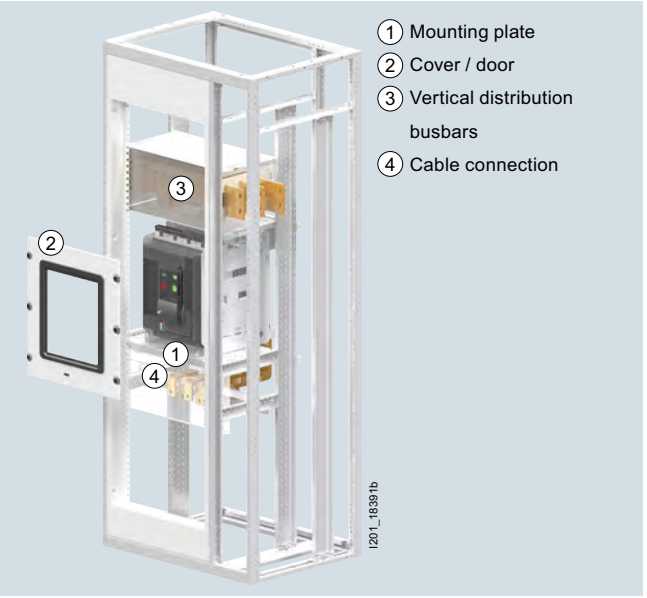
Vertical busbar connection

Features

- 3-/4-pole combined
- Incl. copper drawings



Selection and ordering data

Version	Article No. www.siemens.com/product?Article No.	Article No. www.siemens.com/product?Article No.
Draw-out and fixed-mounted versions with cover • Door sealing frame 3WL9111-0AP01-0AA0 suitable for IP4X		

Size	Compartment width mm	No. of poles	Minimum depth mm	Height mm	① **Mounting plate**	② **Cover**
I	600	3	600	550	8PQ6000-3BA31	8PQ2055-6BA05
		4	600		8PQ6000-3BA31	8PQ2055-6BA07
	800	3/4	600		8PQ6000-3BA32	8PQ2055-8BA04
II	600	3	600	550	8PQ6000-3BA31	8PQ2055-6BA05
	800	3	600		8PQ6000-3BA32	8PQ2055-8BA07
		4	600		8PQ6000-3BA32	8PQ2055-8BA05

Draw-out and fixed-mounted versions with modular door

- Door sealing frame 3WL9111-0AP01-0AA0 suitable for IP4X
- Protective cover 3WL9111-0AP02-0AA0 suitable for IP55

Size	Compartment width mm	No. of poles	Minimum depth mm	Height mm	① **Mounting plate**	② **Modular door IP4X**	② **Modular door IP55**
I	400	3	400	550	8PQ6000-5BA25	8PQ2055-4BA12	--
	600	3/4	400		8PQ6000-5BA26	8PQ2055-6BA16	8PQ2055-6BA17
II	800	3/4	600	550	8PQ6000-5BA24	8PQ2055-8BA08	8PQ2055-8BA10

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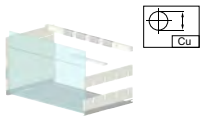
Selection and ordering data

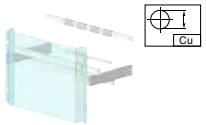
3WL connecting terminal kit

③ Vertical distribution busbars



Size	Enclosure	3WL rated current	Compartment width	Installation type	Height		Mechanical system
					Above circuit breaker	Below circuit breaker	
		A	mm		mm	mm	
I	Modular door	1600	400[1]	Fixed	250	300	8PQ6000-5BA48
				Draw-out	250	300	8PQ6000-5BA50
			600	Fixed	250	300	8PQ6000-5BA51
				Draw-out	250	300	8PQ6000-5BA52
	Cover	1600	600	Fixed	250	300	8PQ6000-5BA45
				Draw-out	250	300	8PQ6000-5BA45
			800	Fixed	250	300	8PQ6000-5BA46
				Draw-out	250	300	8PQ6000-5BA46
	Modular door	2000	400[1]	Fixed	300	350	8PQ6000-7BA05
				Draw-out	300	350	8PQ6000-7BA06
			600	Fixed	300	350	8PQ6000-7BA07
				Draw-out	300	350	8PQ6000-7BA08
	Cover	2000	600	Fixed	300	350	8PQ6000-7BA03
				Draw-out	300	350	8PQ6000-7BA03
			800	Fixed	300	350	8PQ6000-7BA04
				Draw-out	300	350	8PQ6000-7BA04
II	Modular door	2000	800	Fixed	300	350	8PQ6000-5BA53
				Draw-out	300	350	8PQ6000-5BA53
		3200	800	Fixed	300	350	8PQ6000-5BA53
				Draw-out	300	350	8PQ6000-5BA53
	Cover	2000	800	Fixed	300	350	8PQ6000-5BA47
				Draw-out	300	350	8PQ6000-5BA47
		3200	800	Fixed	300	350	8PQ6000-5BA47
				Draw-out	300	350	8PQ6000-5BA47

④ Cable connection
- To be able to anchor, bend and connect the cables it is necessary to leave enough space for the assembly operations.
- Suitable for transformer installation



Size	Enclosure	3WL rated current	Compartment width	Installation type	Height	Mechanical system
		A	mm		mm	
I	Modular door	2000	400[1]	Fixed	425	8PQ6000-5BA78
				Draw-out	425	8PQ6000-5BA80
			600	Fixed	425	8PQ6000-5BA81
				Draw-out	425	8PQ6000-5BA82
	Cover	2000	600	Fixed	250	8PQ6000-5BA75
				Draw-out	250	8PQ6000-5BA75
			800	Fixed	250	8PQ6000-5BA76
				Draw-out	250	8PQ6000-5BA76
II	Modular door	2000	800	Fixed	425	8PQ6000-5BA83
				Draw-out	425	8PQ6000-5BA83
		3200	800	Fixed	425	8PQ6000-5BA83
				Draw-out	425	8PQ6000-5BA83
	Cover	2000	800	Fixed	400	8PQ6000-5BA77
				Draw-out	400	8PQ6000-5BA77
		3200	800	Fixed	350	8PQ6000-5BA77
				Draw-out	350	8PQ6000-5BA77

[1] 3-pole corresponding to circuit breaker assembly kit

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Version	Article No. www.siemens.com/product?Article No.
⑧ **3WL insulation** Required for • Vertical distribution busbars ③, size I in draw-out version • Cable connection ④, size I in draw-out version	

Version	**Insulation**
Insulation for draw-out version	**8PQ6000-7BA28**

Accessories

Busbar holders
1 set = 4 holders

Size	Number of poles	Width in mm	
I	3/4	600	**8PQ6000-4BA35**
II	3	600	**8PQ6000-4BA36**
I	3/4	800	**8PQ6000-4BA37**
II	3/4	800	**8PQ6000-4BA38**
III	3/4	1000	**8PQ6000-4BA40**

Busbar connection
For use with SIVACON 8PS

Size	Number of poles	Width in mm	**Mechanical system**
I	3/4	600	**8PQ3000-1BA70**
II	3	600	
I	3/4	800	**8PQ3000-1BA71**
II	3/4	800	
III	3/4	1000	**8PQ3000-1BA72**

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Overview

Note:
Available from 10/2015

The assembly kits of the new 3VA molded case circuit breakers will soon also be available for SIVACON S4.

Our SIVACON assembly kits are perfectly tailored to the respective installation conditions of the device. It is particularly important for us to ensure that all accessory components are supported, so that a host of possible uses will then be available.

In addition to fixed-mounted versions, the compatibility of motor frame and guide frame is ensured thanks to adjustable-depth mounting plates. For the first time multiple feeders can also be depicted in conjunction with the 8US busbar system, which ensures a particularly convenient connection option.

As ever, the new hardware can be configured in conjunction with the molded case circuit breakers using SIMARIS Configuration. The free tool ensures correct interaction between all components and offers a diverse selection of calculation and output options.

The advantages at a glance:

- Perfectly tailored to the 3VA
- Type verification according to IEC 61439-2
- High integration density
- Wide variety of connection options
- User-friendly design with SIMARIS Configuration

Paneling options:

- Internal cover
- Modular door with rotary operating mechanism

Mounting designs:

- Motorized operating mechanism
- Rotary operating mechanism
- Guide frame
- 8US busbar adapter
- Standard mounting rail

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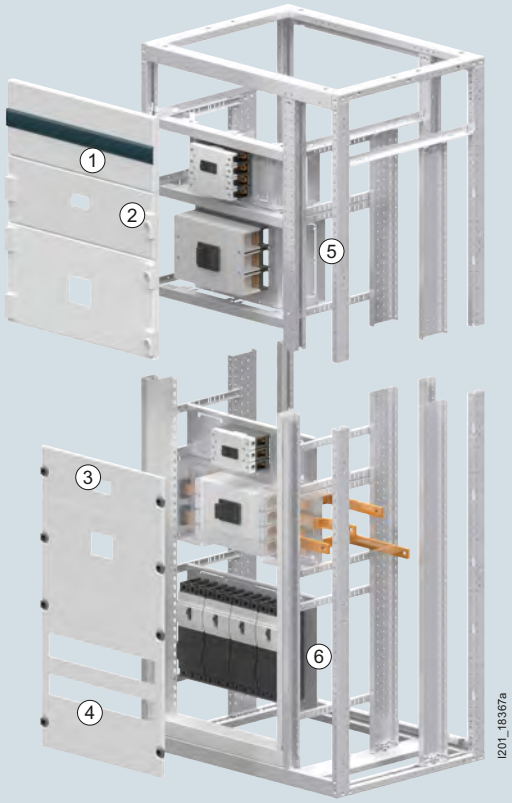
Overview



1. Head compartment cover
2. Modular door for direct operating mechanism
3. Cover for single branch unit
4. Cover for multiple branch unit
5. Assembly kit, horizontal
6. Assembly kit, vertical

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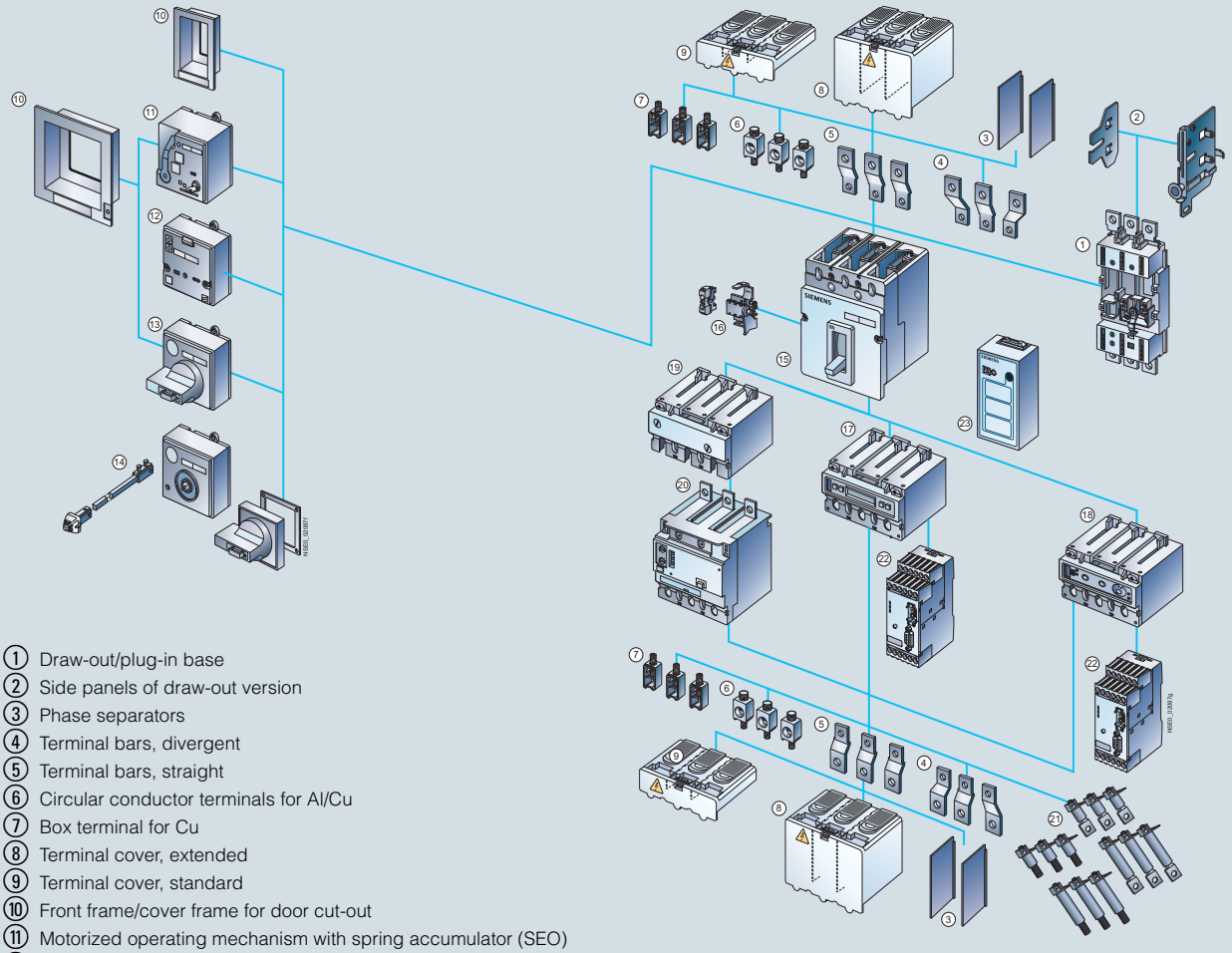
3VL molded case circuit breakers



① Draw-out/plug-in base
② Side panels of draw-out version
③ Phase separators
④ Terminal bars, divergent
⑤ Terminal bars, straight
⑥ Circular conductor terminals for Al/Cu
⑦ Box terminal for Cu
⑧ Terminal cover, extended
⑨ Terminal cover, standard
⑩ Front frame/cover frame for door cut-out
⑪ Motorized operating mechanism with spring accumulator (SEO)
⑫ Motorized operating mechanism (MO)
⑬ Front-operated rotary operating mechanism
⑭ Door-coupling rotary operating mechanism
⑮ 3VL molded case circuit breaker
⑯ Internal accessories
⑰ Electronic Trip Unit LCD ETU
⑱ Electronic Trip Unit with communication function
⑲ Thermal/magnetic overcurrent release
⑳ RCD module
㉑ Rear connections – flat and round
㉒ COM20/21 communication module to the PROFIBUS DP/MODBUS
㉓ Battery power supply with test function for Electronic Trip Units

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Technical specifications

Type			VL160X	VL160	VL250	VL400	VL630	VL800	VL1250	VL1600
Conductor cross-sections										
Box terminals[1]										
• Solid or stranded cable	Only copper	mm^2	2.5 ... 95	2.5 ... 95	25 ... 185	50 ... 240	–	–	–	–
• Flexible wire with sleeve connector		mm^2	2.5 ... 50	2.5 ... 50	25 ... 120	50 ... 240	–	–	–	–
• Flexible busbar		mm	12 × 10	12 × 10	17 × 10	25 × 10	–	–	–	–
Connecting terminal plate for flexible busbar[2]		mm	–	–	–	–	2 units 10 × 32	–	–	–
Circular conductor terminal for cable[1]										
• Solid or stranded cable	Cu or Al	mm^2	16 ... 70	16 ... 70	25 ... 185	50 ... 300	–	–	–	–
- With terminal cover	Cu or Al	mm^2	16 ... 150	16 ... 150	120 ... 240	--	--	--	--	--
• Flexible wire with sleeve connector		mm^2	10 ... 50	10 ... 50	25 ... 120	50 ... 240	–	–	–	–
Multiple feed-in terminal[1]										
• Solid or stranded cable	Cu or Al	mm^2	–	–	–	2 units 50 ... 120	2 units 50 ... 240	3 units 50 ... 240	4 units 50 ... 240	–
- With terminal cover	Cu or Al	mm^2	--	--	--	2 units 70 ... 300	--	--	--	--
• Flexible wire with sleeve connector		mm^2	–	–	–	2 units 50 ... 95	2 units 50 ... 185	3 units 50 ... 185	4 units 50 ... 185	–
• Direct busbar connection	Cu or Al	mm	17 × 7	22 × 7	24 × 7	32 × 10	40 × 10	2 × 40 × 10	2 × 50 × 10	3 × 60 × 10
• Screw type for screwed connection			M6	M6	M8	M8	M6	M8	M8	–

1) Cross-sections according to IEC 60999.

2) Not for 690 V AC/600 V DC.

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Cable connection - form 4b

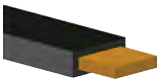
Selection and ordering data

Features

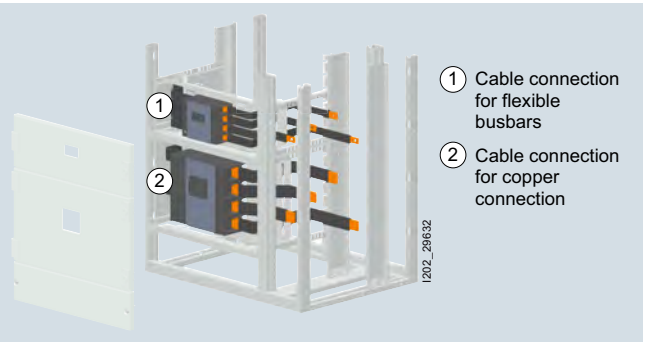
- Several connection points per conductor
- For implementation of form 4a and 4b

Configuration

- Up to 3VL630 connection is made by means of flexible insulated busbars



- From 3VL800 copper drawings are available



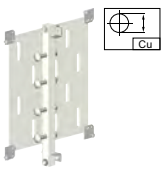
① Cable connection for flexible busbars

- Form 4a

Circuit breaker	Compartment height in mm	No. of poles	Installation system	Operating mechanism	Article No. www.siemens.com/product?Article No.
VL250	150	3	Fixed	Direct, front	8PQ6000-7BA55
			Plug-in	Direct, door coupling, motorized	8PQ6000-7BA56
	200	4	Fixed	Direct, front	8PQ6000-7BA57
			Plug-in	Direct, door coupling, motorized	8PQ6000-7BA58
VL400	200	3	Fixed	Direct, front	8PQ6000-7BA51
			Plug-in	Direct, door coupling	8PQ6000-7BA52
	250	4	Fixed	Direct, front, motorized	8PQ6000-7BA53
			Plug-in	Direct, door coupling	8PQ6000-7BA54
VL630	300	3	Fixed	Direct, front, motorized	8PQ6000-7BA36
			Plug-in	Direct, door coupling	8PQ6000-7BA37
	350	4	Fixed	Direct, front, motorized	8PQ6000-7BA38
			Plug-in	Direct, door coupling	8PQ6000-7BA50

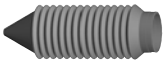
② Cable connection for copper connection

- Form 4a



Circuit breaker	Compartment height in mm	No. of poles	Installation system	Operating mechanism	Article No. www.siemens.com/product?Article No.
VL800	400	4	Fixed	Direct	8PQ6000-7BA30
			Fixed	Direct, door coupling	8PQ6000-7BA31
	500	4	Draw-out	Direct	8PQ6000-7BA34
VL1250, VL1600	450	4	Fixed	Direct	8PQ6000-7BA32
			Fixed	Door coupling	8PQ6000-7BA33
	500	4	Draw-out	Direct	8PQ6000-7BA35

Protective bellows



Version	Article No. www.siemens.com/product?Article No.
• Suitable for connecting terminals • Form 4b	8PQ9400-0BA71

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Internal cover – horizontal

Selection and ordering data

Configuration

- Extended terminal covers required for front connection.
- Cover is prepared for a motorized operating mechanism with spring accumulator.

Version	Article No. www.siemens.com/product?Article No.	Article No. www.siemens.com/product?Article No.
Fixed-mounted version		

Circuit breaker	Compartment width	No. of poles	Connection	Operating mechanism	Height	**Mounting plate**	**Cover**
VL160X	600	3	Front, rear	Direct, rotary and motorized	150	**8PQ6000-4BA88**	**8PQ2015-6BA21**
		4	Front, rear	Direct, rotary and motorized	200	**8PQ6000-5BA01**	**8PQ2020-6BA26**
	800	3/4	Front, rear	Direct, rotary and motorized	200	**8PQ6000-4BA41**	**8PQ2020-8BA10**
VL160/250	600	3	Front, rear	Direct, rotary and motorized	150	**8PQ6000-5BA00**	**8PQ2015-6BA21**
		4	Front, rear	Direct, rotary and motorized	200	**8PQ6000-5BA02**	**8PQ2020-6BA26**
	800	3/4	Front, rear	Direct, rotary and motorized	200	**8PQ6000-4BA42**	**8PQ2020-8BA10**
VL400	600	3	Front, rear	Direct, rotary and motorized	200	**8PQ6000-2BA84**	**8PQ2020-6BA06**
		4	Front, rear	Direct, rotary and motorized	250	**8PQ6000-2BA87**	**8PQ2025-6BA02**
	800	3/4	Front, rear	Direct, rotary and motorized	250	**8PQ6000-4BA44**	**8PQ2025-8BA06**
VL630	600	3	Front, rear	Direct, rotary and motorized	300	**8PQ6000-3BA01**	**8PQ2030-6BA03**
		4	Front, rear	Direct, rotary and motorized	350	**8PQ6000-3BA10**	**8PQ2035-6BA04**
	800	3/4	Front, rear	Direct, rotary and motorized	350	**8PQ6000-4BA45**	**8PQ2035-8BA10**

Circuit breaker	Compartment width	No. of poles	Connection	Operating mechanism	Height	**Crossbar**	**Cover**
VL800	800	3/4	Front, rear	Direct, rotary and motorized	400	**8PQ6000-4BA46**	**8PQ2040-8BA21**
VL1250	800	3/4	Front, rear	Direct, motorized	450	**8PQ6000-4BA47**	**8PQ2045-8BA05**
VL1600	800	3/4	Front, rear	Direct, motorized	450	**8PQ6000-4BA48**	**8PQ2045-8BA05**

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Selection and ordering data

Configuration

- Extended terminal covers required for front connection.
- Cover is prepared for a motorized operating mechanism with spring accumulator.

Version						Article No. www.siemens.com/product?Article No.	Article No. www.siemens.com/product?Article No.
Fixed-mounted version with RCD							
Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	**Mounting plate**	**Cover**
VL160X	600	3	Front, rear	Direct	150	8PQ6000-4BA88	8PQ2015-6BA22
		4	Front, rear	Direct	200	8PQ6000-5BA01	8PQ2020-6BA27
	800	3/4	Front, rear	Direct	200	8PQ6000-4BA41	8PQ2020-8BA11
VL160/250	600	3	Front, rear	Direct, rotary, motorized	150	8PQ6000-5BA00	8PQ2015-6BA21
		4	Front, rear	Direct, rotary, motorized	200	8PQ6000-5BA02	8PQ2020-6BA26
	800	3/4	Front, rear	Direct, rotary, motorized	200	8PQ6000-4BA42	8PQ2020-8BA10
VL400	800	4	Front, rear	Direct, rotary, motorized	250	8PQ6000-4BA44	8PQ2025-8BA06
Plug-in version							
Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	**Mounting plate**	**Cover**
VL160X	600	3	Front, rear	Direct	150	8PQ6000-3BA24	8PQ2015-6BA21
		4	Front, rear	Direct	200	8PQ6000-3BA27	8PQ2020-6BA26
	800	3/4	Front, rear	Direct	200	8PQ6000-4BA43	8PQ2020-8BA10
VL160/250	600	3	Front, rear	Direct, rotary	150	8PQ6000-3BA24	8PQ2015-6BA21
		4	Front, rear	Direct, rotary	200	8PQ6000-3BA27	8PQ2020-6BA26
	800	3/4	Front, rear	Direct, rotary	200	8PQ6000-4BA43	8PQ2020-8BA10
VL400	600	3	Front, rear	Direct, rotary	200	8PQ6000-2BA84	8PQ2020-6BA06
		4	Front, rear	Direct, rotary	250	8PQ6000-2BA87	8PQ2025-6BA02
	800	3/4	Front, rear	Direct, rotary	250	8PQ6000-4BA44	8PQ2025-8BA06
VL630	600	3	Front, rear	Direct, rotary	300	8PQ6000-3BA01	8PQ2030-6BA03
		4	Front, rear	Direct, rotary	350	8PQ6000-3BA10	8PQ2035-6BA04
	800	3/4	Front, rear	Direct, rotary	350	8PQ6000-4BA45	8PQ2035-8BA10

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Selection and ordering data

Configuration

- Extended terminal covers required for front connection.
- To improve the stability of the kits for VL400 and VL630 in draw-out version it is necessary to fit a reinforcement kit for each branch unit.

Version						Article No. www.siemens.com/product?Article No.	Article No. www.siemens.com/product?Article No.
Plug-in version with RCD							
Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	**Mounting plate**	**Cover**
VL160X	600	3	Front, rear	Direct	150	8PQ6000-2BA75	8PQ2015-6BA06
		4	Front, rear	Direct	200	8PQ6000-2BA81	8PQ2020-6BA07
	800	3/4	Front, rear	Direct	200	8PQ6000-4BA43	8PQ2020-8BA11
VL160/250	600	3	Front, rear	Direct, rotary	150	8PQ6000-2BA75	8PQ2015-6BA04
		4	Front, rear	Direct, rotary	200	8PQ6000-2BA81	8PQ2020-6BA05
	800	3/4	Front, rear	Direct, rotary	200	8PQ6000-4BA43	8PQ2020-8BA10
VL400	800	4	Front, rear	Direct, rotary	250	8PQ6000-4BA44	8PQ2025-8BA06
Draw-out version							
Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	**Mounting plate**	**Cover**
VL160/250	600	3/4	Front, rear	Direct, rotary	250	8PQ6000-3BA27	8PQ2020-6BA21
	800	3/4	Front, rear	Direct, rotary	250	8PQ6000-4BA43	8PQ2025-8BA07
VL400	600	3/4	Front, rear	Direct, rotary	300	8PQ6000-2BA87	8PQ2025-6BA11
	800	3/4	Front, rear	Direct, rotary	300	8PQ6000-4BA44	8PQ2030-8BA08
VL630	600	3	Front, rear	Direct, rotary	300	8PQ6000-3BA01	8PQ2030-6BA17
		4	Front, rear	Direct, rotary	350	8PQ6000-3BA10	8PQ2035-6BA17
	800	3/4	Front, rear	Direct, rotary	350	8PQ6000-4BA45	8PQ2035-8BA11
VL800	800	3/4	Front, rear	Direct	500	8PQ6000-4BA56	8PQ2050-8BA05
VL1250	800	3/4	Front, rear	Direct	500	8PQ6000-4BA56	8PQ2050-8BA06
VL1600	800	3/4	Front, rear	Direct	500	8PQ6000-4BA56	8PQ2050-8BA06
Reinforcement for draw-out version							
Circuit breaker	No. of poles					**Reinforcement**	
VL400	3/4					8PQ6000-4BA17	
VL630	3					8PQ6000-4BA20	
VL630	4					8PQ6000-4BA18	

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Internal cover - vertical

Selection and ordering data

Configuration

- Cover is prepared for a motorized operating mechanism with spring accumulator.
- For vertical assembly kits that are equipped with a motorized operating mechanism, the adjacent mounting space must be left empty so that the mechanism can be tensioned by hand.

Version								Article No. www.siemens.com/product?Article No.	Article No. www.siemens.com/product?Article No.
Fixed-mounted version									
Circuit breaker		Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	No. of circuit breakers	**Mounting plate**	**Cover**
VL160X		600	3	Front, rear	Direct, rotary, motorized	350	1 ... 4	8PQ6000-2BA76	8PQ2035-6BA02
			4	Front, rear	Direct, rotary, motorized	350	1 ... 3	8PQ6000-2BA82	8PQ2035-6BA03
		800	3	Front, rear	Direct, rotary, motorized	350	1 ... 5	8PQ6000-2BA77	8PQ2035-8BA02
			4	Front, rear	Direct, rotary, motorized	350	1 ... 4	8PQ6000-2BA83	8PQ2035-8BA03
VL160/250		600	3	Front, rear	Direct, rotary, motorized	350	1 ... 4	8PQ6000-3BA16	8PQ2035-6BA02
			4	Front, rear	Direct, rotary, motorized	350	1 ... 3	8PQ6000-3BA22	8PQ2035-6BA03
		800	3	Front, rear	Direct, rotary, motorized	350	1 ... 5	8PQ6000-3BA17	8PQ2035-8BA02
			4	Front, rear	Direct, rotary, motorized	350	1 ... 4	8PQ6000-3BA23	8PQ2035-8BA03
VL400	b	600	3	Front, rear	Direct, rotary, motorized	400	1 ... 3	8PQ6000-2BA85	8PQ2040-6BA07
	b		4	Front, rear	Direct, rotary, motorized	400	1 ... 2	8PQ6000-2BA88	8PQ2040-6BA05
	b	800	3	Front, rear	Direct, rotary, motorized	400	1 ... 4	8PQ6000-2BA86	8PQ2040-8BA08
	b		4	Front, rear	Direct, rotary, motorized	400	1 ... 3	8PQ6000-3BA00	8PQ2040-8BA07
VL630	b	600	3	Front, rear	Direct, rotary, motorized	400	1 ... 2	8PQ6000-3BA02	8PQ2040-6BA06
	b		4	Front, rear	Direct, rotary, motorized	400	1	8PQ6000-3BA05	8PQ2040-6BA08
	b	800	3	Front, rear	Direct, rotary, motorized	400	1 ... 3	8PQ6000-3BA03	8PQ2040-8BA06
	b		4	Front, rear	Direct, rotary, motorized	400	1 ... 2	8PQ6000-3BA06	8PQ2040-8BA05
Circuit breaker		Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	No. of circuit breakers	**Crossbar**	**Cover**
VL800	b	600	3/4	Front, rear	Direct, rotary, motorized	600	1	8PQ6000-3BA07	8PQ2060-6BA02
VL1250	b	600	3/4	Front, rear	Direct, motorized	600	1	8PQ6000-3BA11	8PQ2060-6BA03
VL1600	b	600	3/4	Front, rear	Direct, motorized	700	1	8PQ6000-3BA12	8PQ2070-6BA01

b For front terminal bars, two additional covers, height 100 mm each, are required. Moreover, extended terminal covers have to be ordered for the respective circuit breaker.

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Selection and ordering data

Configuration

- Cover is prepared for a motorized operating mechanism with spring accumulator.
- For vertical assembly kits that are equipped with a motorized operating mechanism, the adjacent mounting space must be left empty so that the mechanism can be tensioned by hand.

Version							Article No. www.siemens.com/product?Article No.	Article No. www.siemens.com/product?Article No.
Fixed-mounted version with RCD								
Circuit breaker	Compart-ment width mm	No. of poles	Connection	Operating mechanism	Height mm	No. of circuit breakers	**Mounting plate**	**Cover**
VL160X	600	3	Front, rear	Direct	500	1 ... 4	8PQ6000-2BA76	8PQ2050-6BA05
		4	Front, rear	Direct	500	1 ... 3	8PQ6000-2BA82	8PQ2050-6BA06
	800	3	Front, rear	Direct	500	1 ... 5	8PQ6000-2BA77	8PQ2050-8BA07
		4	Front, rear	Direct	500	1 ... 4	8PQ6000-2BA83	8PQ2050-8BA08
VL160/250	600	3	Front, rear	Direct, rotary, motorized	500	1 ... 4	8PQ6000-3BA16	8PQ2050-6BA07
		4	Front, rear	Direct, rotary, motorized	500	1 ... 3	8PQ6000-3BA22	8PQ2050-6BA08
	800	3	Front, rear	Direct, rotary, motorized	500	1 ... 5	8PQ6000-3BA17	8PQ2050-8BA10
		4	Front, rear	Direct, rotary, motorized	500	1 ... 4	8PQ6000-3BA23	8PQ2050-8BA11
Plug-in version								
Circuit breaker		Compart-ment width mm	No. of poles	Connection	Operating mechanism	Height mm	No. of circuit breakers	**Mounting plate**	**Cover**
VL160X	a	600	3	Front, rear	Direct, rotary	350	1 ... 4	8PQ6000-3BA25	8PQ2035-6BA02
	a		4	Front, rear	Direct, rotary	350	1 ... 3	8PQ6000-3BA28	8PQ2035-6BA03
	a	800	3	Front, rear	Direct, rotary	350	1 ... 5	8PQ6000-3BA26	8PQ2035-8BA02
	a		4	Front, rear	Direct, rotary	350	1 ... 4	8PQ6000-3BA30	8PQ2035-8BA03
VL160/250	a	600	3	Front, rear	Direct, rotary	350	1 ... 4	8PQ6000-3BA25	8PQ2035-6BA02
	a		4	Front, rear	Direct, rotary	350	1 ... 3	8PQ6000-3BA28	8PQ2035-6BA03
	a	800	3	Front, rear	Direct, rotary	350	1 ... 5	8PQ6000-3BA26	8PQ2035-8BA02
	a		4	Front, rear	Direct, rotary	350	1 ... 4	8PQ6000-3BA30	8PQ2035-8BA03
VL400	b	600	3	Front, rear	Direct, rotary	400	1 ... 3	8PQ6000-2BA85	8PQ2040-6BA07
	b		4	Front, rear	Direct, rotary	400	1 ... 2	8PQ6000-2BA88	8PQ2040-6BA05
	b	800	3	Front, rear	Direct, rotary	400	1 ... 4	8PQ6000-2BA86	8PQ2040-8BA08
	b		4	Front, rear	Direct, rotary	400	1 ... 3	8PQ6000-3BA00	8PQ2040-8BA07
VL630	b	600	3	Front, rear	Direct, rotary	400	1 ... 2	8PQ6000-3BA02	8PQ2040-6BA06
	b		4	Front, rear	Direct, rotary	400	1	8PQ6000-3BA05	8PQ2040-6BA08
	b	800	3	Front, rear	Direct, rotary	400	1 ... 3	8PQ6000-3BA03	8PQ2040-8BA06
	b		4	Front, rear	Direct, rotary	400	1 ... 2	8PQ6000-3BA06	8PQ2040-8BA05

a For front terminal bars, two additional covers, height 50 mm each, are required. Moreover, extended terminal covers have to be ordered for the respective circuit breaker.

b For front terminal bars, two additional covers, height 100 mm each, are required. Moreover, extended terminal covers have to be ordered for the respective circuit breaker.

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Selection and ordering data

Version							Article No. www.siemens.com/product?Article No.	Article No. www.siemens.com/product?Article No.
Plug-in version with RCD								
Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	No. of circuit breakers	**Mounting plate**	**Cover**
VL160X	600	3	Front, rear	Direct	500	1 ... 4	**8PQ6000-3BA25**	**8PQ2050-6BA05**
		4	Front, rear	Direct	500	1 ... 3	**8PQ6000-3BA28**	**8PQ2050-6BA06**
	800	3	Front, rear	Direct	500	1 ... 5	**8PQ6000-3BA26**	**8PQ2050-8BA07**
		4	Front, rear	Direct	500	1 ... 4	**8PQ6000-3BA30**	**8PQ2050-8BA08**
VL160/250	600	3	Front, rear	Direct, rotary	500	1 ... 4	**8PQ6000-3BA25**	**8PQ2050-6BA07**
		4	Front, rear	Direct, rotary	500	1 ... 3	**8PQ6000-3BA28**	**8PQ2050-6BA08**
	800	3	Front, rear	Direct, rotary	500	1 ... 5	**8PQ6000-3BA26**	**8PQ2050-8BA10**
		4	Front, rear	Direct, rotary	500	1 ... 4	**8PQ6000-3BA30**	**8PQ2050-8BA11**
Draw-out version								
Circuit breaker		Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	No. of circuit breakers	**Mounting plate**	**Cover**
VL160/250	a	800	3	Front, rear	Direct, rotary	350	1 ... 3	**8PQ6000-3BA26**	**8PQ2035-8BA08**
	a		4	Front, rear	Direct, rotary	350	1 ... 2	**8PQ6000-3BA30**	**8PQ2040-8BA15**
VL400	b	600	3/4	Front, rear	Direct, rotary	400	1	**8PQ6000-2BA88**	**8PQ2040-6BA17**
	b	800	3	Front, rear	Direct, rotary	400	1 ... 2	**8PQ6000-2BA86**	**8PQ2040-8BA16**
	b		4	Front, rear	Direct, rotary	400	1	**8PQ6000-3BA00**	**8PQ2040-8BA17**
VL630	b	600	3/4	Front, rear	Direct, rotary	400	1	**8PQ6000-3BA05**	**8PQ2060-6BA12**
	b	800	3/4	Front, rear	Direct, rotary	400	1	**8PQ6000-3BA06**	**8PQ2040-8BA20**
Draw-out version Minimum frame depth: 600mm								
Circuit breaker		Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	No. of circuit breakers	**Mounting plate**	**Cover**
VL800	b	600	3	Front, rear	Direct	600	1	**8PQ6000-3BA87**	**8PQ2060-6BA13**
	b		4	Front, rear	Direct	600	1	**8PQ6000-3BA88**	**8PQ2060-6BA14**
VL1250/1600	b	600	3	Front, rear	Direct	650	1	**8PQ6000-4BA00**	**8PQ2065-6BA05**
	b		4	Front, rear	Direct	650	1	**8PQ6000-4BA01**	**8PQ2065-6BA06**

a For front terminal bars, two additional covers, height 50 mm each, are required. Moreover, extended terminal covers have to be ordered for the respective circuit breaker.

b For front terminal bars, two additional covers, height 100 mm each, are required. Moreover, extended terminal covers have to be ordered for the respective circuit breaker.

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Modular door – horizontal

Selection and ordering data

Configuration

- Extended terminal covers required for front connection.
- For degree of protection IP55 an upgrade is available
(see "Frame" and Enclosure", from page 14/10 and "Modular Doors", page 14/31)

Fixed-mounted version with direct operating mechanism

Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	Mounting plate	Modular door
VL160X	600	3	Front, rear	Direct	150	8PQ6000-6BA27	8PQ2015-6BA23
		4	Front, rear	Direct	200	8PQ6000-6BA34	8PQ2020-6BA30
	800	3/4	Front, rear	Direct	200	8PQ6000-6BA41	8PQ2020-8BA15
VL160/250	600	3	Front, rear	Direct	150	8PQ6000-6BA30	8PQ2015-6BA23
		4	Front, rear	Direct	200	8PQ6000-6BA36	8PQ2020-6BA30
	800	3/4	Front, rear	Direct	200	8PQ6000-6BA42	8PQ2020-8BA15
VL400	600	3	Front, rear	Direct	200	8PQ6000-6BA44	8PQ2020-6BA33
		4	Front, rear	Direct	250	8PQ6000-6BA45	8PQ2025-6BA20
	800	3/4	Front, rear	Direct	250	8PQ6000-6BA46	8PQ2025-8BA11
VL630	600	3	Front, rear	Direct	300	8PQ6000-6BA47	8PQ2030-6BA24
		4	Front, rear	Direct	350	8PQ6000-6BA48	8PQ2035-6BA23
	800	3/4	Front, rear	Direct	350	8PQ6000-6BA50	8PQ2035-8BA14

Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	Crossbar	Cover
VL800	800	3/4	Front, rear	Direct	400	8PQ6000-4BA46	8PQ2040-8BA22
VL1250	800	3/4	Front, rear	Direct	450	8PQ6000-4BA47	8PQ2045-8BA07
VL1600	800	3/4	Front, rear	Direct	450	8PQ6000-4BA48	8PQ2045-8BA07

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3VL molded case circuit breakers

Version						Article No. www.siemens.com/product?Article No.	Article No. www.siemens.com/product?Article No.
Fixed version with door-coupling rotary operating mechanism							
Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	**Mounting plate**	**Modular door**
VL160X	600	3	Front, rear	8UC door coupling, size 1	150	8PQ6000-4BA88	8PQ2015-6BA14
		4	Front, rear	8UC door coupling, size 1	200	8PQ6000-5BA01	8PQ2020-6BA16
	800	3/4	Front, rear	8UC door coupling, size 1	200	8PQ6000-4BA41	8PQ2020-8BA12
VL160/250	600	3	Front, rear	8UC door coupling, size 1	150	8PQ6000-5BA00	8PQ2015-6BA14
		4	Front, rear	8UC door coupling, size 1	200	8PQ6000-5BA02	8PQ2020-6BA16
	800	3/4	Front, rear	8UC door coupling, size 1	200	8PQ6000-4BA42	8PQ2020-8BA12
VL400	600	3	Front, rear	8UC door coupling, size 2	200	8PQ6000-2BA84	8PQ2020-6BA20
		4	Front, rear	8UC door coupling, size 2	250	8PQ6000-2BA87	8PQ2025-6BA10
	800	3/4	Front, rear	8UC door coupling, size 2	250	8PQ6000-4BA44	8PQ2025-8BA08
VL630	600	3	Front, rear	8UC door coupling, size 2	300	8PQ6000-3BA01	8PQ2030-6BA15
		4	Front, rear	8UC door coupling, size 2	350	8PQ6000-3BA10	8PQ2035-6BA15
	800	3/4	Front, rear	8UC door coupling, size 2	350	8PQ6000-4BA45	8PQ2035-8BA12
Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	**Crossbar**	**Modular door**
VL800	800	3/4	Front, rear	8UC door coupling, size 2	400	8PQ6000-4BA46	8PQ2035-8BA13
VL1250	800	3/4	Front, rear	8UC door coupling, size 3	450	8PQ6000-4BA47	8PQ2045-8BA06
VL1600	800	3/4	Front, rear	8UC door coupling, size 3	450	8PQ6000-4BA48	8PQ2045-8BA06
Fixed-mounted version with RCD							
Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	**Mounting plate**	**Modular door**
VL160X	600	3	Front, rear	Direct	150	8PQ6000-6BA28	8PQ2015-6BA24
		4	Front, rear		200	8PQ6000-6BA35	8PQ2020-6BA31
	800	3/4	Front, rear	Direct	200	8PQ6000-6BA41	8PQ2020-8BA16
VL160/250	600	3	Front, rear	Direct	150	8PQ6000-6BA31	8PQ2015-6BA25
		4	Front, rear		200	8PQ6000-6BA37	8PQ2020-6BA32
		3	Front, rear	8UC door coupling, size 1	150	8PQ6000-5BA00	8PQ2015-6BA16
		4	Front, rear		200	8PQ6000-5BA02	8PQ2020-6BA16
	800	3/4	Front, rear	Direct	200	8PQ6000-6BA42	8PQ2020-8BA15
		3/4	Front, rear	8UC door coupling, size 1	200	8PQ6000-4BA42	8PQ2020-8BA12
VL400	800	4	Front, rear	Direct	250	8PQ6000-6BA46	8PQ2025-8BA11
		4	Front, rear	8UC door coupling, size 2	250	8PQ6000-4BA44	8PQ2025-8BA08

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Version						Article No. www.siemens.com/product?Article No.	Article No. www.siemens.com/product?Article No.
Plug-in version with direct operating mechanism							
Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	**Mounting plate**	**Modular door**
VL160X	600	3	Front, rear	Direct	150	8PQ6000-6BA32	8PQ2015-6BA23
		4	Front, rear	Direct	200	8PQ6000-6BA38	8PQ2020-6BA30
	800	3/4	Front, rear	Direct	200	8PQ6000-6BA43	8PQ2020-8BA15
VL160/250	600	3	Front, rear	Direct	150	8PQ6000-6BA32	8PQ2015-6BA24
		4	Front, rear	Direct	200	8PQ6000-6BA38	8PQ2020-6BA30
	800	3/4	Front, rear	Direct	200	8PQ6000-6BA43	8PQ2020-8BA15
VL400	600	3	Front, rear	Direct	200	8PQ6000-6BA44	8PQ2020-6BA33
		4	Front, rear	Direct	250	8PQ6000-6BA45	8PQ2025-6BA20
	800	3/4	Front, rear	Direct	250	8PQ6000-6BA46	8PQ2025-8BA11
VL630	600	3	Front, rear	Direct	300	8PQ6000-6BA47	8PQ2030-6BA24
		4	Front, rear	Direct	350	8PQ6000-6BA48	8PQ2035-6BA23
	800	3/4	Front, rear	Direct	350	8PQ6000-6BA50	8PQ2035-8BA14
Plug-in version with door-coupling rotary operating mechanism							
Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	**Mounting plate**	**Modular door**
VL160X	600	3	Front, rear	8UC door coupling, size 1	150	8PQ6000-3BA24	8PQ2015-6BA14
		4	Front, rear	8UC door coupling, size 1	200	8PQ6000-3BA27	8PQ2020-6BA16
	800	3/4	Front, rear	8UC door coupling, size 1	200	8PQ6000-4BA43	8PQ2020-8BA12
VL160/250	600	3	Front, rear	8UC door coupling, size 1	150	8PQ6000-3BA24	8PQ2015-6BA14
		4	Front, rear	8UC door coupling, size 1	200	8PQ6000-3BA27	8PQ2020-6BA16
	800	3/4	Front, rear	8UC door coupling, size 1	200	8PQ6000-4BA43	8PQ2020-8BA12
VL400	600	3	Front, rear	8UC door coupling, size 2	200	8PQ6000-2BA84	8PQ2020-6BA20
		4	Front, rear	8UC door coupling, size 2	250	8PQ6000-2BA87	8PQ2025-6BA10
	800	3/4	Front, rear	8UC door coupling, size 2	250	8PQ6000-4BA44	8PQ2025-8BA08
VL630	600	3	Front, rear	8UC door coupling, size 2	300	8PQ6000-3BA01	8PQ2030-6BA15
		4	Front, rear	8UC door coupling, size 2	350	8PQ6000-3BA10	8PQ2035-6BA15
	800	3/4	Front, rear	8UC door coupling, size 2	350	8PQ6000-4BA45	8PQ2035-8BA12
Plug-in version with RCD							
Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	**Mounting plate**	**Modular door**
VL160X	600	3	Front, rear	Direct	150	8PQ6000-6BA33	8PQ2015-6BA24
		4	Front, rear		200	8PQ6000-6BA40	8PQ2020-6BA31
	800	3/4	Front, rear	Direct	200	8PQ6000-6BA43	8PQ2020-8BA16
VL160/250	600	3	Front, rear	Direct	150	8PQ6000-6BA33	8PQ2015-6BA25
		4	Front, rear		200	8PQ6000-6BA40	8PQ2020-6BA32
		3	Front, rear	8UC door coupling, size 1	150	8PQ6000-2BA75	8PQ2015-6BA16
		4	Front, rear		200	8PQ6000-2BA81	8PQ2020-6BA17
	800	3/4	Front, rear	Direct	200	8PQ6000-6BA43	8PQ2020-8BA15
		3/4	Front, rear	8UC door coupling, size 1	200	8PQ6000-4BA43	8PQ2020-8BA12
VL400	800	4	Front, rear	Direct	250	8PQ6000-6BA46	8PQ2025-8BA11
		4	Front, rear	8UC door coupling, size 2	250	8PQ6000-4BA44	8PQ2025-8BA08

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Modular door – vertical

Selection and ordering data

Configuration

- Extended terminal covers required for front connection.
- For degree of protection IP55 an upgrade is available (see "Frame" and Enclosure", from page 14/10 and "Modular Doors", page 14/31)

Version							Article No. www.siemens.com/product?Article No.	Article No. www.siemens.com/product?Article No.
Fixed-mounted version with direct operating mechanism								
Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	No. of circuit breakers	**Mounting plate**	**Modular door**
VL630	600	3/4	Front, rear	Direct	600	1	**8PQ6000-6BA51**	**8PQ2060-6BA24**
VL800	600	3/4	Front, rear	Direct	800	1	**8PQ6000-3BA12**	**8PQ2080-6BA11**
VL1250	600	3/4	Front, rear	Direct	800	1	**8PQ6000-3BA11**	**8PQ2080-6BA11**
VL1600	600	3/4	Front, rear	Direct	900	1	**8PQ6000-3BA07**	**8PQ2090-6BA04**
Fixed version with door-coupling rotary operating mechanism								
Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	No. of circuit breakers	**Mounting plate**	**Modular door**
VL630	400	3/4	Front, rear	8UC door coupling, size 2	550	1	**8PQ6000-4BA60**	**8PQ2055-4BA13**
	600	3/4	Rear	8UC door coupling, size 2	400	1	**8PQ6000-3BA05**	**8PQ2040-6BA16**
		3/4	Front	8UC door coupling, size 2	600	1	**8PQ6000-3BA05**	**8PQ2060-6BA17**
VL800	400	3/4	Front, rear	8UC door coupling, size 2	550	1	**8PQ6000-4BA87**	**8PQ2055-4BA13**
	600	3/4	Rear	8UC door coupling, size 2	600	1	**8PQ6000-3BA07**	**8PQ2060-6BA10**
		3/4	Front	8UC door coupling, size 2	800	1	**8PQ6000-3BA07**	**8PQ2080-6BA05**
VL1250	400	3/4	Front, rear	8UC door coupling, size 3	550	1	**8PQ6000-4BA61**	**8PQ2055-4BA14**
	600	3/4	Rear	8UC door coupling, size 3	600	1	**8PQ6000-3BA11**	**8PQ2060-6BA11**
		3/4	Front	8UC door coupling, size 3	800	1	**8PQ6000-3BA11**	**8PQ2080-6BA06**
VL1600	400	3/4	Front, rear	8UC door coupling, size 3	550	1	**8PQ6000-4BA61**	**8PQ2055-4BA14**
	600	3/4	Rear	8UC door coupling, size 3	700	1	**8PQ6000-3BA12**	**8PQ2070-6BA02**
		3/4	Front	8UC door coupling, size 3	900	1	**8PQ6000-3BA12**	**8PQ2090-6BA01**
Touch protection covers over cable connection								
Circuit breaker		Compartment width mm	No. of poles	Height mm			**Cover**	
VL630, VL800, VL1250, VL1600		400	3/4	400			**8PQ5000-3BA15**	

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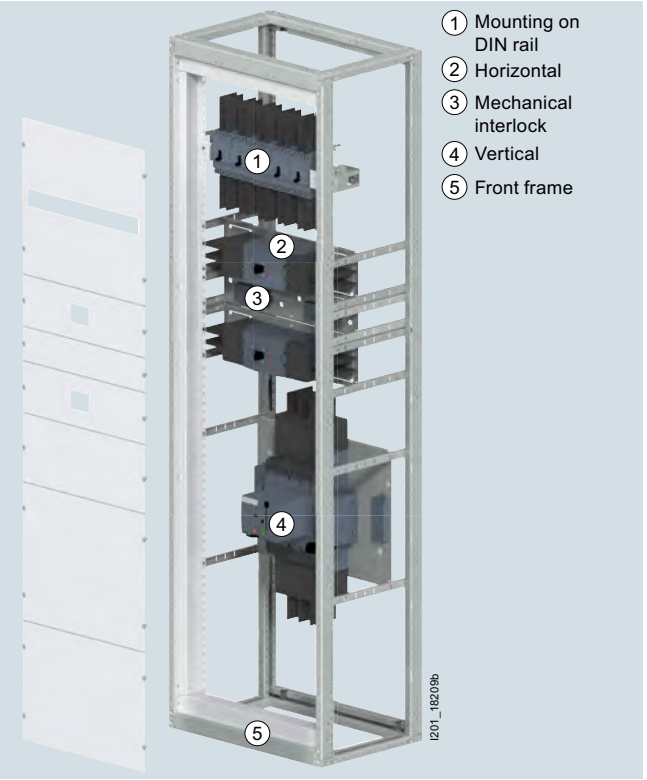
Overview

Configuration

For voltages > 415 V, additional safety clearances are necessary.



Selection and ordering data

Version	Article No. www.siemens.com/product?Article No.	Article No. www.siemens.com/product?Article No.
① **Mounting on DIN rail**		

Circuit breaker	Compartment width mm	Operating mechanism	No. of poles	Connection	Height mm	No. of circuit breakers	**Mounting plate**	**Cover**
3VT1 (160A)	600	Direct	3	Front	250	1 ... 5	**8PQ6000-3BA36**	**8PQ2025-6BA15**
			4	Front	250	1 ... 3	**8PQ6000-3BA36**	**8PQ2025-6BA15**
		Motorized	3	Front	250	1 ... 2	**8PQ6000-3BA36**	**8PQ2025-6BA15**
			4	Front	250	1 ... 2	**8PQ6000-3BA36**	**8PQ2025-6BA15**

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3VT molded case circuit breakers

Version							Article No. www.siemens.com/product?Article No.	Article No. www.siemens.com/product?Article No.
Horizontal installation								
② **Fixed-mounted and plug-in version**								
Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm		**Mounting plate**	**Cover**
3VT1 (160 A)	600[1)]	3/4	Front, rear	Direct	150		8PQ6000-4BA21	8PQ2015-6BA17
3VT2 (250 A)	600	3	Front, rear	Direct, motorized	150		8PQ6000-4BA23	8PQ2015-6BA18
3VT2 (250 A)	600	4	Front, rear	Direct, motorized	200		8PQ6000-4BA24	8PQ2020-6BA22
3VT3 (630 A)	600	3	Front, rear	Direct, motorized	200		8PQ6000-4BA27	8PQ2020-6BA23
3VT3 (630 A)	600	4	Front, rear	Direct, motorized	250		8PQ6000-4BA26	8PQ2025-6BA14
[1)] Mounting plate can be used only for fixed-mounted version.								
② **Draw-out version**								
Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm		**Mounting plate**	**Cover**
3VT2 (250 A)	600	3/4	Front, rear	Direct, motorized	250		8PQ6000-4BA22	8PQ2025-6BA13
3VT3 (630 A)	600	3/4	Front, rear	Direct, motorized	300		8PQ6000-4BA25	8PQ2030-6BA20
③ **Mechanical interlocks**								
• Assembly kit for mechanical interlock • Customized interlock (accessory) available for each device type								
Circuit breaker	Compartment width mm				Height mm		**Mounting plate**	**Cover**
3VT2, 3VT3	600				100		8PQ6000-4BA34	8PQ2010-6BA01
Vertical installation								
④ **Fixed-mounted and plug-in version**								
• Front terminal bars and a breaking capacity of 35 kA require two additional covers 150 mm each, phase separators and terminal covers • Front terminal bars and a breaking capacity of 65 kA require two additional covers 250 mm each, phase separators and terminal covers								
Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	No. of circuit breakers	**Mounting plate**	**Cover**
3VT2 (250A)	600	3	Front, rear	Direct, motorized	350	1 ... 3	8PQ6000-4BA28	8PQ2035-6BA18
		4	Front, rear	Direct, motorized	350	1 ... 2	8PQ6000-4BA30	8PQ2035-6BA20
3VT3 (630A)	600	3	Front, rear	Direct, motorized	400	1 ... 2	8PQ6000-4BA31	8PQ2040-6BA18
		4	Front, rear	Direct, motorized	400	1 ... 2	8PQ6000-4BA32	8PQ2040-6BA20
④ **Draw-out version**								
• Front terminal bars and a breaking capacity of 35 kA require two additional covers 150 mm each, phase separators and terminal covers • Front terminal bars and a breaking capacity of 65 kA require two additional covers 250 mm each, phase separators and terminal covers								
Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	No. of circuit breakers	**Mounting plate**	**Cover**
3VT2 (250A)	600	3	Front, rear	Direct, motorized	350	1 ... 2	8PQ6000-4BA28	8PQ2035-6BA18
		4	Front, rear	Direct, motorized	350	1 ... 2	8PQ6000-4BA30	8PQ2035-6BA20
3VT3 (630A)	600	3	Front, rear	Direct, motorized	400	1 ... 2	8PQ6000-4BA31	8PQ2040-6BA18
		4	Front, rear	Direct, motorized	400	1	8PQ6000-4BA33	8PQ2040-6BA21

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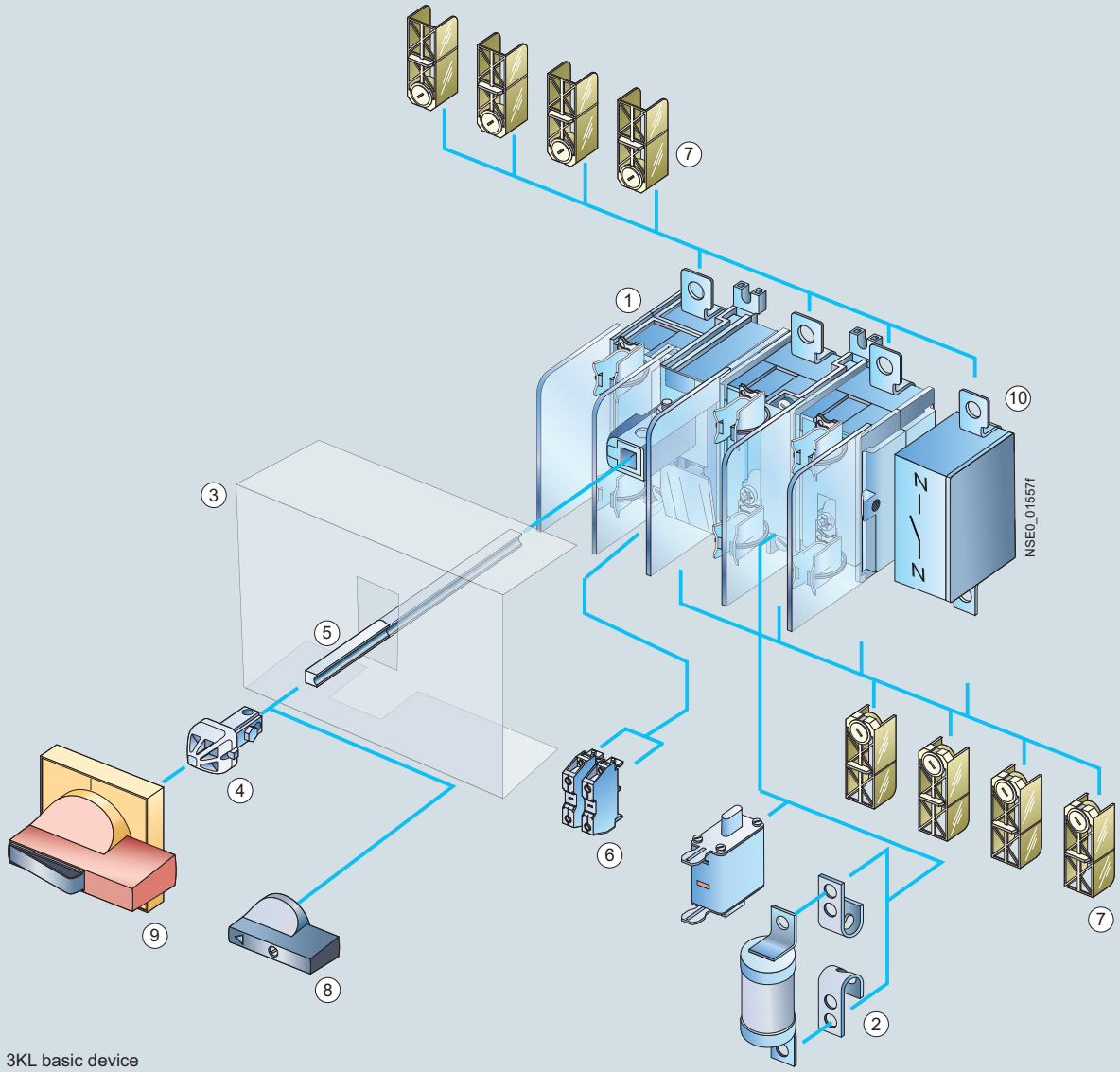
Overview



1. 3KL basic device
2. Fuses, optionally BS 88 or LV HRC fuses
3. Terminal cover, IP20 (vertical to operator side)
4. Coupling driver
5. Extension shaft
6. Standard products from the Siemens 3SB1 range are used as auxiliary switches.

All components from the switch to the actuator are provided with non-interchangeability features.

Optional

7. Single-pole terminal cover from 63 A to 630 A, IP20 (vertical to operator side)
8. 8UC9 knob for fixed mounting in standard version (black) or EMERGENCY-STOP version (red), or
9. 8UC7 door-coupling rotary operating mechanism in standard version (ti-grey) or EMERGENCY-STOP version (red/yellow)
10. 4th pole (optional)

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Technical specifications

Standards		IEC 60947-1, IEC 60947-3, VDE 0660 Part 107					
Type		**3KL50**	**3KL52**	**3KL53**	**3KL55[1)]**	**3KL57[1)]**	**3KL61[1)]**
3KL5, 3KL6							
Rated continuous current I_u for fuse links according to DIN 43620	A Size	63 00 and 000	125 00 and 000	160 00 and 000	250 1 and 2	400 1 and 2	630 3 and 2
Cable lug, max. (stranded) conductor size	mm^2	35	70	120	150	2 × 150 or 1 × 240	2 × 240
Tightening torque Terminal screws	Nm	6 .. 7.5 M6	7 ... 10 M6	18 ... 22 M8	35 ... 45 M10	35 ... 45 M10	56 M12

[1)] Technical specifications for CSA approval upon request.

3KA711								
Rated continuous current I_u	A	32	45	63	80	100	125	
Cable lug, max. (stranded) conductor size	mm^2	50	50	50	50	50	50	
Busbar size	mm^2	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3	
3KA712								
Rated continuous current I_u	A	160	200	250	--	--	--	--
Cable lug, max. (stranded) conductor size	mm^2	120	120	120	--	--	--	--
Busbar size	mm^2	20 × 5	20 × 5	20 × 5	--	--	--	--
3KA713								
Rated continuous current I_u	A	315	400	--	--	--	--	--
Cable lug, max. (stranded) conductor size	mm^2	2 × 150	2 × 150	--	--	--	--	--
Busbar size	mm^2	2 × 25 × 5	2 × 25 × 5	--	--	--	--	--
3KA714								
Rated continuous current I_u	A	630	--	--	--	--	--	--
Cable lug, max. (stranded) conductor size	mm^2	2 × 185	--	--	--	--	--	--
Busbar size	mm^2	2 × 32 × 6	--	--	--	--	--	--
3KA715								
Rated continuous current I_u	A	800	1000	1250	1600	2000	2500	3150
Cable lug, max. (stranded) conductor size	mm^2	2 × 240	--	--	--	--	--	--
Busbar size	mm^2	2 × 50 × 5	2 × 50 × 6	2 × 50 × 8	3 × 50 × 8	3 × 50 × 12	4 × 50 × 12	8 × 50 × 12
3KA716								
Rated continuous current I_u	A	1600	2000	2500	3150	--	--	--
Cable lug, max. (stranded) conductor size	mm^2	--	--	--	--	--	--	--
Busbar size	mm^2	2 × 80 × 10	2 × 80 × 10	3 × 80 × 10	3 × 100 × 10	--	--	--
3KL711								
Rated continuous current I_u	A	32	45	63	80	--	--	--
Cable lug, max. (stranded) conductor size	mm^2	25	25	25	25	--	--	--
Busbar size	mm^2	12 × 3	12 × 3	12 × 3	12 × 3	--	--	--
3KL712								
Rated continuous current I_u	A	100	125	160	--	--	--	--
Cable lug, max. (stranded) conductor size	mm^2	70	70	70	--	--	--	--
Busbar size	mm^2	16 × 4	16 × 4	16 × 4	--	--	--	--
3KL713								
Rated continuous current I_u	A	200	250	--	--	--	--	--
Cable lug, max. (stranded) conductor size	mm^2	120	120	--	--	--	--	--
Busbar size	mm^2	25 × 4	25 × 4	--	--	--	--	--
3KL714								
Rated continuous current I_u	A	315	400	--	--	--	--	--
Cable lug, max. (stranded) conductor size	mm^2	240	240	--	--	--	--	--
Busbar size	mm^2	32 × 5	32 × 5	--	--	--	--	--
3KL715								
Rated continuous current I_u	A	630	800	--	--	--	--	--
Cable lug, max. (stranded) conductor size	mm^2	2 × 185	2 × 185	--	--	--	--	--
Busbar size	mm^2	2 × 40 × 6	2 × 40 × 6	--	--	--	--	--

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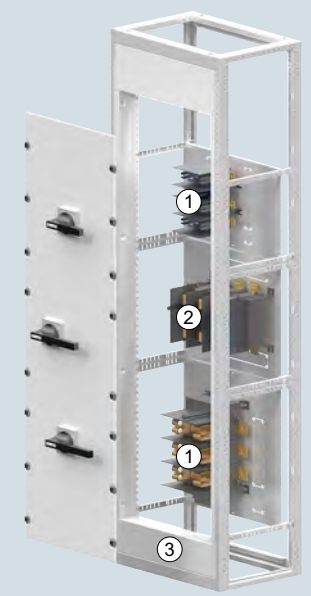
Selection and ordering data

General description

Cover prepared for direct operating mechanism

Configuration

In addition the terminal covers of the devices are required.



① Fixed version, horizontal
② Fixed version, vertical
③ Front frame

① Fixed-mounted version, horizontal

Circuit breaker		Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	Article No. www.siemens.com/product?Article No. **Mounting plate**	Article No. www.siemens.com/product?Article No. **Cover**
3KL50/3KL52		600	3/4	Front, rear	Door-coupling rotary operating mechanism	300	**8PQ6000-2BA65**	**8PQ2030-6BA06**
3KL55/3KL57		600	3/4	Front, rear	Door-coupling rotary operating mechanism	350	**8PQ6000-2BA71**	**8PQ2035-6BA08**
3KL61		600	3/4	Front, rear	Door-coupling rotary operating mechanism	550	**8PQ6000-2BA50**	**8PQ2055-6BA02**
3KL711/3KA711		600	3/4	Front, rear	Door-coupling rotary operating mechanism	200	**8PQ6000-2BA52**	**8PQ2020-6BA10**
3KL712/3KA712		600	3/4	Front, rear	Door-coupling rotary operating mechanism	250	**8PQ6000-2BA55**	**8PQ2025-6BA03**
3KL713/3KA713		600	3/4	Front, rear	Door-coupling rotary operating mechanism	300	**8PQ6000-2BA58**	**8PQ2030-6BA04**
3KL714/3KA714		600	3/4	Front, rear	Door-coupling rotary operating mechanism	350	**8PQ6000-2BA62**	**8PQ2035-6BA06**
3KL715/3KA715	a	600	3/4	Front, rear	Door-coupling rotary operating mechanism	450	**8PQ6000-2BA67**	**8PQ2045-6BA02**

② Fixed-mounted version, vertical

Circuit breaker		Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	**Mounting plate**	**Cover**
3KL50/3KL52		600	3/4	Front, rear	Door-coupling rotary operating mechanism	250	**8PQ6000-2BA66**	**8PQ2025-6BA05**
3KL55/3KL57		600	3/4	Front, rear	Door-coupling rotary operating mechanism	350	**8PQ6000-2BA72**	**8PQ2035-6BA10**
3KL61		600	3	Front, rear	Door-coupling rotary operating mechanism	450	**8PQ6000-2BA51**	**8PQ2045-6BA01**
3KL711/3KA711		600	3/4	Front, rear	Door-coupling rotary operating mechanism	200	**8PQ6000-2BA53**	**8PQ2020-6BA11**
		800	3/4	Front, rear	Door-coupling rotary operating mechanism	200	**8PQ6000-2BA54**	**8PQ2020-8BA04**
3KL712/3KA712		600	3/4	Front, rear	Door-coupling rotary operating mechanism	250	**8PQ6000-2BA56**	**8PQ2025-6BA04**
		800	3/4	Front, rear	Door-coupling rotary operating mechanism	250	**8PQ6000-2BA57**	**8PQ2025-8BA02**
3KL713/3KA713		600	3/4	Front, rear	Door-coupling rotary operating mechanism	300	**8PQ6000-2BA60**	**8PQ2030-6BA05**
		800	3/4	Front, rear	Door-coupling rotary operating mechanism	300	**8PQ6000-2BA61**	**8PQ2030-8BA02**
3KL714/3KA714		600	3/4	Front, rear	Door-coupling rotary operating mechanism	350	**8PQ6000-2BA63**	**8PQ2035-6BA07**
		800	3/4	Front, rear	Door-coupling rotary operating mechanism	350	**8PQ6000-2BA64**	**8PQ2035-8BA04**
3KL715/3KA715	b	600	3/4	Front, rear	Door-coupling rotary operating mechanism	450	**8PQ6000-2BA68**	**8PQ2045-6BA03**
		800	3/4	Front, rear	Door-coupling rotary operating mechanism	450	**8PQ6000-2BA70**	**8PQ2045-8BA01**

a Due to the size of its handle, the 1250A/50 kA 3KA715 disconnector requires an additional 200 mm cover.
b Due to the size of its handle, the 3KA715 disconnector can be installed only in versions up to 1250A/35 kA.

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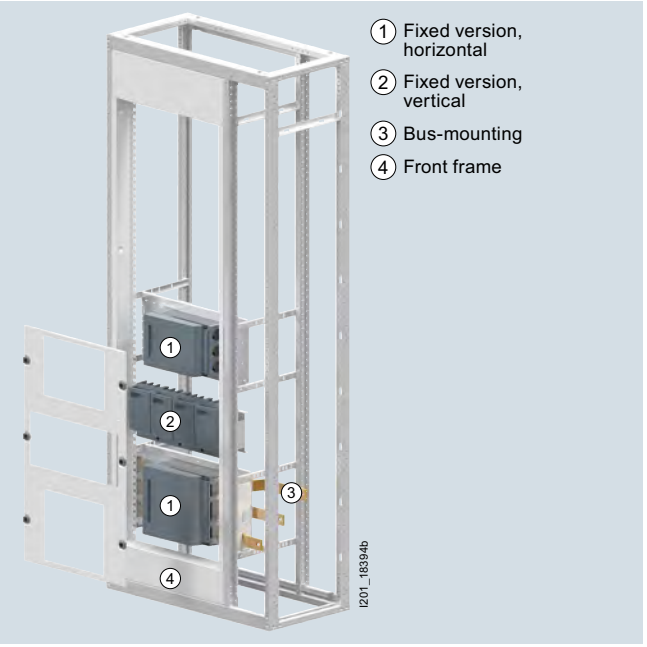
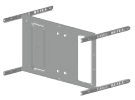
Selection and ordering data

Configuration

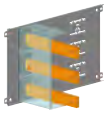
You can find fuse links in the chapter "Fuse Systems".



Version	Article No. www.siemens.com/product?Article No.	Article No. www.siemens.com/product?Article No.
① **Fixed-mounted version, horizontal**		

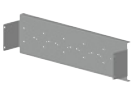
Circuit breaker	Compartment width mm	No. of poles	Height mm	**Mounting plate**	**Cover**
3NP1143	600	3	250	8PQ6000-3BA75	8PQ2025-6BA16
3NP1153	600	3	250	8PQ6000-3BA75	8PQ2025-6BA17
3NP1163	600	3	300	8PQ6000-3BA77	8PQ2030-6BA22

Bus mounting



Circuit breaker	Compartment width mm	No. of poles	Height mm	**Vertical distribution busbar, cascaded**	**Cable connection form 3**
3NP1143	600	3	250	8PQ6000-5BA68	8PQ6000-5BA72
3NP1153	600	3	250	8PQ6000-5BA70	8PQ6000-5BA73
3NP1163	600	3	300	8PQ6000-5BA71	8PQ6000-5BA74

② **Fixed-mounted version, vertical**



Circuit breaker	Compartment width mm	No. of poles	Height mm	No. of circuit breakers	**Mounting plate**	**Cover**
3NP1123	600	3	250	1 ... 4	8PQ6000-3BA78	8PQ2025-6BA18
	800	3	250	1 ... 6	8PQ6000-3BA82	8PQ2025-8BA10
3NP1133	600	3	300	1 ... 4	8PQ6000-3BA78	8PQ2030-6BA23
	800	3	300	1 ... 5	8PQ6000-3BA82	8PQ2030-8BA11

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Overview

Standards		**IEC 60947-1, IEC 60947-3, VDE 0660 Part 107**			
Type		**3NJ410**	**3NJ412**	**3NJ413**	**3NJ414**
Conventional thermal current					
Free-air with gG fuses, I_{th}	A	160	250	400	630
For fuse links and isolating blades	Size	00	1	2	3
gG according to IEC 60269, I_n	A	160	250	400	630
Rated operational voltage U_e At 40 Hz ...60 Hz AC	V	690	690	690	690
Rated insulation voltage U_i	V	800	1000	1000	1000
Rated impulse withstand voltage U_{imp}	kV	8	12	12	12
Rated conditional short-circuit current with fuses, at 500 V AC					
With gG fuse (rms value)	kA	80/120	120	120	120
Max. permissible power loss per fuse link	W	12	32	45	48
Rated short-time withstand current I_{CW} rms value	kA	--	14.5	14.5	14.5
Capacitive switching capacity	kvar	--	105 ... 115	155 ... 185	250 ...300
Permissible ambient temperature	°C	-25 ... +55, > 35 °C with derating factors			
Mechanical endurance, operating cycles		1400	1400	800	800
Electrical endurance, operating cycles		200	200	200	200
Degree of protection					
With closed fuse carrier, with terminal cover and peripheral cover		IP30	IP30	IP30	IP30
With open fuse carrier		IP10	IP10	IP10	IP10
Power loss of the main current paths at I_{th}	W	18	23	54	115
Main conductor connections					
Terminal screws		M8	M10	M12	M12
Flat bars	mm	20	30	30	30
Cable lug, max. (stranded) conductor size	mm^2	95	240	240	240
Tightening torque	Nm	12 ... 15	30 ... 35	35 ... 40	35 ... 40
Clamp/V terminals	mm^2	1.5 ... 70	25 ... 300	25 ... 300	25 ... 300
Fixing screws		M8	M12	M12	M12
Required tightening torque for mounting on busbars	Nm	16 ... 18	35 ... 40	35 ... 40	35 ... 40

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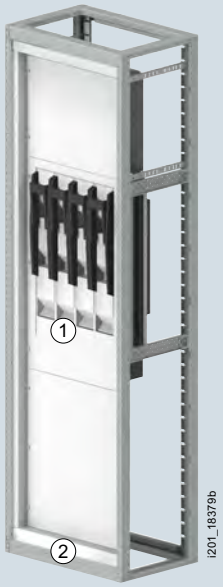
Selection and ordering data

General description

- Adjustable-depth mounting plate
- Cut-outs prepared for direct operating mechanism
- Two busbar holders needed per assembly kit.

Configuration

- Two busbar holders are required per assembly kit
- You can find fuse links in the chapter "Fuse Systems".



① Fixed version, vertical
② Front frame

Version	Article No. www.siemens.com/product?Article No.	Quantity	Article No. www.siemens.com/product?Article No.	Article No. www.siemens.com/product?Article No.
① Fixed-mounted version with cover • For installation behind section door • In combination with the swivel front frame, the maximum possible number of components is reduced by -1				

Circuit breaker	Compartment width mm	No. of poles	Installation system	Height mm	Circuit breakers per kit	**Mounting plate**		**Busbar holder**	**Cover**
3NJ4, size 1, 2, 3	600	3	Fixed	800	1 ... 4	8PQ6000-2BA48	2 ×	3NJ5974-0AB	8PQ2000-6BA06
3NJ4, size 1, 2, 3	800	3	Fixed	800	1 ... 6	8PQ6000-2BA48	2 ×	3NJ5974-0AB	8PQ2000-8BA06

Fixed version with modular door
• Operation through the door
• Degree of protection: IP 30

Circuit breaker	Compartment width mm	No. of poles	Installation system	Height mm	Circuit breakers per kit	**Mounting plate**		**Busbar holder**	**Modular door**
3NJ4, size 1, 2, 3	600	3	Fixed	800	1 ... 4	8PQ6000-2BA48	2 ×	3NJ5974-0AB	8PQ2080-6BA10
3NJ4, size 1, 2, 3	800	3	Fixed	800	1 ... 6	8PQ6000-2BA48	2 ×	3NJ5974-0AB	8PQ2080-8BA05

Blanking covers

Panel cutout	Width mm	**Blanking cover**
3NJ4, size 00	50	3NJ4912-2AA00
3NJ4, size 1, 2, 3	100	3NJ4912-2BA00

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	Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
Separation			
	Form 3b • For cable connection at the bottom **horizontal partition + support rail** required		
	Width mm		
	600	**8PQ5000-1BA70**	1 unit
	800	**8PQ5000-1BA71**	1 unit
	Horizontal separation		
	Compartment width mm		
	400	**8PQ5000-3BA44**	1 unit
	600	**8PQ5000-2BA61**	1 unit
	800	**8PQ5000-2BA62**	1 unit
	Support rails • Equipment height in mm: 25	**8PQ5000-2BA63**	1/2 units

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*** You can order this quantity or a multiple thereof.**

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Technical specifications

Main devices of sizes 00 and 1

Size		**00**								**1**			
In-line switch disconnectors with fuses type 3NJ62...	**LV HRC**			**...02-3 ...02-4**		**...03-1 ...04-1 ...04-2**		**...03-3 ...03-4**		**...12-3 ...12-4**		**...13-1 ...14-1 ...14-2**	**...13-3 ...13-4**
	BS	**...43-3**	**...53-3**	**...62-3 ...62-4**				**...63-3 ...63-4**		**...72-3 ...72-4**		**...74-1 ...74-2**	**...73-3 ...73-4**
Switching capacity		H	H	H		S		H		H		S	H
Rated insulation voltage U_i	V	1000											
Rated impulse withstand voltage U_{imp}	V	8000											
Rated operating current I_e	A	63	100	160	-	160	125	160	125	250			
For LV HRC fuse links acc. to IEC 60269		-	-	00 and 000						1			
For BS fuse links acc. to BS 88		A3	A3	00T[1]						B2			
Rated operational voltage U_e													
• At 50/60Hz rated frequency	V	690		--	--	500	690	500	690	690			
• At DC	V	--	--	230	440	--	--	--	--	230	440	-	-
Utilization category		AC23B		DC23B	DC21B	AC22B		AC23B		DC23B	DC21B	AC22B	AC23B
Rated conditional short-circuit current													
• Short-circuit resistance (rms value)	kA	100		60		100		100		60		100	
• Short-circuit making capacity (rms value)	kA	66		60		55		66		60		55	66
Rated making capacity													
• P.f. = 0.65	A	--	--	--	--	480	375	--	--	--	--	750	--
• P.f. = 0.45	A	630	1000	--	--	--	--	--	--	--	--	--	--
• P.f. = 0.35	A	--	--	--	--	--	--	1600	1250	--	--	--	2500
Rated breaking capacity													
• P.f. = 0.65	A	--	--	--	--	480	375	--	--	--	--	750	--
• P.f. = 0.45	A	504	800	--	--	--	--	--	--	--	--	--	--
• P.f. = 0.35	A	--	--	--	--	--	--	1280	1000	--	--	--	2000
Operating life													
Operating cycles total		2000		1600						1600			
• Electrical (690 V, p.f. = 0.65)		300		200						200			
Power dissipated (no fuse links)	W	7	17	43						78			
Permissible ambient temperature	°C	-5...+55											
Permissible operating position		Horizontal and vertical with bottom connection											
Connection type		Main conductor connections											
Cable lug connection													
• Conductor cross-section (Al/Cu, solid or stranded) according to DIN 46235 (Cu) and DIN 46239 (Al)	mm^2	1x 10-95 2x 16-70								1x 25-240 2x 25-70			
• Screw dimensions		M8								M12			
• Torque	Nm	15								30			
Clamp connection													
• Conductor size (Al/Cu), rm	mm^2	1x 10-50								1x 16-185			
• Conductor size (Al/Cu), re	mm^2	1x 10-50								1x 16-150			
• Conductor size (Al/Cu), sm	mm^2	1x 16-95								1x 35-240			
• Conductor size (Al/Cu), se	mm^2	1x 16-95								1x 35-300			
• Required torque	Nm	15								25			

[1] The fuse is available from Lawson Fuses (UK) and does not correspond to BS 88.

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Main devices of sizes 2 and 3

Size		**2**				**3**					
In-line switch disconnectors with fuses type 3NJ62...	**LV HRC**	**...22-3 ...22-4**		**...23-1 ...24-1 ...24-2**	**...23-3 ...23-4**	**...32-3 ...32-4**		**...33-1 ...34-1 ...34-2**		**...33-3 ...33-4**	
	BS	**...82-3 ...82-4**			**...83-3 ...83-4**	**...92-3 ...92-4**		**...94-1 ...94-2**		**...93-3 ...93-4**	
										...33-3 ...33-4	
Switching capacity		H		S	H	H		S		H	
Rated insulation voltage U_i	V	1000									
Rated impulse withstand voltage U_{imp}	V	8000									
Rated operating current I_e											
• For fuse links according to IEC 60269/ BS88	A	400				630			500	630	500
For fuse links according to IEC 60269		2 and 1				3 and 2					
For BS fuse links acc. to BS 88		B4				3T[1)]					
Rated operational voltage U_e											
• At 50/60Hz rated frequency	V	--	--	690		230	440	500	690	500	690
• At DC	V	230	440	--		--	--	--	--	--	--
Utilization category		DC23B	DC21B	AC22B	AC23B	DC23B	DC21B	AC22B		AC23B	
Rated conditional short-circuit current											
• Short-circuit resistance (rms value)	kA	60		100		60		100			
• Short-circuit making capacity (rms value)	kA	60		55	66	60		55		66	
Rated making capacity											
• P.f. = 0.65	A	--	--	1200	--	--	--	1890	1500	--	--
• P.f. = 0.45	A	--	--	--	--	--	--	--	--	--	--
• P.f. = 0.35	A	--	--	--	4000	--	--	--	--	6300	5000
Rated breaking capacity											
• P.f. = 0.65	A	--	--	1200	--	--	--	1890	1500	--	--
• P.f. = 0.45	A	--	--	--	--	--	--	--	--	--	--
• P.f. = 0.35	A	--	--	--	3200	--	--	--	--	5040	4000
Operating life											
Operating cycles total		1000				1000					
• Electrical (690 V, p.f. = 0.65)		200				200					
Power dissipated (no fuse links)	W	158				357					
Permissible ambient temperature	°C	-5...+55									
Permissible operating position		Horizontal and vertical with bottom connection									
Degree of protection (in operating condition)		IP41									
Connection type		Main conductor connections									
Cable lug connection											
Conductor size	mm^2	1x 25-300				1x 25-300					
• Conductor size (Al/Cu, solid or stranded) according to DIN46235 (Cu) and DIN46239 (Al)		2x 25-240				2x 25-240					
• Screw dimensions		2x M12				2x M12					
• Torque	Nm	30				30					
Clamp connection											
• Conductor size (Al/Cu), rm	mm^2	2x 16-185				2x 16-185					
• Conductor size (Al/Cu), re	mm^2	2x 16-150				2x 16-150					
• Conductor size (Al/Cu), sm	mm^2	2x 35-240				2x 35-240					
• Conductor size (Al/Cu), se	mm^2	2x 35-300				2x 35-300					
• Required torque	Nm	25				25					

1) The fuse is available from Lawson Fuses (UK) and does not correspond to BS 88.

Vertical busbar rated currents

Cross-section	**Rated currents I_n**						
mm	**Ventilated**						
	in A						
Temperature in °C	**20**	**25**	**30**	**35**	**40**	**45**	**50**
60 x 10	1680	1640	1600	**1560**	1520	1480	1430
80 x 10	2260	2210	2155	**2100**	2045	1985	1925

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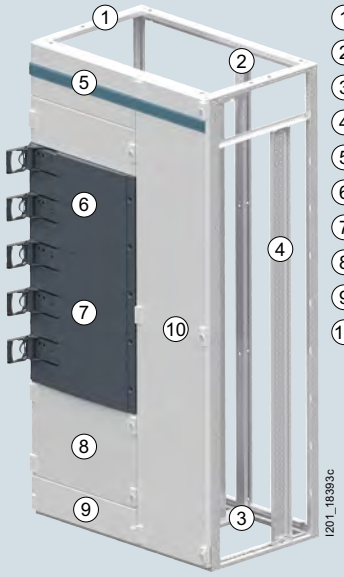
Selection and ordering data

Features

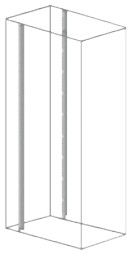
- Suitable for 3- and 4-pole busbar arrangement
- Degree of protection IP40
- Plug-in in-line switch disconnectors

Configuration

- You can find fuse links in the chapter "Fuse Systems".
- Due to the design of the devices, separation 2b already creates 3b.



1 Frame
2 Exterior intermediate upright
3 Bottom plate partition crossbar
4 Interior side upright
5 Head compartment cover
6 3NJ6 assembly kit
7 Blanking cover
8 Device compartment
9 Base compartment cover
10 Section door / outer cover

Version			Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	① **Frame** Height 2000 mm			
	Width mm	Depth		
	1000	400	**8PQ1201-4BA02**	1 unit
		600	**8PQ1201-6BA02**	1 unit
		800	**8PQ1201-8BA03**	1 unit
	1200	400	**8PQ1202-4BA02**	1 unit
		600	**8PQ1202-6BA02**	1 unit
		800	**8PQ1202-8BA02**	1 unit
	② **Exterior intermediate uprights** For fitting • Outer covers • Section doors • Modular doors		**8PQ3000-1BA43**	1 unit
	② **Bottom plate partition crossbars** For width 600 to 1200 mm			
	Depth in mm	Quantity		
	400	1 ×	**8PQ3000-1BA38**	1 unit
	600	1 ×	**8PQ3000-1BA40**	1 unit
	800	2 ×	**8PQ3000-1BA38**	1 unit

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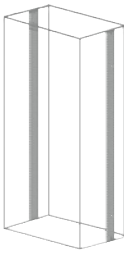
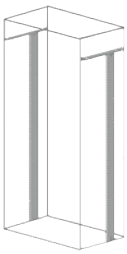
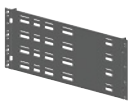
Version			Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	④ **Interior side uprights, without main busbar** • For width from 400 to 1200 mm • For depth from 600 to 800 mm			
	Depth in mm			
	600 800		**8PQ3000-0BA03**	1 unit
	④ **Interior side uprights, with main busbar at top** • For width from 800 to 1200 mm			
	Depth in mm			
	400 600 800		**8PQ3000-0BA65** **8PQ3000-0BA01** **8PQ3000-0BA02**	1 unit 1 unit 1 unit
	⑤ **Head compartment covers**			
	Height mm	Width mm		
	225	600	**8PQ2022-6BA01**	1 unit
	⑥ **Assembly kits for 3NJ6 in-line switch disconnectors with fuses** • Compatible cross-sections: 60 x 10, 80 x 10			
	Height mm	Width mm		
	1600	600	**8PQ3000-1BA48**	1 unit
	**Busbar covers** • Mounting height 200 mm • 8 units required per 3NJ6 assembly kit		**3NJ6916-4EA00**	1 unit
	⑦ **Blanking covers** • Mounting height 50 mm		**3NJ6900-4CB00**	1 unit

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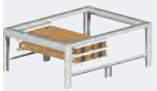
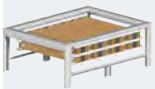
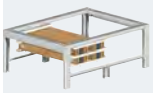
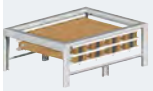
3NJ6 in-line switch disconnectors with fuses

Version				Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	⑧ **Device compartments**				
	Height mm	Width mm			
	200	600		8PQ3000-1BA50	1 unit
	400			8PQ3000-1BA51	1 unit
	⑨ **Base compartment covers, IP 4X**				
	Height mm	Width mm			
	175	600		8PQ2000-6BA07	1 unit
	⑩ **Section doors – doors with two-way interlocking system**				
	Hinge position	Width mm			
	Left	400		8PQ2197-4BA08	1 unit
		600		8PQ2197-6BA06	1 unit
	Right	400		8PQ2197-4BA11	1 unit
		600		8PQ2197-6BA13	1 unit
	⑩ **Section doors – doors for semi-cylindrical profile** Semi-cylindrical profile acc. to DIN 18252/18254, 8 × 45°				
	Hinge position	Width mm			
	Left	400		8PQ2197-4BA06	1 unit
		600		8PQ2197-6BA04	1 unit
	Right	400		8PQ2197-4BA07	1 unit
		600		8PQ2197-6BA05	1 unit
Separation					
	Form 2b, equipment compartment Separation from the main busbar				
	Position of main busbar mm	Frame depth mm	Width mm		
	Top, front 	400	600	8PQ3000-1BA44	1 unit
		600		8PQ3000-1BA45	1 unit
		800		8PQ3000-1BA46	1 unit
	Top, both sides 	800	600	8PQ3000-1BA47	1 unit
	Form 2b, cable compartment				
	Position of main busbar mm	Frame depth mm	Width mm		
	Top, front 	400	400	8PQ3000-0BA67	1 unit
		600		8PQ3000-0BA52	1 unit
		800		8PQ3000-0BA55	1 unit
		400	600	8PQ3000-0BA68	1 unit
		600		8PQ3000-0BA53	1 unit
		800		8PQ3000-0BA56	1 unit
	Top, both sides 	800	400	8PQ3000-0BA58	1 unit
			600	8PQ3000-0BA60	1 unit
	Form 4b, terminal covers				
	• Terminal covers				
	- For 2-/3-pole devices			3NJ6923-1DA00	1 unit
	- Only for 4th pole			3NJ6904-1DA00	1 unit

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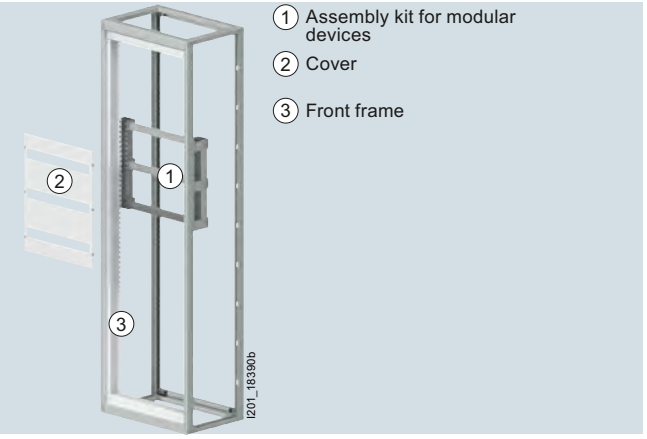
Selection and ordering data

Features

- Adjustable-depth multi-profile rail, 35 mm
- SIKclip snaps onto rear

Configuration

- One mounting plate ① for every row



Version					Article No. www.siemens.com/product?Article No.	Article No. www.siemens.com/product?Article No.
Modular devices with cover						
Width mm	Rows × MW	Row center distance mm	Height mm	Quantity	① **Mounting plate**	② **Cover**
600	1 × 24	150	150	1 ×	8PQ6000-3BA36	8PQ2015-6BA07
600	1 × 24	200	200	1 ×	8PQ6000-3BA36	8PQ2020-6BA12
800	1 × 35	150	150	1 ×	8PQ6000-3BA37	8PQ2015-8BA03
800	1 × 35	200	200	1 ×	8PQ6000-3BA37	8PQ2020-8BA05
Width mm	Rows × MW	Row center distance mm	Height mm	Quantity	① **Mounting plate**	② **Cover**
600	2 × 24	150	300	2 ×	8PQ6000-3BA36	8PQ2030-6BA07
600	2 × 24	200	400	2 ×	8PQ6000-3BA36	8PQ2040-6BA10
800	2 × 35	150	300	2 ×	8PQ6000-3BA37	8PQ2030-8BA03
800	2 × 35	200	400	2 ×	8PQ6000-3BA37	8PQ2040-8BA10
Width mm	Rows × MW	Row center distance mm	Height mm	Quantity	① **Mounting plate**	② **Cover**
600	3 × 24	150	450	3 ×	8PQ6000-3BA36	8PQ2045-6BA04
600	3 × 24	200	600	3 ×	8PQ6000-3BA36	8PQ2060-6BA04
800	3 × 35	150	450	3 ×	8PQ6000-3BA37	8PQ2045-8BA02
800	3 × 35	200	600	3 ×	8PQ6000-3BA37	8PQ2060-8BA02
Modular devices with modular door						
Width mm	Rows × MW	Row center distance mm	Height mm	Quantity	**Mounting plate**	**Modular door**
600	1 × 24	200	200	1 ×	8PQ6000-6BA52	8PQ2020-6BA28
800	1 × 35	200	200	1 ×	8PQ6000-6BA53	8PQ2020-8BA14
Supports for raceway fastening						
Width mm					**Supports**	
600					8PQ6000-0BA16	
800						
Blanking strips Color RAL 7035 (light gray)						
Versions						
• For 12 MW (1 MW = 18 mm)					8GK9910-0KK00	
• Length 1 m Without pressure-relief joint, to cut to length					8GK9910-0KK01	

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SIKclip wiring system

Technical specifications

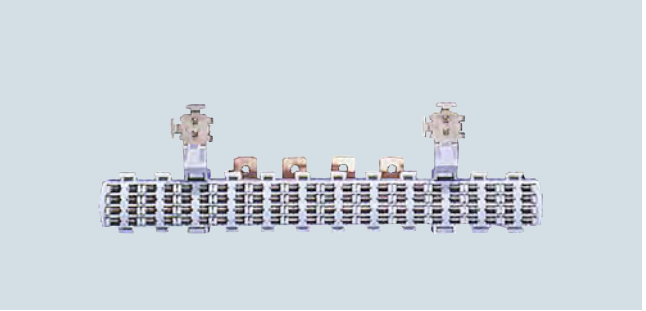
Max. rated operating current I_n	250 A at 40 °C ambient temperature
Max. rated output current I_n	63 A at 40 °C ambient temperature
Rated operating voltage U_n	400 V AC
Rated insulation voltage	660 V AC
Test voltage	2.5 kV, 50 Hz
Degree of protection	IP20
Connecting conductors	40 A (6 mm^2), 63 A (10 mm^2)
Type of connecting conductor	H07VK
Color	RAL 7035
Operating temperature	-5 °C to +60 °C
Test specifications	EN 60947-1, EN 60439-3

Selection and ordering data

General description

SIKclip is a quick wiring system simplifying the connection of flush-mounted circuit breakers.

- For direct mounting on the rear vertical Cu busbar.
- Fixing with clips onto the back of the DIN rail (top hat rail).



	Version			Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	SIKclip wiring system				
	Modular width (MW)				
	12			5ST2520	1 unit
	24			5ST2521	1 unit
	36			5ST2522	1 unit
	Connecting conductors				
	Cross-section	Length	Color		
	6 mm^2	120 mm	Black	5ST2523	10 units
			Blue	5ST2524	10 units
		220 mm	Black	5ST2527	10 units
			Blue	5ST2528	10 units
	10 mm^2	120 mm	Black	5ST2525	10 units
			Blue	5ST2526	10 units
		220 mm	Black	5ST2530	10 units
			Blue	5ST2531	10 units
	Push-in connectors			5ST2532	20 units
	Brackets • For anchoring to bar of DIN rail • 1 pair = 2 units			5ST2533	2 units

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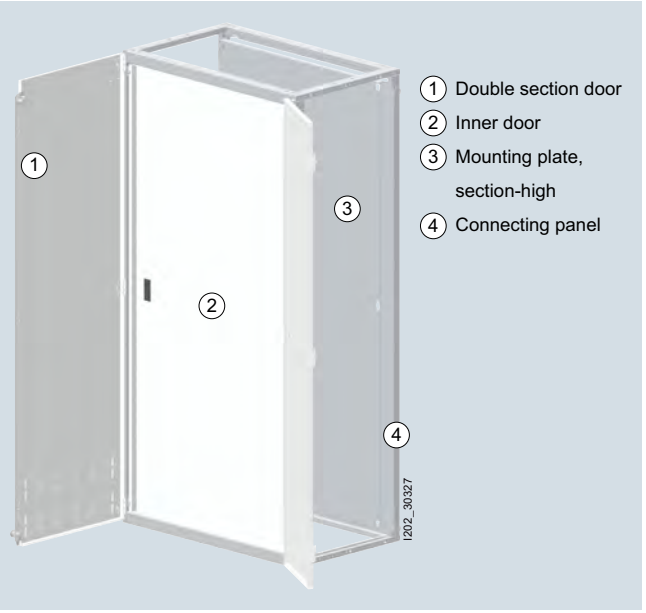
Overview

Features

- Double section door in combination with inner door and section-high mounting plates



① Double section door
② Inner door
③ Mounting plate, section-high
④ Connecting panel

Selection and ordering data

Version		Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
① Double section doors - double-bit keys					
Width mm	Division mm	**IP40**		**IP55**	
1000	600 + 400	8PQ2197-1BA14	1 unit	8PQ2197-1BA13	1 unit
1200	600 + 600	8PQ2197-2BA11	1 unit	8PQ2197-2BA10	1 unit
Double section doors - semi-cylindrical profile					
Width mm	Division mm	**IP40**		**IP55**	
1000	600 + 400	8PQ2197-1BA16	1 unit	8PQ2197-1BA15	1 unit
1200	600 + 600	8PQ2197-2BA13	1 unit	8PQ2197-2BA12	1 unit
② Inner door • Suitable for installation behind section doors • Cannot be combined with front frames • Prepared for installation of inner door struts on the rear • One kit 8PQ2080-0BA07 (2 x 700 mm) each can be fitted at top and bottom					
Width mm	Height mm	**Inner door**		**Inner door strut 700 mm high**	
600	1900	8PQ2000-6BA05	1 unit	8PQ2080-0BA07	1 unit
800		8PQ2000-8BA05	1 unit	8PQ2080-0BA07	1 unit
1000		8PQ2000-1BA01	1 unit	8PQ2080-0BA07	1 unit

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Mounting plates

Version	Width mm	Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
③ **Mounting plates, section-high** • Reinforced version for heavy load					
Height mm		**2 mm**		**3 mm**	
1600	400	8PQ3000-0BA33	1 unit	--	
	600	8PQ3000-0BA35	1 unit	--	
	800	8PQ3000-0BA37	1 unit	8PQ3000-2BA81	1 unit
	1000	8PQ3000-1BA06	1 unit	8PQ3000-2BA55	1 unit
	1200	8PQ3000-1BA07	1 unit	8PQ3000-2BA57	1 unit
1900	400	8PQ3000-0BA32	1 unit	--	
	600	8PQ3000-0BA34	1 unit	--	
	800	8PQ3000-0BA36	1 unit	8PQ3000-2BA80	1 unit
	1000	8PQ3000-1BA04	1 unit	8PQ3000-2BA56	1 unit
	1200	8PQ3000-1BA05	1 unit	8PQ3000-2BA58	1 unit
④ **Connecting panels** • Connect two adjacent mounting plates					
Height mm		**Connecting panel**			
1600		8PQ3000-1BA10	1 unit		
1900		8PQ3000-1BA08	1 unit		
Modular mounting plates • For use with device support plates for free assembly					
Width mm	Height mm	**Mounting plate**			
400	150	8PQ3000-2BA60	1 unit		
	200	8PQ3000-2BA17	1 unit		
	300	8PQ3000-2BA66	1 unit		
	400	8PQ3000-2BA18	1 unit		
	600	8PQ3000-2BA21	1 unit		
	800	8PQ3000-2BA23	1 unit		
600	150	8PQ3000-2BA62	1 unit		
	200	8PQ3000-1BA56	1 unit		
	300	8PQ3000-2BA51	1 unit		
	400	8PQ3000-1BA61	1 unit		
	550	8PQ3000-3BA07	1 unit		
	600	8PQ3000-1BA65	1 unit		
	800	8PQ3000-1BA26	1 unit		
800	150	8PQ3000-2BA64	1 unit		
	200	8PQ3000-1BA58	1 unit		
	300	8PQ3000-2BA53	1 unit		
	400	8PQ3000-1BA63	1 unit		
	550	8PQ3000-3BA08	1 unit		
	600	8PQ3000-1BA67	1 unit		
	800	8PQ3000-1BA28	1 unit		

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Selection and ordering data

	Version		Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	19" racks • Number of module heights (HU): 39 • 1 module height (HU) = 44.45 mm • Swivel frame for left and right hinge position • The maximum weight of the equipment that can be installed is 160 kg.			
	Frame width mm	Installation type	**Mounting kits for 19" rack**	
	600	Fixed	**8PQ3000-1BA11**	1 unit
	800	Swivel	**8PQ3000-1BA12**	1 unit
	Fan draw-out units • Power 45 W • Voltage 230 V • Series LE 019		**8MR2190-1A**	1 unit

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Overview

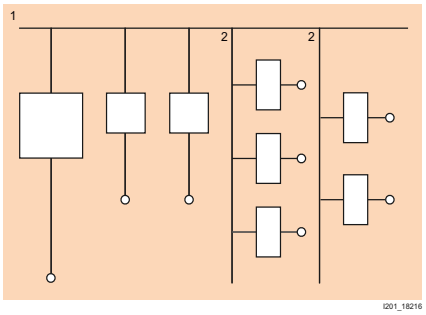
Features

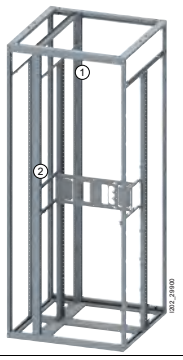
Internal separation is achieved with partitions, covers and device enclosures. Enclosed protected compartments are thus created. Internal separation results in a higher level of safety for people and equipment.

Benefits

- Reduction of possible hazards during connection, scheduled maintenance and extraordinary maintenance operations
- Attenuation of the consequences of local faults and faster resumption of regular operation
- Protection against contact with hazardous parts and the adjacent functional units

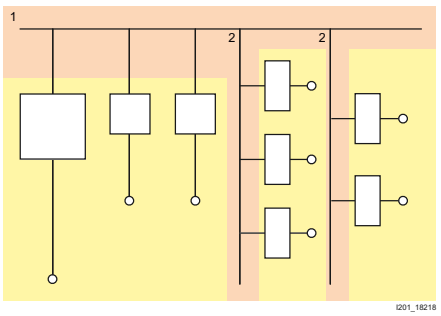
Form 1

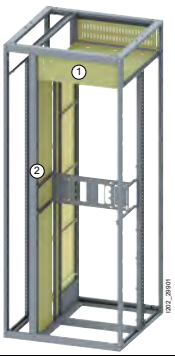




Outgoing feeder panel
- No internal separation

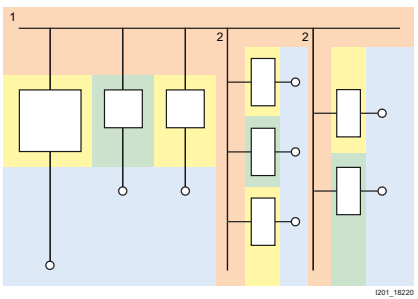
Form 2b

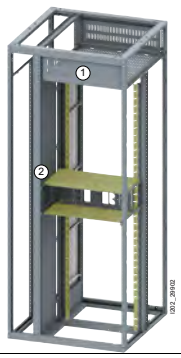




Outgoing feeder panel
+ Separation of the main busbar and the vertical busbar

Form 3b

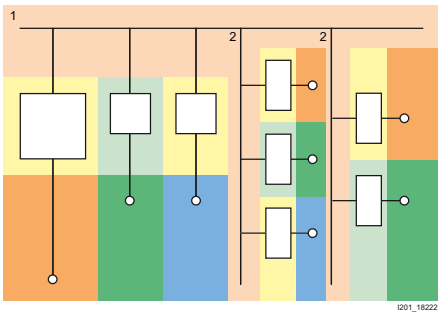


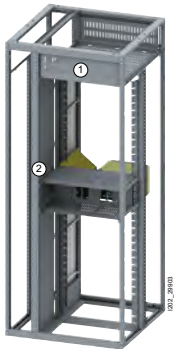


Outgoing feeder panel
- Separation of the main busbar and the vertical busbar

+ Separation of device compartments

Form 4b





Outgoing feeder panel
- Separation of the main busbar and the vertical busbar
- Separation of the devices

+ Separation of the connection points

Functional units
Connection point
① Main busbars
② Vertical busbar

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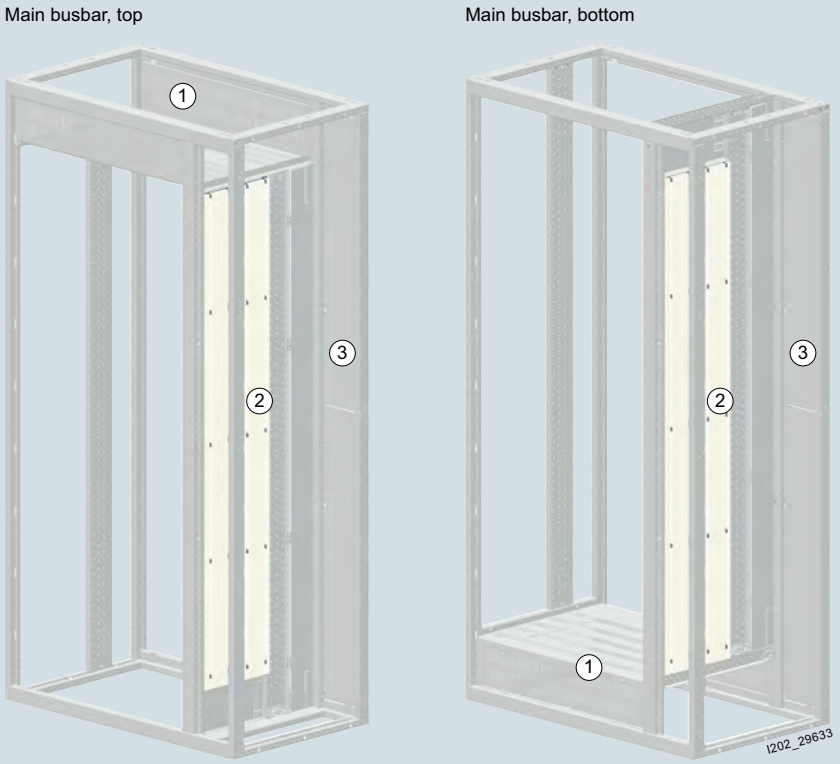

① Separation, main busbar
② Separation, vertical busbar
③ Touch protection cover, vertical busbar

Features

- Separations vertical busbar ② contain openings for cable routing
- With main busbar at bottom form 2b is mandatory
- Sophisticated ventilation concept

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Configuration

One unit per frame division corresponding to the relative dimensions for equipment compartment or cable compartment.

Selection and ordering data

Separation form 2b, main busbar

	Version			Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	① **Main busbar at top** • Height: 225 mm				
	Frame depth mm	Position of main busbar	Compartment width mm	**Separation**	
	400	Top	200 350 400 600 800 850 1000 1200	**8PQ3000-1BA52** **8PQ3000-2BA68** **8PQ3000-0BA67** **8PQ3000-0BA68** **8PQ3000-0BA70** **8PQ3000-2BA70** **8PQ3000-1BA13** **8PQ3000-1BA15**	1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit
	600	Top	200 350 400 600 800 850 1000 1200	**8PQ3000-1BA53** **8PQ3000-2BA71** **8PQ3000-0BA52** **8PQ3000-0BA53** **8PQ3000-0BA54** **8PQ3000-2BA72** **8PQ3000-1BA14** **8PQ3000-1BA16**	1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit
	800	Top front / rear	200 350 400 600 800 850 1000 1200	**8PQ3000-1BA54** **8PQ3000-2BA73** **8PQ3000-0BA55** **8PQ3000-0BA56** **8PQ3000-0BA57** **8PQ3000-2BA74** **8PQ3000-1BA17** **8PQ3000-1BA18**	1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit
	800	Top	200 350 400 600 800 850 1000 1200	**8PQ3000-1BA55** **8PQ3000-2BA75** **8PQ3000-0BA58** **8PQ3000-0BA60** **8PQ3000-0BA61** **8PQ3000-2BA76** **8PQ3000-1BA20** **8PQ3000-1BA21**	1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit

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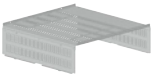
	Version			Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	Main busbar at bottom				
	Frame depth mm	Position Main busbar	Frame width mm	**Separation**	
	400	Bottom	350	**8PQ3000-3BA13**	1 unit
			400	**8PQ3000-3BA14**	1 unit
			600	**8PQ3000-3BA15**	1 unit
			800	**8PQ3000-3BA16**	1 unit
			850	**8PQ3000-3BA17**	1 unit
			1000	**8PQ3000-3BA18**	1 unit
			1200	**8PQ3000-3BA20**	1 unit
	600	Bottom	350	**8PQ3000-3BA22**	1 unit
			400	**8PQ3000-3BA23**	1 unit
			600	**8PQ3000-3BA24**	1 unit
			800	**8PQ3000-3BA25**	1 unit
			850	**8PQ3000-3BA26**	1 unit
			1000	**8PQ3000-3BA27**	1 unit
			1200	**8PQ3000-3BA28**	1 unit
	800	Bottom front for cable entry	350	**8PQ3000-3BA40**	1 unit
			400	**8PQ3000-3BA41**	1 unit
			600	**8PQ3000-3BA42**	1 unit
			800	**8PQ3000-3BA43**	1 unit
			850	**8PQ3000-3BA44**	1 unit
			1000	**8PQ3000-3BA45**	1 unit
			1200	**8PQ3000-3BA46**	1 unit
	800	Bottom double	350	**8PQ3000-3BA31**	1 unit
			400	**8PQ3000-3BA32**	1 unit
			600	**8PQ3000-3BA33**	1 unit
			800	**8PQ3000-3BA34**	1 unit
			850	**8PQ3000-3BA35**	1 unit
			1000	**8PQ3000-3BA36**	1 unit
			1200	**8PQ3000-3BA37**	1 unit

*** You can order this quantity or a multiple thereof.**

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Main busbar

Main busbar at rear

- Height: 250 mm

Frame depth mm	Position of main busbar	Compartment width mm	Separation	PS*/ P. unit
800	Rear	350	8PQ3000-2BA77	1 unit
		400	8PQ3000-0BA78	1 unit
		600	8PQ3000-0BA80	1 unit
		800	8PQ3000-0BA81	1 unit
		850	8PQ3000-2BA78	1 unit
		1000	8PQ3000-1BA22	1 unit
		1200	8PQ3000-1BA23	1 unit

Main busbar at rear

- With horizontal separations

Frame depth mm	Position of main busbar	Frame width mm	Separation	PS*/ P. unit
800	Rear	400	8PQ5000-4BA24	1 unit
		600	8PQ5000-4BA25	1 unit
		800	8PQ5000-4BA26	1 unit
		1000	8PQ5000-4BA27	1 unit

* You can order this quantity or a multiple thereof.

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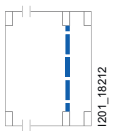
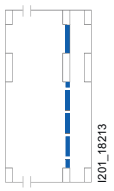
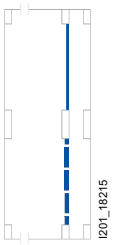
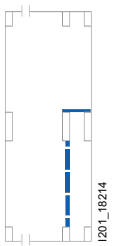
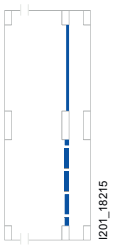
Selection and ordering data

	Version				Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	② **Vertical busbar, form 2b**					
	Position of main busbar	Positioning	Frame depth mm	Compartment width mm		
	Top	--	400	--	**8PQ4000-0BA05**	1 unit
			600	--	**8PQ4000-0BA07**	1 unit
	Top	On two sides	800		**8PQ4000-0BA64**	1 unit
	Top	Front/rear	800	200	**8PQ4000-0BA02**	1 unit
				400	**8PQ4000-0BA01**	1 unit
	Without	--	400	--	**8PQ4000-0BA06**	1 unit
			600	--	**8PQ4000-0BA03**	1 unit
			800	--	**8PQ4000-0BA76**	1 unit

* You can order this quantity or a multiple thereof.

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Vertical busbar

Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
③ **Touch protection covers, vertical busbar**		
• Height 1900 mm • Not for use with frame depth 400 mm		
Compartment width mm		
200	**8PQ3000-2BA50**	1 unit
400	**8PQ3000-0BA51**	1 unit

Version		Article No. www.siemens.com/product?Article No.	PS*/ P. unit
④ **Vertical separation between sections**			
• Height 1900 mm • With removable pre-sectioning units for main busbar, top			
Frame depth mm	Quantity		
400	1 ×	**8PQ3000-0BA15**	1 unit
600	1 ×	**8PQ3000-0BA16**	1 unit
800	2 ×	**8PQ3000-0BA15**	1 unit

* You can order this quantity or a multiple thereof.

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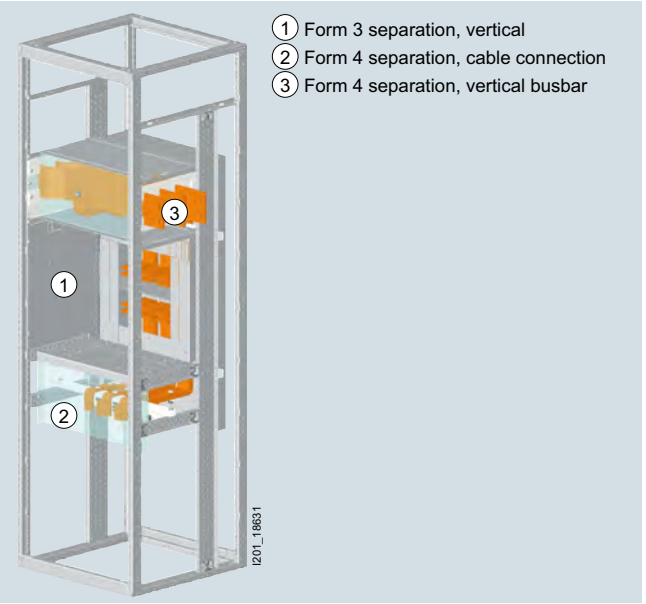
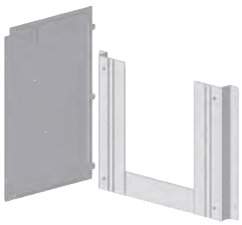
Overview

The separation kit for 3WL circuit breakers ensures rear and side separation.



Section with busbar connections and form 4b separation.

Selection and ordering data



Version				Article No. www.siemens.com/product?Article No.	PS*/ P. unit
① **Form 3 separation, vertical** Module height: 550 mm					
Size	Modular cover at the front	Compartment width mm	Installation type		
I	Door	400	Fixed/draw-out	8PQ5000-3BA82	1 unit
		600	Fixed/draw-out	8PQ5000-3BA82	1 unit
	Cover	600	Fixed	8PQ5000-0BA08	1 unit
			Draw-out	8PQ5000-0BA07	1 unit
		800	Fixed	8PQ5000-1BA65	1 unit
			Draw-out	8PQ5000-1BA66	1 unit
II	Door	600	Draw-out	8PQ5000-3BA82	1 unit
		800	Fixed/draw-out	8PQ5000-3BA81	1 unit
	Cover	600	Fixed	8PQ5000-0BA13	1 unit
			Draw-out	8PQ5000-0BA12	1 unit
		800	Fixed	8PQ5000-0BA11	1 unit
			Draw-out	8PQ5000-0BA10	1 unit
Note					
The separations cannot be used for 3WL1240.					

* You can order this quantity or a multiple thereof.

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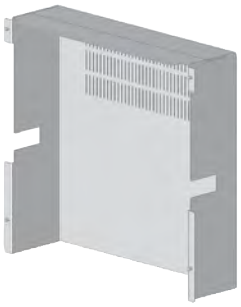

② Form 4 separation, cable connection
Installation type: Fixed-mounted and draw-out version

Size	Modular cover at the front	Compartment width	Section depth	Mounting height		Article No. www.siemens.com/product?Article No.	PS*/ P. unit
				Above circuit breaker	Below circuit breaker		
		mm	mm	mm	mm		
I	Door	400	400	250	300	8PQ5000-3BA84	1 unit
			600/800			8PQ5000-4BA00	1 unit
		600	400			8PQ5000-3BA86	1 unit
			600/800			8PQ5000-4BA01	1 unit
	Cover	600	600/800			8PQ5000-0BA30	1 unit
		800	600/800			8PQ5000-1BA68	1 unit
II	Door	800	600/800	350	400	8PQ5000-4BA02	1 unit
	Cover	800	600/800			8PQ5000-0BA38	1 unit

③ Form 4 separation, vertical busbars
Installation type: Fixed-mounted and draw-out version

Size	Modular cover at the front	Compartment width	Section depth	Mounting height		Article No. www.siemens.com/product?Article No.	PS*/ P. unit
				Above circuit breaker	Below circuit breaker		
		mm	mm	mm	mm		
I	Door	400	400	250	300	8PQ5000-3BA84	1 unit
			600/800			8PQ5000-3BA85	1 unit
		600	400			8PQ5000-3BA86	1 unit
			600/800			8PQ5000-3BA87	1 unit
	Cover	600	600/800			8PQ5000-0BA14	1 unit
		800	600/800			8PQ5000-1BA67	1 unit
II	Door	800	600/800	300	350	8PQ5000-3BA88	1 unit
	Cover	800	600/800			8PQ5000-0BA21	1 unit

* You can order this quantity or a multiple thereof.

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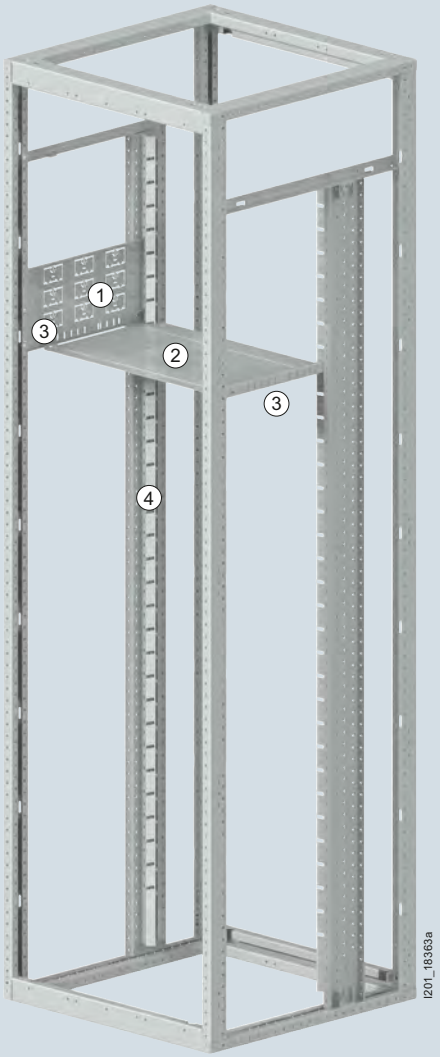
Overview

Features

- Modular system for 3VL, 3VT, 3K and 3NP
- Separation 3b



(1) Separation on the side

(2) Horizontal separation

(3) Crossbars

(4) Plug-in rails

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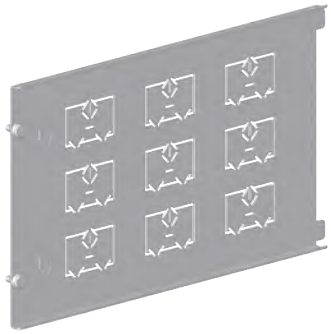
Selection and ordering data

	Version		Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	① **Side separation** • Kit version: Support rails • Suitable for connection terminals			
	Mounting height mm	Branch current A		
	100 150	-- --	8PQ5000-2BA27 8PQ5000-2BA28	1 unit 1 unit
	200	≤ 250 ≥ 400	8PQ5000-2BA30 8PQ5000-2BA31	1 unit 1 unit
	250	≤ 250 ≥ 400	8PQ5000-2BA32 8PQ5000-2BA33	1 unit 1 unit
	300	≤ 250 ≥ 400	8PQ5000-2BA34 8PQ5000-2BA35	1 unit 1 unit
	350	--	8PQ5000-2BA36	1 unit
	400	--	8PQ5000-2BA37	1 unit
	450	--	8PQ5000-2BA38	1 unit
	500	--	8PQ5000-2BA40	1 unit
	550	--	8PQ5000-2BA41	1 unit
	600	--	8PQ5000-2BA42	1 unit
	650	--	8PQ5000-2BA43	1 unit
	700	--	8PQ5000-2BA44	1 unit
	800	--	8PQ5000-2BA45	1 unit
	Side separation • Kit version: Crossbars • Suitable for connection terminals			
	Mounting height mm	Branch current A		
	400	≥ 800	8PQ5000-3BA50	1 unit
	450	≥ 800	8PQ5000-2BA65	1 unit
	500	≥ 800	8PQ5000-2BA66	1 unit
	600	≥ 800	8PQ5000-2BA48	1 unit
	700	≥ 800	8PQ5000-2BA50	1 unit
	② **Horizontal separation**			
	Compartment width mm			
	400 600 800		8PQ5000-3BA44 8PQ5000-2BA61 8PQ5000-2BA62	1 unit 1 unit 1 unit
	③ **Support rails** • Equipment height in mm: 25		8PQ5000-2BA63	1/2 units
	④ **Plug-in rails**			
	Equipment height mm	Busbar system		
	1600 1800	Top Rear or without	8PQ3000-0BA82 8PQ3000-0BA83	1 unit 1 unit

* You can order this quantity or a multiple thereof.

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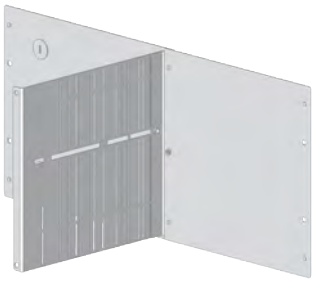
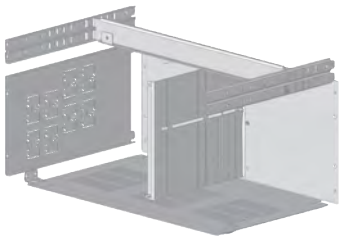


⑤ **Rear vertical separation**
Not applicable for frame depth 400 mm

Compartment width mm	Mounting height mm	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
600	50	8PQ5000-2BA51	1 unit
	100	8PQ5000-2BA52	1 unit
	150	8PQ5000-2BA53	1 unit
	200	8PQ5000-2BA54	1 unit
	250	8PQ5000-2BA55	1 unit
	300	8PQ5000-2BA56	1 unit
	350	8PQ5000-2BA57	1 unit
	450	8PQ5000-2BA58	1 unit
	550	8PQ5000-2BA60	1 unit
800	50	8PQ5000-2BA67	1 unit
	100	8PQ5000-2BA68	1 unit
	200	8PQ5000-2BA70	1 unit
	250	8PQ5000-2BA71	1 unit
	350	8PQ5000-2BA72	1 unit
	400	8PQ5000-2BA73	1 unit
	450	8PQ5000-2BA74	1 unit

3VL molded case circuit breakers



⑤ **Draw-out version, form 4a**

Compartment width mm	Frame depth mm	Circuit breaker	No. of poles	Module height: mm	Cable connection	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
600	400	VL160/250	3/4	250	Front	8PQ5000-1BA76	1 unit
		VL400	3/4	300	Front	8PQ5000-1BA77	1 unit
	600, 800	VL160/250	3/4	250	Front, rear	8PQ5000-1BA82	1 unit
		VL400	3/4	300	Front, rear	8PQ5000-1BA84	1 unit
		VL630	3/4	[1]	Front, rear		
800	400	VL160/250	3/4	250	Front	8PQ5000-2BA75	1 unit
		VL400	3/4	300	Front	8PQ5000-2BA76	1 unit
	600, 800	VL160/250	3/4	250	Front, rear	8PQ5000-2BA80	1 unit
		VL400	3/4	300	Front, rear	8PQ5000-2BA86	1 unit
		VL630 to VL1600	3/4	[1]			

[1] Select separations according to the dimensions from modular separation kits for vertical side and/or rear.

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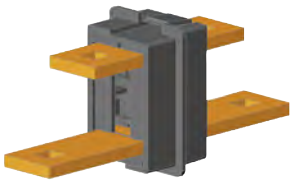
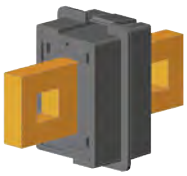
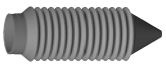
3VL, 3VT, 3K, 3NP modular kits

Accessories

	Version			Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	Connecting terminals xa • Upgrade for separation 3b to 4a.				
	Package contents	Rated current I_n A	Busbar mm × mm		
	4 units	--	None	**8PQ5000-0BA05**	1 unit
	2 units	250	2 × 25 × 5	**8PQ5000-0BA72**	1 unit
	4 units	400 630	1 × 30 × 10 1 × 40 × 10	**8PQ5000-0BA73** **8PQ5000-0BA74**	1 unit 1 unit
	**Protective bellows xb** • Upgrade to 4b in combination with connecting terminals			**8PQ9400-0BA71**	4 units

* You can order this quantity or a multiple thereof.

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Overview

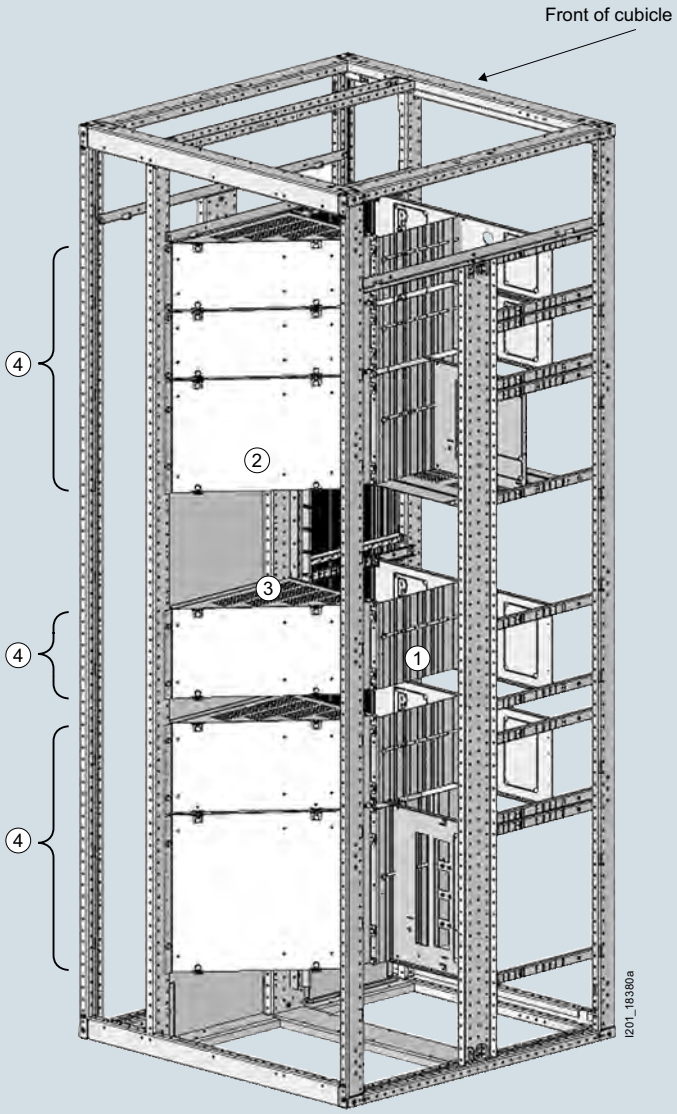
Features

- Modular system for rear device connection
- Connection is made by means of flexible insulated busbars

Configuration

- One basic module ① and vertical separation ② required for each separation kit
- Horizontal separation ③ forms top and bottom termination and is required once for each sub-segment.

Selection and ordering data



① Basic module
② Vertical separation
③ Horizontal separation
④ Sub-segments

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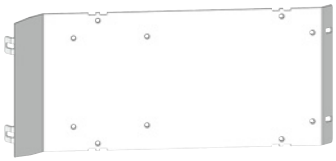
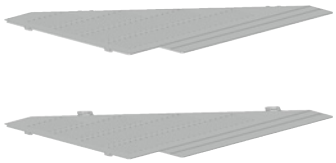
3VL rear connection

Version		Article No. www.siemens.com/product?Article No.	PS*/ P. unit
① **Basic modules**			
Compartment width mm	Module height: mm		
600	150	8PQ5000-3BA65	1 unit
	200	8PQ5000-3BA66	1 unit
	250	8PQ5000-3BA67	1 unit
	300	8PQ5000-3BA68	1 unit
	350	8PQ5000-3BA70	1 unit
	400	8PQ5000-4BA03	1 unit
800	200	8PQ5000-3BA77	1 unit
	250	8PQ5000-3BA78	1 unit
	350	8PQ5000-3BA80	1 unit
	400	8PQ5000-4BA04	1 unit
	450	8PQ5000-4BA05	1 unit



② **Vertical separation**			
Compartment width mm	Module height: mm		
600	150	8PQ5000-3BA52	1 unit
	200	8PQ5000-3BA53	1 unit
	250	8PQ5000-3BA54	1 unit
	300	8PQ5000-3BA55	1 unit
	350	8PQ5000-3BA56	1 unit
	400	8PQ5000-4BA06	1 unit
800	200	8PQ5000-3BA58	1 unit
	250	8PQ5000-3BA60	1 unit
	350	8PQ5000-3BA61	1 unit
	400	8PQ5000-4BA07	1 unit
	450	8PQ5000-4BA08	1 unit



③ **Horizontal separation** • Forms the top and bottom terminations • Required 1 × for each sub-segment • 1 set = 2 units			
Compartment width mm			
600		8PQ5000-3BA63	1 unit
800		8PQ5000-3BA64	1 unit

* You can order this quantity or a multiple thereof.

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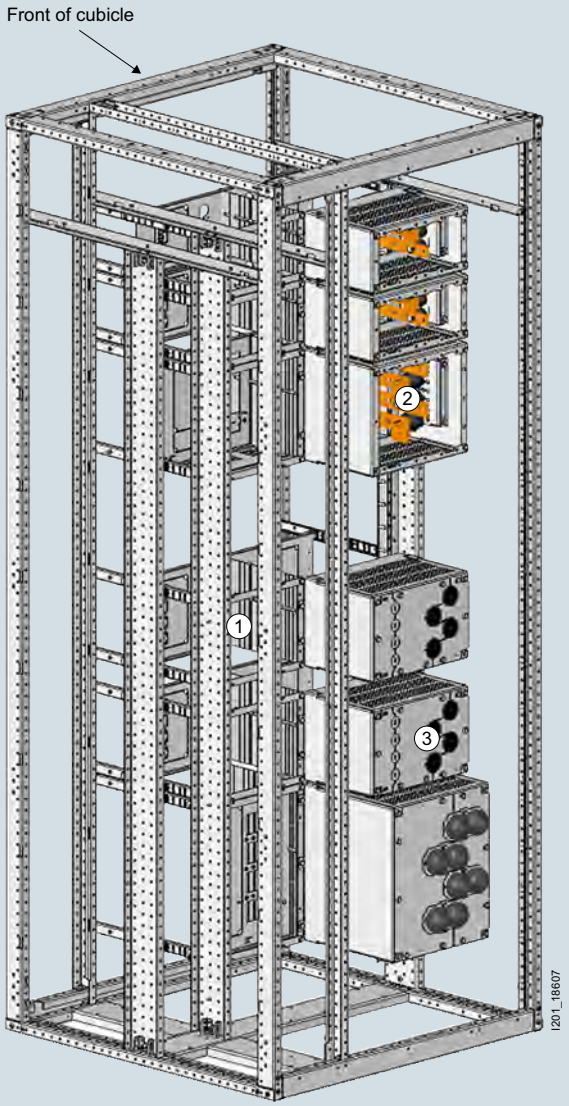
Configuration

For circuit breaker sizes as from VL400, a cable connection panel must be additional planned on the rear.



1 Basic module, rear connection
2 Cable connection compartment
3 Cover plate for cable connection compartment

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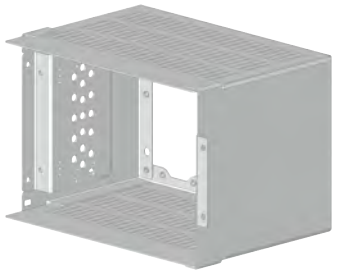
3VL rear connection

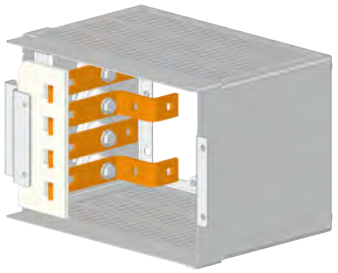
Version		Article No. www.siemens.com/product?Article No.	PS*/ P. unit
① **Basic modules**			
Compartment width mm	Module height: mm		
600	150	8PQ5000-3BA65	1 unit
	200	8PQ5000-3BA66	1 unit
	250	8PQ5000-3BA67	1 unit
	300	8PQ5000-3BA68	1 unit
	350	8PQ5000-3BA70	1 unit
800	200	8PQ5000-3BA77	1 unit
	250	8PQ5000-3BA78	1 unit
	350	8PQ5000-3BA80	1 unit



② **Cable connection compartments**
- Cables are connected via 8WH terminal blocks see Catalog LV 52
- Kit prepared for mounting of DIN rails
- Not included in scope of supply

Versions	No. of poles	Module height mm		
VL160X, VL160	3	150	8PQ6000-5BA13	1 unit
VL160X, VL160	4	200/250[1]	8PQ6000-5BA14	1 unit

[1] Height of compartment for draw-out version. The height of the cable connection compartment does not change and is the same for the fixed-mounted version and the plug-in version.



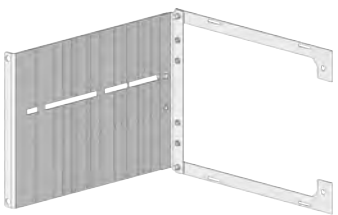
Cable connecting bars made of copper

Versions	No. of poles	Module height mm		
VL250	3	150	8PQ6000-5BA15	1 unit
	4	200/250[1]	8PQ6000-5BA17	1 unit
VL400	3	200	8PQ6000-5BA18	1 unit
	4	250/300[1]	8PQ6000-5BA20	1 unit
VL630	3	300	8PQ6000-5BA21	1 unit
	4	350	8PQ6000-5BA22	1 unit

[1] Height of compartment for draw-out version. The height of the cable connection compartment does not change and is the same for the fixed-mounted version and the plug-in version.

③ **Cover plates**

Versions	No. of poles	Module height mm		
VL160X, VL160, VL250	3	150	8PQ5000-3BA71	1 unit
VL160X, VL160, VL250	4	200	8PQ5000-3BA72	1 unit
VL400	3	200	8PQ5000-3BA73	1 unit
	4	250	8PQ5000-3BA74	1 unit
VL630	3	300	8PQ5000-3BA75	1 unit
	4	350	8PQ5000-3BA76	1 unit



① **Basic modules, fixed-mounted version**

Compartment width mm	Module height: mm		
600	350	8PQ5000-3BA70	1 unit
	400	8PQ5000-4BA03	1 unit
800	400	8PQ5000-4BA04	1 unit
	450	8PQ5000-4BA05	1 unit

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② Connection modules, complete, fixed-mounted version

Compartment width mm	Circuit breaker	No. of poles	Operating mechanism type	Height mm	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
800	VL800	3/4	Direct	400	**8PQ6000-6BA25**	1 unit
			Motor/door coupling	400	**8PQ6000-6BA26**	1 unit
			Rotary	400	**8PQ6000-6BA24**	1 unit
	VL1250	3/4	Direct	450	**8PQ6000-6BA01**	1 unit
			Motor/door coupling	450	**8PQ6000-6BA02**	1 unit
	VL1600	3/4	Direct	450	**8PQ6000-6BA03**	1 unit
			Motor/door coupling	450	**8PQ6000-6BA04**	1 unit

① Basic modules, draw-out version

Compartment width mm	Module height: mm	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
800	500	**8PQ5000-4BA10**	1 unit

② Connection modules, complete, draw-out version

Compartment width mm	Circuit breaker	No. of poles	Operating mechanism type	Height mm	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
800	VL800 VL1250 VL1600	3/4	Direct	500	**8PQ6000-6BA05**	1 unit

Cable entries
1 pack = 20 units

8PQ9400-0BA16 1/20 units

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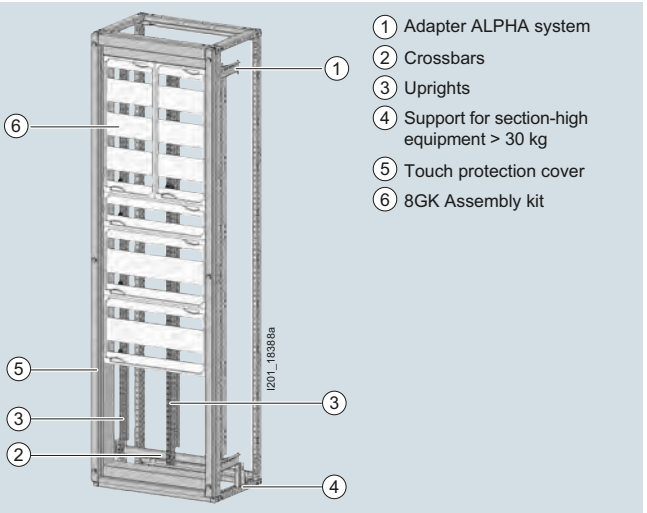
Overview

Configuration

- Heights 1650 for sections with main busbar at top
- Heights 1800 for sections without main busbar



Configuration for sections without main busbar

Selection and ordering data

	Version			Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	Frame Height: 2000 mm				
	Width mm	Depth mm			
	350	400		**8PQ1200-4BA15**	1 unit
		600		**8PQ1200-6BA14**	1 unit
		800		**8PQ1200-8BA01**	1 unit
	600	400		**8PQ1206-4BA01**	1 unit
		600		**8PQ1206-6BA01**	1 unit
		800		**8PQ1206-8BA01**	1 unit
	850	400		**8PQ1200-4BA16**	1 unit
		600		**8PQ1200-6BA15**	1 unit
		800		**8PQ1200-8BA02**	1 unit
	① **Adapters** • For installing the ALPHA system • 1 set = 4 units			**8PQ3000-1BA74**	1 unit
	② **Crossbars** 1 set = 2 units				
	Height mm	Frame width mm	Width 8GK mm		
	--	350	250	**8PQ3000-1BA76**	1 unit
	--	600	500	**8PQ3000-1BA78**	1 unit
	--	850	750	**8PQ3000-1BA80**	1 unit

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	Version			Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	③ **Uprights** 1 set = 2 units				
	Height mm	Frame width mm	Width 8GK mm		
	1650 1800	-- --	-- --	**8PQ3000-2BA88** **8PQ3000-1BA82**	1 unit 1 unit
	④ **Supports** • 1 set = 2 units • For section-high equipment > 30 kg				
	Height mm	Frame width mm	Width 8GK mm		
	1800	--	--	**8PQ3000-1BA75**	1 unit
	⑤ **Touch protection covers** • For section doors				
	Height mm	Frame width mm	Width 8GK mm		
	1650	350 600 850	--	**8PQ3000-2BA85** **8PQ3000-2BA86** **8PQ3000-2BA87**	1 unit 1 unit 1 unit
	1800	350 600 850	--	**8PQ3000-2BA45** **8PQ3000-2BA46** **8PQ3000-2BA47**	1 unit 1 unit 1 unit
	• For frame paneling				
	Height mm	Frame width mm	Width 8GK mm		
	1650	350 600 850	--	**8PQ3000-2BA82** **8PQ3000-2BA83** **8PQ3000-2BA84**	1 unit 1 unit 1 unit
	1800	350 600 850	--	**8PQ3000-1BA83** **8PQ3000-1BA84** **8PQ3000-1BA85**	1 unit 1 unit 1 unit

⑥ Frame paneling or optionally doors, see paneling sections on page 14/114.

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Paneling sections

Overview

1 Base
2 Bottom plate
3 Rear panel
4 Side panel
5 Top plate
6 Doors / Alternatively, frame paneling

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Selection and ordering data

Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit

① Base corner pieces with front cover

Height in mm	Width in mm	**Height 100 mm**	
100	350	**8PQ1010-0BA01**	1 unit
	600	**8PQ1016-0BA01**	1 unit
	850	**8PQ1010-0BA02**	1 unit

Height in mm	Width in mm	**Height 200 mm**	
200	350	**8PQ1020-0BA01**	1 unit
	600	**8PQ1026-0BA01**	1 unit
	850	**8PQ1020-0BA02**	1 unit

Base reinforcements for transport
Height: 100 mm

Width in mm	Depth in mm	**Height 100 mm**	
350	--	**8PQ1010-0BA06**	1 unit
600	--	**8PQ1016-0BA02**	1 unit
850	--	**8PQ1010-0BA07**	1 unit
--	400	**8PQ1014-0BA02**	1 unit
--	600	**8PQ1016-0BA02**	1 unit
--	800	**8PQ1018-0BA02**	1 unit

Base covers, lateral
Height: 100 mm

Depth in mm	**Height 100 mm**	
400	**8PQ1010-4BA01**	1 unit
600	**8PQ1010-6BA01**	1 unit
800	**8PQ1010-8BA01**	1 unit

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Paneling sections

Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
② **Bottom plates** for 800 mm deep frames, order **two** 400 mm deep bottom plates in the corresponding width.				
Depth in mm / Width in mm	**IP55**		**IP40, for cable entry**	
400 / 350	8PQ2300-4BA16	1 unit	8PQ2300-4BA18	1 unit
400 / 600	8PQ2306-4BA05	1 unit	8PQ2306-4BA06	1 unit
400 / 850	8PQ2300-4BA17	1 unit	8PQ2300-4BA20	1 unit
600 / 350	8PQ2300-6BA20	1 unit	8PQ2300-6BA22	1 unit
600 / 600	8PQ2306-6BA05	1 unit	8PQ2306-6BA06	1 unit
600 / 850	8PQ2300-6BA21	1 unit	8PQ2300-6BA23	1 unit
② **Bottom plates for main busbar, bottom**				
Depth in mm / Width in mm	**IP20**			
400 / 350	8PQ2300-4BA23	1 unit	--	
400 / 600	8PQ2306-4BA10	1 unit	--	
400 / 850	8PQ2300-4BA24	1 unit	--	
600 / 350	8PQ2300-6BA25	1 unit	--	
600 / 600	8PQ2306-6BA16	1 unit	--	
600 / 850	8PQ2300-6BA26	1 unit	--	
800 / 350	8PQ2300-8BA10	1 unit	--	
800 / 600	8PQ2306-8BA05	1 unit	--	
800 / 850	8PQ2300-8BA11	1 unit	--	
② **Bottom plates for main busbar, bottom with cable entry** • Bottom plates for cable entry cover the front area of the main busbar • In the rea area **bottom plates with cable entries** are additionally required				
Depth in mm / Width in mm	**Depth 400 For cable entry**		**Depth 400 Cable entry**	
400 / 350	8PQ2300-8BA12	1 unit	8PQ2300-4BA18	1 unit
400 / 600	8PQ2306-8BA06	1 unit	8PQ2306-4BA06	1 unit
400 / 850	8PQ2300-8BA13	1 unit	8PQ2300-4BA20	1 unit
③ **Rear panels**				
Width in mm	**IP40**		**IP55**	
350	8PQ2420-0BA01	1 unit	8PQ2420-0BA03	1 unit
600	8PQ2420-6BA02	1 unit	8PQ2420-6BA01	1 unit
850	8PQ2420-0BA02	1 unit	8PQ2420-0BA04	1 unit
④ **Side panels** 1 set = 2 units				
Depth in mm	**IP40, with design strip**		**IP55**	
400	8PQ2520-4BA01	1 unit	8PQ2520-4BA02	1 unit
600	8PQ2520-6BA01	1 unit	8PQ2520-6BA02	1 unit
800	8PQ2520-8BA01	1 unit	8PQ2520-8BA02	1 unit

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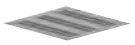
Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
⑤ **Top plates**								
								
Depth in mm / Width in mm	**IP40**		**IPX1 upgrade**		**IP55**		**IP40, with cable entry**	
400 / 350	**8PQ2300-4BA06**	1 unit	**8PQ2300-4BA11**	1 unit	**8PQ2300-4BA04**	1 unit	**8PQ2300-4BA14**	1 unit
600	**8PQ2306-4BA02**	1 unit	**8PQ2306-4BA04**	1 unit	**8PQ2306-4BA01**	1 unit	**8PQ2306-4BA03**	1 unit
850	**8PQ2300-4BA07**	1 unit	**8PQ2300-4BA12**	1 unit	**8PQ2300-4BA05**	1 unit	**8PQ2300-4BA15**	1 unit
600 / 350	**8PQ2300-6BA13**	1 unit	**8PQ2300-6BA15**	1 unit	**8PQ2300-6BA11**	1 unit	**8PQ2300-6BA17**	1 unit
600	**8PQ2306-6BA02**	1 unit	**8PQ2306-6BA04**	1 unit	**8PQ2306-6BA01**	1 unit	**8PQ2306-6BA03**	1 unit
850	**8PQ2300-6BA14**	1 unit	**8PQ2300-6BA16**	1 unit	**8PQ2300-6BA12**	1 unit	**8PQ2300-6BA18**	1 unit
800 / 350	**8PQ2300-8BA03**	1 unit	**8PQ2300-8BA05**	1 unit	**8PQ2300-8BA01**	1 unit	**8PQ2300-8BA07**	1 unit
600	**8PQ2306-8BA02**	1 unit	**8PQ2306-8BA04**	1 unit	**8PQ2306-8BA01**	1 unit	**8PQ2306-8BA03**	1 unit
850	**8PQ2300-8BA04**	1 unit	**8PQ2300-8BA06**	1 unit	**8PQ2300-8BA02**	1 unit	**8PQ2300-8BA08**	1 unit

Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
⑥ **Doors with two-way interlocking system**						
Hinge position / Width in mm	**IP40**		**IP55**		**IP55 glass doors**	
Left / 350	**8PQ2197-0BA03**	1 unit	**8PQ2197-0BA06**	1 unit	**--**	
600	**8PQ2197-6BA06**	1 unit	**8PQ2197-6BA03**	1 unit	**8PQ2197-6BA10**	1 unit
850	**8PQ2197-0BA04**	1 unit	**8PQ2197-0BA07**	1 unit	**8PQ2197-0BA01**	1 unit
Right / 350	**8PQ2197-0BA16**	1 unit	**8PQ2197-0BA18**	1 unit	**--**	
600	**8PQ2197-6BA13**	1 unit	**8PQ2197-6BA12**	1 unit	**8PQ2197-6BA14**	1 unit
850	**8PQ2197-0BA17**	1 unit	**8PQ2197-0BA20**	1 unit	**8PQ2197-0BA21**	1 unit
Doors for semi-cylindrical profile • Semi-cylindrical profile acc. to DIN 18252/18254 • 8 × 45°						
Hinge position / Width in mm	**IP40**		**IP55**		**IP55 glass doors**	
Left / 350	**8PQ2197-0BA34**	1 unit	**8PQ2197-0BA31**	1 unit	**--**	
600	**8PQ2197-6BA04**	1 unit	**8PQ2197-6BA01**	1 unit	**8PQ2197-6BA07**	1 unit
850	**8PQ2197-0BA35**	1 unit	**8PQ2197-0BA32**	1 unit	**8PQ2197-0BA33**	1 unit
Right / 350	**8PQ2197-0BA40**	1 unit	**8PQ2197-0BA36**	1 unit	**--**	
600	**8PQ2197-6BA05**	1 unit	**8PQ2197-6BA02**	1 unit	**8PQ2197-6BA08**	1 unit
850	**8PQ2197-0BA41**	1 unit	**8PQ2197-0BA37**	1 unit	**8PQ2197-0BA38**	1 unit
① **Frame paneling** • Degree of protection IP30 • Cannot be combined with doors						
Hinge position / Width in mm	**IP30**					
-- / 350	**8PQ2197-0BA11**	1 unit				
600	**8PQ2197-6BA11**	1 unit				
800	**8PQ2197-8BA11**	1 unit				

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Paneling sections

	Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
Accessories			
	Flat cylinders/two-way interlocking mechanism		
	Versions		
	Rotary handles with flat cylinder • Identical key type • Including key	**8PQ9400-0BA07**	1 unit
	Rotary handles with two-way interlocking mechanism	**8PQ9400-0BA08**	1 unit
	Coupling bars	**8PQ9400-0BA27**	1 unit
	Locking rods	**8PQ9400-0BA37**	1 unit
	Bar guides	**8PQ9400-0BA36**	1 unit

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	Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	Semi-cylindrical profiles		
	Versions		
	Rotary handles with semi-cylindrical profile	**8PQ9400-0BA41**	1 unit
	Coupling bars	**8PQ9400-0BA28**	1 unit
	Locking rods	**8PQ9400-0BA38**	1 unit
	Bar guides	**8PQ9400-0BA36**	1 unit
	Semi-cylindrical profiles • Acc. to DIN 18252/18254 • 8 × 45° adjustable • Identical key type • Further lock systems (RONIS, VW) on request. • Including key	**8PQ9400-0BA26**	1 unit
	Door hinges 1 set = 2 units	**8PQ9400-0BA55**	1/2 units
	Cubicle keys • 3 mm double bit • 1 pack = 10 units	**8PQ9400-0BA12**	1 unit
	Inner door struts • For use with section doors • 1 pair = 2 units • Height 1975 mm	**8PQ2197-0BA10**	1 unit
SIVACON designed by SIEMENS	**Cubicle ID plates** SIVACON designed by Siemens	**8PQ9400-0BA06**	1 unit

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Fasteners

Selection and ordering data

	Version	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
Frame			
T30	**Self-tapping screws** For use with frame and crossbars ***Cylinder-head screws*** External diameter × Length in mm		
	M6 × 10	8PQ9500-0BA34	1 unit
	M6 × 16	8PQ9500-0BA32	1 unit
	M6 × 20	8PQ9500-0BA31	1 unit
	Cap, RAL 7035	8PQ9400-0BA14	1 unit
T30	***Countersunk screws*** External diameter × Length in mm		
	M6 × 12	8PQ9500-1BA07	1 unit
Flat copper connection			
	Square screws DIN 603 1 pack = 50 units External diameter × Length in mm		
	M10 × 35	8PQ9500-0BA14	1 unit
	M10 × 45	8PQ9500-0BA16	1 unit
	M10 × 55	8PQ9500-1BA36	1 unit
	M10 × 65	8PQ9500-1BA25	1 unit
	Busbar clamps 1 pack = 20 units	8PQ9400-0BA02	1 unit
Electrical connections			
	Hexagon-head screws ISO 4017 • Continuous thread • 1 pack = 50 units External diameter × Length in mm		
	M8 × 25	8PQ9500-0BA77	1 unit
	M8 × 35	8PQ9500-0BA78	1 unit
	M12 × 40	8PQ9500-0BA88	1 unit
	Hexagon-head screws ISO 4014 • With shank • 1 pack = 50 units External diameter × Length in mm		
	M12 × 50	8PQ9500-0BA64	1 unit
	M12 × 60	8PQ9500-1BA02	1 unit
	M12 × 80	8PQ9500-1BA51	1 unit
	Hexagonal nuts ISO 4032 1 pack = 50 units External diameter		
	M8	8PQ9500-0BA07	1 unit
	M10	8PQ9500-0BA05	1 unit
	M12	8PQ9500-0BA04	1 unit
	Clamping washers DIN 6796 1 pack = 50 units Screw type		
	M8	8PQ9500-0BA58	1 unit
	M10	8PQ9500-0BA60	1 unit
	M12	8PQ9500-0BA61	1 unit
	Washers DIN 125 1 pack = 50 units For screw type		
	M8	8PQ9500-0BA70	1 unit
	M10	8PQ9500-0BA67	1 unit
	M12	8PQ9500-1BA33	1 unit
	Lock washers BN208012 1 pack = 50 units For screw type		
	M8	8PQ9500-0BA48	1 unit
	M10	8PQ9500-0BA50	1 unit
	M12	8PQ9500-0BA51	1 unit

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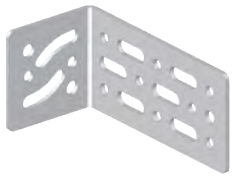
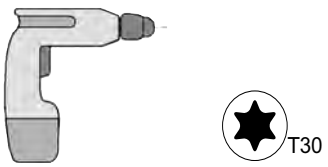
Selection and ordering data

	Version		Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	**Universal mounting brackets** 1 pack = 10 units		**8PQ9400-0BA01**	1 unit
	Cable brackets • C profile, 30 mm • 1 set = 5 units • 1 pack = 5 units			
	Depth in mm			
	400, 600, 800		**8PQ3000-0BA38**	1 unit
	Width in mm			
	350		**8PQ3000-0BA38**	1 unit
	400		**8PQ3000-0BA41**	1 unit
	600		**8PQ3000-0BA42**	1 unit
	800		**8PQ3000-0BA43**	1 unit
	850		**8PQ3000-2BA35**	1/5 units
	1000		**8PQ3000-0BA86**	1/5 units
	1200		**8PQ3000-0BA87**	1/5 units
	Cable bracket fastenings 1 pack = 10 units		**8PQ3000-0BA73**	1 unit
	Multi-profile rails • H profile = 35 mm • Length = 1600 mm • Made of aluminum		**8PQ9600-0BA01**	1 unit
	Lifting eyebolts 1 set = 4 units		**8PQ9400-0BA11**	1 unit
	Lifting brackets 1 set = 2 units			
	Frame width in mm			
	800		**8PQ3000-1BA01**	1 unit
	850		**8PQ3000-2BA38**	1 unit
	1000		**8PQ3000-1BA02**	1/2 units
	1200		**8PQ3000-1BA03**	1/2 units
Tools				
	**Bits for screwdriver**			
	External diameter × Length in mm	Package contents		
	M6 × 50	5 units	**8PQ9400-0BA05**	1 unit
	M6 × 200	2 units	**8PQ9400-0BA10**	1 unit

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Notes

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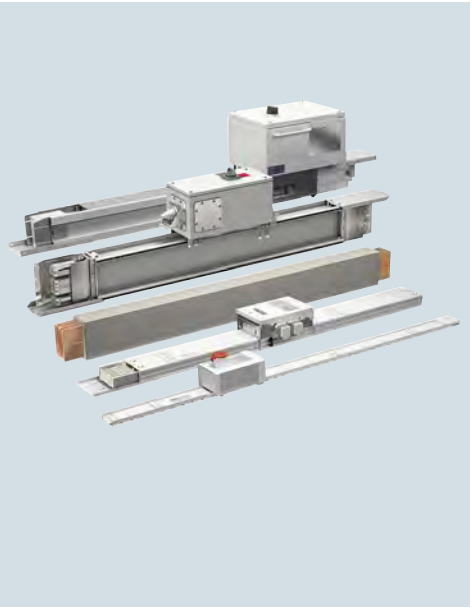

Introduction

15/2 Introduction
15/4 Features overview
15/6 Principles of busbar trunking planning

For further information,
see Catalog LV 70

For further technical product information:

Installation manual

SIVACON 8PS
- Installation with BD2 system
Article No.: A5E02126899-02

Planning Manual

SIVACON 8PS
- Planning with SIVACON 8PS
Article No.: A5E01541101-03

Siemens Industry Online Support:

www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
Download
FAQ
Manual
Product note
Software archive
Technical data

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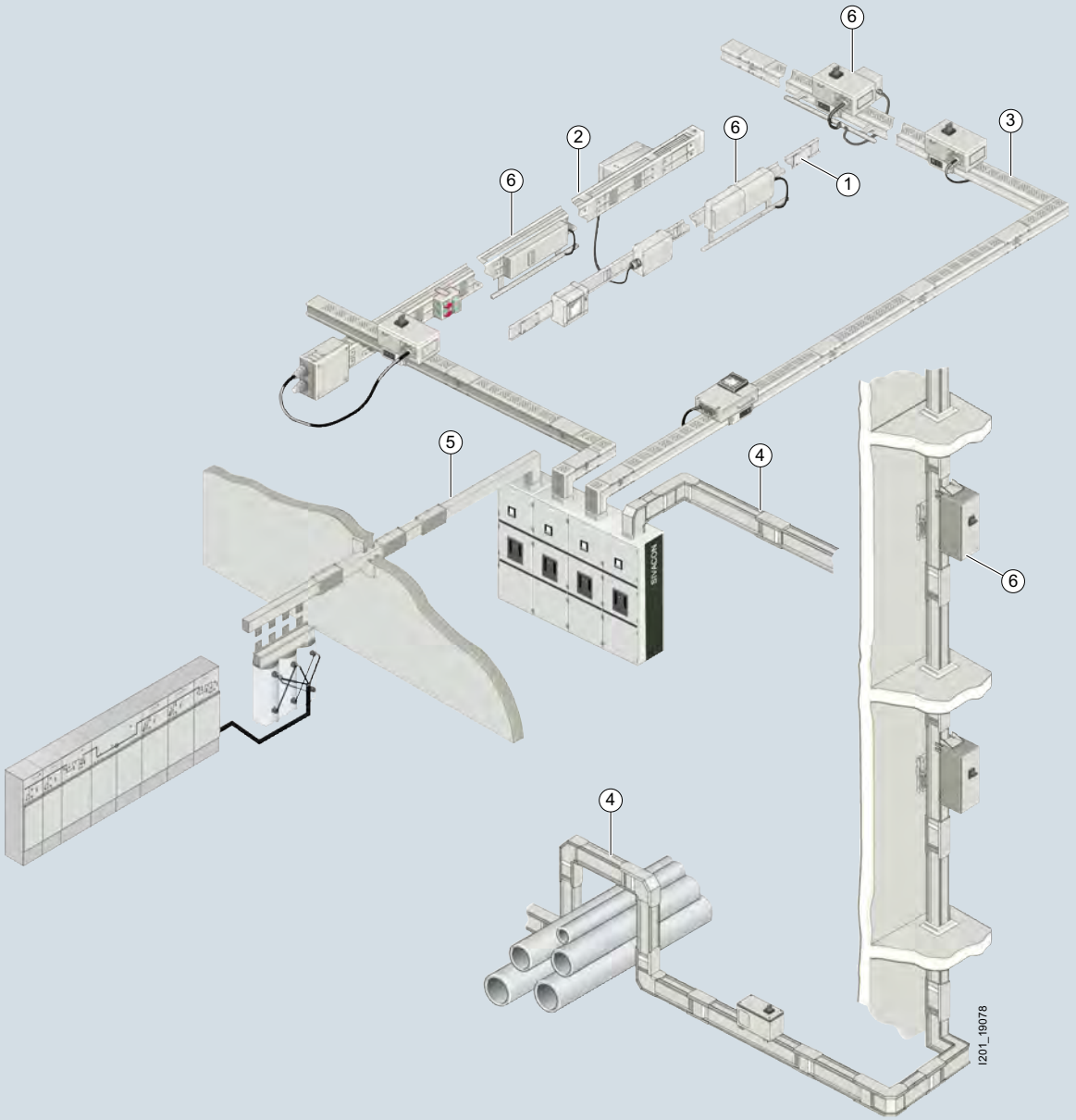
Overview



1. BD01 system
2. BD2 system
3. LD system
4. LI system
5. LR system
6. Communication-capable busbar trunking systems for connection to the following bus systems:
   - KNX (EIB / Instabus)
   - AS-Interface
   - PROFIBUS
   - PROFINET
   - Modbus

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Benefits

① *BD01 system up to 160A*

The busbar trunking system for power distribution in the skilled trades and business:

- High degree of protection up to IP55
- Flexible power supply
- Easy and quick planning
- Time-saving mounting
- Reliable mechanical and electrical connection technology
- High stability, low weight
- Few basic modules required
- Storage-friendly system
- Variable changes of direction
- Versatile tap-off units
- Positive opening and closing of tap-off points

② *BD2 system up to 1250 A*

The busbar trunking system for operation in the harsh industrial world:

- High degree of protection up to IP55
- Easy and quick planning
- Time-saving and economical mounting
- Reliable and safe operation
- Flexible modular system with simple solutions for every application
- Early planning of the power distribution system without exact knowledge of load locations
- Early readiness for operation thanks to fast and simple mounting
- Innovative design: No more compensation boxes to compensate elongation
- Codable tap-off units and tap-off points
- Sealable throughout

③ *LD system up to 5000 A*

The busbar trunking system for optimized power distribution in industry:

- Degree of protection up to IP54
- Quick and easy mounting
- Reliable and safe operation
- Space-saving, compact design up to 5000 A in one enclosure
- Load outgoing feeders up to 1250 A
- Type-tested connection to distribution boards and transformers

④ *LI system up to 6300 A*

The busbar trunking system for power transmission and distribution in the infrastructure – e.g. in multistory buildings – and in industrial applications:

- Reliable and easy mounting
- Reliable and safe operation
- Load outgoing feeders up to 1250 A
- Tested connection to distribution boards (type-tested connection to SIVACON S8) and transformers

⑤ *LR system up to 6150 A*

The busbar trunking system for power transmission under extreme ambient conditions (IP68).

Detailed information about this system is available from the Siemens branch located close to you.

⑥ *Communication-capable busbar trunking systems*

Communication-capable function expansions for combination with known tap-off units:

- Can be used with the BD01, BD2, LD and LI systems
- Uses:
  - Building control
  - Switching, reporting and remote operation
  - Consumption recording and remote monitoring of decentral power tap-off units
  - Interlinking of various trades
- Connection to the KNX (EIB/Instabus), AS-Interface and PROFIBUS, PROFINET and Modbus bus systems
- Integrated, efficient and future-proof solution thanks to the integration of measuring devices in energy management solutions according to ISO 50001
- Flexible with plug-in tap-off units including measuring devices
- Cost-efficient with greater transparency of the energy consumption
- Reliable thanks to central control of the power distribution

More information

Catalog LV 70 -
Busbar Trunking Systems BD01, BD2 up to 1250 A

German: Article No. E86060-K1870-A101-A8
English: Article No. E86060-K1870-A101-A8-7600

SIVACON 8PS busbar trunking systems configurator

Busbar trunking systems up to 1250 A can be ordered using the product configurator (selection aid).

The following configurators are available:

- SIVACON 8PS BD01 system, 40 ... 160 A
- SIVACON 8PS BD2 system, 160 ... 1250 A

This selection aid can be accessed through the Industry Mall and is also included in interactive catalog CA 01 on a DVD, which is available free of charge.

Manuals

Planning with SIVACON 8PS - busbar trunking systems up to 6300 A
German: Article No. A5E01541017-03
English: Article No. A5E01541101-03

Leaflet

English: For safe power flows - SIVACON 8PS busbar trunking systems
German: Article No. IC1000-G320-A158-V1
English: Article No. IC1000-G320-A158-V1-7600

English: An integrated solution for safe and efficient power supply - LI busbar trunking system
German: Article No. IC1000-G320-A194-V1
English: Article No. IC1000-G320-A194-V1-7600

Internet

www.siemens.com/busbar

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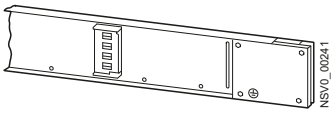
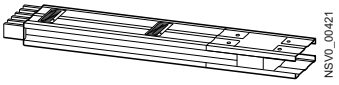
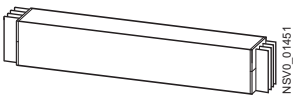
Features overview

Overview

Busbar Trunking Systems	Rated current A	Rated operational voltage V AC	Frequency Hz	Number of active conductors	Degree of protection	Ambient temperature, min./max. °C
BD01 	40 63 100 125 160	400	50	4 (PE = enclosure)	Up to IP55	-5/+40
BD2A **BD2C** 	160 ... 1000 160 ... 1250	690	50	5	Up to IP55	-5/+40
LDA1 ... LDA8 **LDC2 ... LDC8** 	1100 ... 4000 2000 ... 5000	1000	50	4 or 5	Up to IP54	-5/+40
LI-A0800 ... LI-A5000 **LI-C1000 ... LI-C6300** 	800 ... 5000 1000 ... 6300	1000	50	3, 4, 5, 6 (PE = enclosure)	Up to IP66	-5/+50
LRA01 ... LRA29 **LRC01 ... LRC29** 	400 ... 4600 630 ... 6150	1000	50	4, 5	IP68	-5/+40

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Mounting position	Length m	Tap-off points	Tap-off units	Material	Fire load kWh/m	Can be combined with communication-capable tap-off units for
Edgewise, flat (outgoing points downwards)	2 3	On one side every 0.5 or 1 m	Up to 63 A	Insulated Al or Cu conductors, painted sheet-steel enclosure	0.76	Lighting control
Edgewise, flat and vertical	0.5 ... 3.25	Without On two sides offset every 0.25 or 0.5 m	Up to 530 A	Al or Cu busbars, painted sheet-steel enclosure	0.6 ... 0.67 (without tap-off points)	Lighting control, remote switching, signaling and consumption recording
Horizontal, edgewise and vertical	0.5 ... 3.2	Without On one side every 1 m On two sides every 1 m	Up to 1250 A	Insulated Al or Cu busbars, painted sheet-steel enclosure	4.16 ... 8.83 (without tap-off points)	Remote switching and signaling and consumption recording
Horizontal, edgewise and vertical	0.35 ... 3	Without Up to 3 tap-off points on 3 m	Up to 1250 A	Insulated Al or Cu busbars, painted aluminum enclosure	2.13 ... 15.34	Remote switching and signaling and consumption recording
Horizontal, edgewise and vertical	0.5 ... 3	Without Selectable on one side	Up to 630 A	Epoxy resin system, Al or Cu busbars	--	--

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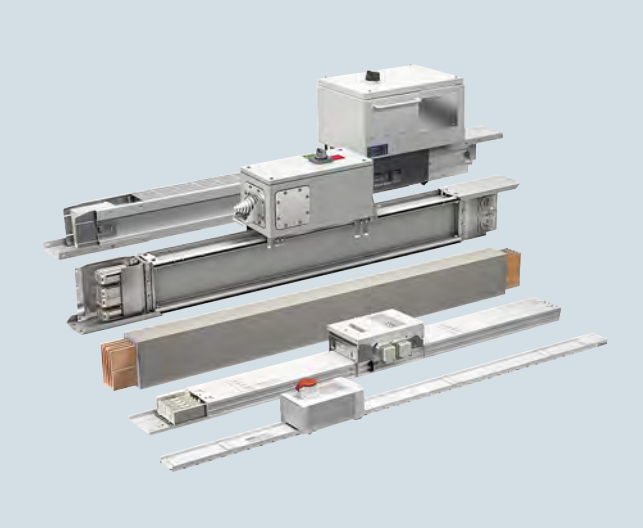
Overview



Trunking units for currents from 40 to 6300 A

When it comes to developing a power distribution concept complete with the configuration of systems and system components, the end user's requirements have to be coordinated with the manufacturer's possibilities.

Descriptions are provided accordingly of the individual systems, their technical features and their fields of application. Another element is the graphic representation of the various busbar trunking elements. All details of importance for the planning work are emphasized and explained.

You will find ideas for a ready-to-use planning solution under "Configuration information" in Chapters 3 and 4 of Catalog LV 70. For example, the basics of dimensioning are presented in detail along with in-depth information on topics such as system construction, short-circuit protection, fire protection and functional maintenance.

Services and engineering tools are available from Siemens to simplify the drawing up of customer specifications.

General information

When developing the planning concept of a power supply system it is necessary not only to consider the standards and specifications in force but also to clarify the correlations between economy and technology. Electrical equipment such as distribution boards and transformers must be dimensioned and selected so that they represent an optimum in their entirety and not just individually.

All components must be sufficiently dimensioned for the loads which arise in the event of a fault as well as during operation at rated values. Other decisive points to be considered when drawing up the power concept are:

- The type, utilization and shape of building (e.g. high-rise, flat-roof and number of storys)
- Determination of load centers and selection of possible supply routes and locations for transformers and main distribution boards
- Determination of building-related connected loads according to specific loads per unit area dependent on the building's use
- Specifications and requirements imposed by the building authorities
- Requirements imposed by the power supply companies

The result will never be a single solution but several versions which must be assessed with regard to their technical and economic implications. The following requirements are paramount in this connection:

- Easy and clear-cut planning
- Long endurance
- High availability
- Low fire load
- Flexible adaptation to changes within the building

In most applications these requirements are easily met by the use of suitable busbar trunking systems. For this reason, busbar trunking systems rather than the cable installation method is being used more and more often by engineering offices for the transmission and distribution of power. Siemens offers busbar trunking systems from 40 to 6300 A:

- The BD01 busbar trunking system from 40 A to 160 A for supplying power to workshops with tap-off units up to 63 A
- The BD2 system from 160 A to 1250 A for supplying power to medium-size loads in buildings and in industry
- The ventilated LD system from 1100 A to 5000 A for supplying loads with medium power consumption in industry
- The LI sandwich system from 800 A to 6300 A for power distribution with IP55 and power transmission of high volumes of power up to IP66 in infrastructure – e.g. in multistory buildings – and in industrial applications
- The LR encapsulated system from 400 A to 6150 A for power transmission in extreme ambient conditions (IP68)

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SIVACON sicube 8MF1 system cubicles

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NEW

Direct reference to the products in the Industry Mall from the selection and ordering data tables:

Article No.
www.siemens.com/product?Article No.
3VA2025-5HL36-0AA0

Paper catalog: To get more product information enter the Web address plus Article No.

PDF catalog: Get more product information with just a mouse click.

For further technical product information:

Siemens Industry Online Support:
www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
Download
FAQ
Manual
Product note
Software archive
Technical data

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System overview

Overview

One system, many possibilities

The basis for progress

Innovative technologies bring progress to the world, either by enabling machines and systems to operate independently or by integrating renewable energy sources and energy stores in the network. Whether in mechanical and plant engineering, in control technology, wind power or photovoltaics, every application and every industry has special requirements to fulfill. The new SIVACON sicube 8MF system cubicles are the perfect answer for every use. Your electrical and electronic components are in good hands here.

Modular system with many variants

With SIVACON sicube 8MF system cubicles, you are backing a system that adapts to your needs. Configure your required unequipped, empty enclosure yourself in only a few steps. Thanks to the modular system with many variants, you profit from a host of standard variants for your tailor-made special solution. The basis is the frame, which is available in 60 sizes. In further steps, you define which enclosure and expansion parts are to be installed on and in your unequipped, empty enclosure. You also have a choice as to how it is delivered, i.e. you can have the cubicle delivered completely pre-assembled or with individually packed components.

Individual modification

The flexibility of the SIVACON sicube 8MF system cubicles is your advantage. If required, we will develop an unequipped, empty enclosure that corresponds precisely to your specifications. We will take care of modifying the cubicle so that you can modify it further straight away, as soon as it is delivered. Paint finishes in special or functional colors, tailor-made cutouts or even EMC versions or cubicles prepared for earthquakes – no matter what your requirements, we will implement them.

Tailor-made solutions

Do you need a special cubicle for your application, e.g. in unusual dimensions or with an individual sheet metal interior to fit your components? Together with you, we will develop an enclosure that complies precisely with your requirements. With an optimized unequipped, empty enclosure to start off with, you can save installation effort, profiting from our consulting service here. Specific approvals or certification also present no problem: we can already offer you a host of certificates, and we can obtain others additionally on request.

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Technical specifications

Standard	IEC 62208, IEC 61439 (see list on right)
Degree of protection	IP20 IP21 IP30 IP40 IP41 IP55
Safety class	I
Material	Sheet steel
Surface	Sendzimir-galvanized Powder-coated
Color	RAL 7035 (light gray)

Tests in compliance with IEC 61439:

- Corrosion resistance
- Heat stability
- Resistance to extraordinary heat and fire
- Raising
- Impact test
- Degree of protection of enclosures
- Continuity of PE conductor connection
- Proof of power loss dissipation capacity

Note:

Other technical versions on request.

	Material		Surface
Frame			
Frame	2.5 mm sheet steel	Screwed	Sendzimir-galvanized
Base	1.5 mm sheet steel	Bases, base covers	Powder-coated on both sides, RAL 7035
Trim strips		With Siemens logo, without cutout for indicator lights Without Siemens logo, without cutout for indicator lights With Siemens logo and cutout for indicator lights, left With Siemens logo and cutout for indicator lights, right	
Enclosure			
Base	2.0 mm sheet steel	Closed With sub-divisions With cable entry	Sendzimir-galvanized
Roof	1.5 mm sheet steel	Closed Closed, foamed seal Perforated With ventilation fins Roof trough	Sendzimir-galvanized
Side/rear panel	1.5 mm sheet steel		Powder-coated on both sides, RAL 7035
Intermediate panel	2.5 mm sheet steel		Sendzimir-galvanized
Door	1.5 mm sheet steel	Right-hand hinge Left-hand hinge With ventilation slits Glass Door halves	Powder-coated on both sides, RAL 7035
Expansion			
Shelves	2.0 mm sheet steel		Sendzimir-galvanized
Mounting plate for:			
• Mounting with universal bracket	2.0 mm sheet steel	Closed Perforated	Sendzimir-galvanized
• Direct mounting on the frame	2.0 mm sheet steel	Closed Perforated	Sendzimir-galvanized
Rear mounting panel	2.5 mm sheet steel	Closed Perforated	Sendzimir-galvanized
Side mounting panel	2.5 mm sheet steel	Closed Perforated	Sendzimir-galvanized
19" versions	2.0 mm sheet steel 2.5 mm sheet steel	19" swing frame 19" fixed-mounted	Powder-coated, RAL 7035 Sendzimir-galvanized

Application

Typical areas of application

- Power station control systems
- Converters
- Transport
- Cubicles in industry

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Individual modification

Overview

Prices

	Additional price per modular element
Special machining	
• Punching an enclosure part[1)2)] or mounting plate	✓
Standard paint finish RAL color group 1	
• Frame (electrogalvanized as standard)	✓
• Trim strip	None
• Per enclosure part that is painted as standard[1)]	None
• Per enclosure part that is electrogalvanized as standard[2)]	✓
• Swing frame (including mounting elements)	None
• Mounting plate (electrogalvanized as standard)	✓
Special paint finish RAL color group 2	
• Frame (electrogalvanized as standard)	✓
• Trim strip	✓
• Per enclosure part that is painted as standard[1)]	✓
• Per enclosure part that is electrogalvanized as standard[2)]	✓
• Swing frame (including mounting elements)	✓
• Mounting plate (electrogalvanized as standard)	✓
Special paint finish RAL color group 3	
• Frame (electrogalvanized as standard)	✓
• Trim strip	✓
• Per enclosure part that is painted as standard[1)]	✓
• Per enclosure part that is electrogalvanized as standard[2)]	✓
• Swing frame (including mounting elements)	✓
• Mounting plate (electrogalvanized as standard)	✓
Special RAL paint finish: other colors	
• All parts	On request
Coating according to corrosivity category	
Corrosivity category C5-M in compliance with EN ISO 12944-2 RAL color group 1 (excluding sand blasting)	
• Frame (electrogalvanized as standard)	✓
• Per enclosure part[1)2)]	✓
Zinc plated: Zn 8 µm blue	
• 8MF1 frame (electrogalvanized as standard)	✓
• Swing frame (including mounting elements)	✓

Reinforced enclosure part[1)2)]	**Additional price per enclosure part**
Sheet 2 mm thick	✓

Cubicle in special dimensions	**Price per cubicle**
Max. dimensions H x W x D: 2200 x 1200 x 1000 mm	Corresponding to next larger cubicle

Data records for customized products	**Price per record**
3D model / 2D set of drawings for 8MF1	
• Frame including enclosure	
• Swing frame/mounting plate	
• Equipped mounting plate	

Colors

Color designation	Surface structure	Color
Color group 1		
RAL 7035, light gray	Smooth matt	
RAL 7035, light gray	Semi-gloss	
RAL 9016, traffic white	Smooth matt	
RAL 7032, pebble gray	Semi-gloss	
Color group 2		
RAL 7038, agate gray	Semi-gloss	
RAL 9002, gray white	Coarse structure matt	
RAL 9003, signal white	Semi-gloss	
RAL 5017, traffic blue	Coarse structure silky gloss	
RAL 5005, signal blue	Smooth semi-gloss	
RAL 5010, gentian blue	Smooth semi-gloss	
RAL 9001, cream	Smooth semi-gloss	
RAL 9010, pure white	Smooth semi-gloss	
SN 610 Siemens white	Semi-gloss	
SN 610 Siemens white	Silky gloss	
RAL 2000, yellow orange	Smooth semi-gloss	
RAL 6018, yellow green	Smooth semi-gloss	
RAL 9002, gray white	Smooth semi-gloss	
Color group 3		
RAL 9002, gray white	Smooth silky gloss	
RAL 9010, pure white	Semi-gloss	
RAL 3000, flame red	Silky gloss	
RAL 1003, signal yellow	Smooth semi-gloss	
RAL 7033, cement gray	Semi-gloss	

✓ Additional price
1) Rear panel, side panel, door
2) Roof plate, base plate, intermediate panel

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Overview

Corrosivity categories in compliance with EN ISO 12944-2

Corrosivity category	Nominal layer thickness in µm	Steam condensation in hours (h)	Impact of salt spray in hours (h)	Examples of typical environments (interior)
C1 insignificant	70	--	--	Heated buildings with neutral atmospheres, e.g. offices, shops, schools or hotels
	70	--	--	
	70	--	--	
C2 low	80	48	--	Unheated buildings where condensation can occur, e.g. warehouses or sports halls
	120	48	--	
	160	120	--	
C3 moderate	120	48	120	Production rooms with high humidity and slight amounts of air pollution, e.g. food production plants, laundries, breweries or dairies
	160	120	240	
	200	240	480	
C4 strong	160	120	240	Chemical plants, swimming baths or boat-sheds above sea level
	200	240	480	
	240 ... 280	480	720	
C5-I very strong (industry)	200	240	480	Buildings or areas with almost permanent condensation and extreme pollution
	240 ... 280	480	720	
	320	720	1440	
C5-M very strong (sea)	200	240	480	Buildings or areas with almost permanent condensation and extreme pollution
	240 ... 280	480	720	
	320	720	1440	

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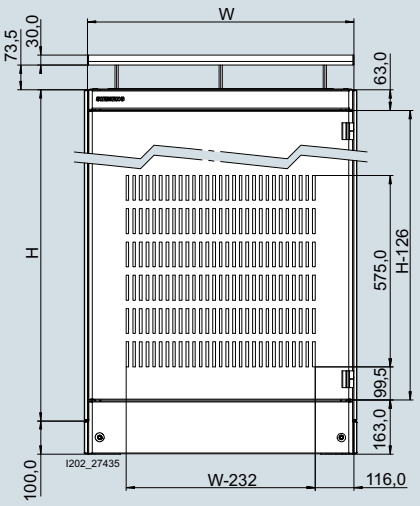
Dimensions

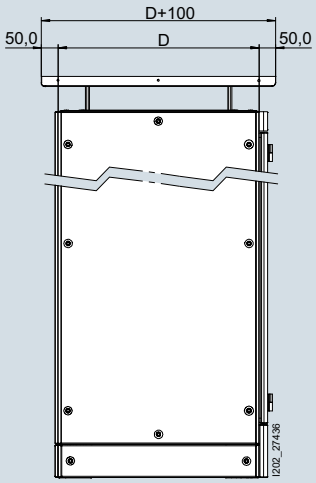
Dimensional drawings

Specimen cubicle

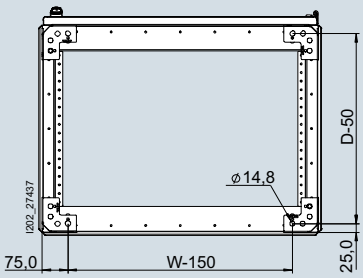
Front view



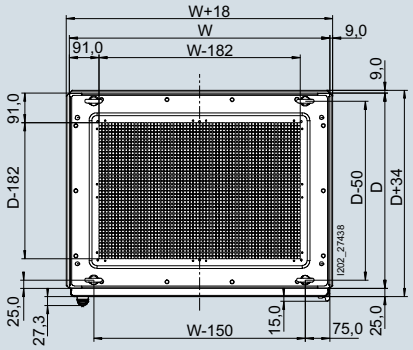
Side view from left



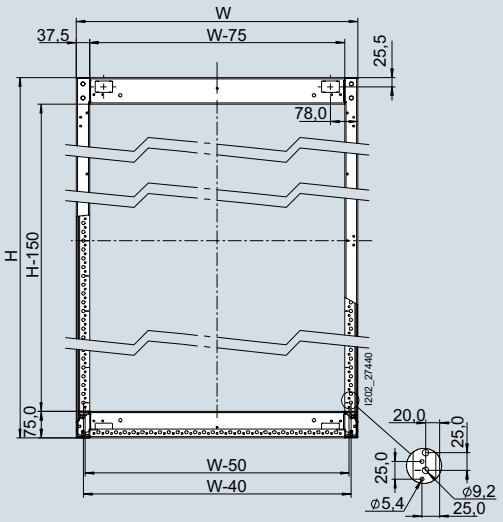
Top view

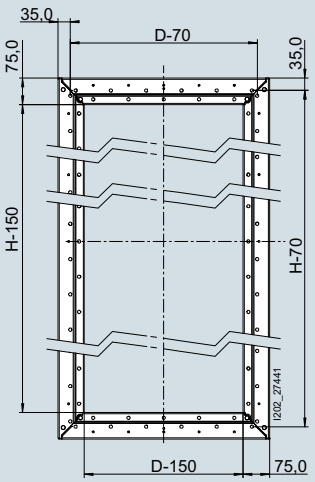


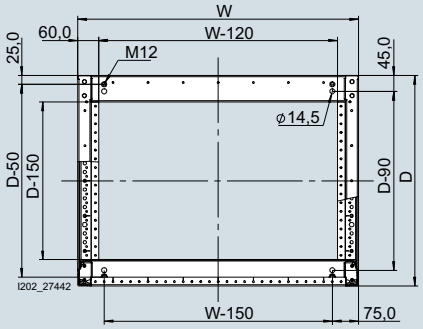
Bottom view/ frame variants



Frame







Frame variants

Height (H) in mm	Width (W) in mm	Depth (D) in mm
1800	600	400
2000	800	600
2200	900	800
2200	1000	1000
2200	1200	1000

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Overview

Degrees of protection in accordance with EN 60529

First code number	**Degree of protection (protection against contact and foreign objects)**		Second code number	**Degree of protection (protection against water)**	
	Description	Explanation		Description	Explanation
0	No protection	No particular protection for persons against accidental contact with live or moving parts. No protection of the equipment against the penetration of solid foreign objects.	0	No protection	No particular protection.
			1	Protection against vertically falling water drops	Vertically falling water drops must have no harmful effects.
1	Protection against solid foreign objects > 50 mm	Protection against accidental broad contact with live or internal moving parts, e.g. with the hand, but no protection against deliberate access to these parts. Protection against the penetration of solid foreign objects with a diameter greater than 50 mm.	2	Protection against water drops falling at an angle	Falling water drops must have no harmful effects at any angle up to 15° from the vertical.
			3	Protection against spraying water	Water spraying at any angle up to 60° from the vertical must have no harmful effects.
2	Protection against solid foreign objects > 12 mm	Protection against finger contact with live or internal moving parts. Protection against the penetration of solid foreign objects with a diameter greater than 12 mm.	4	Protection against splashing water	Water splashing against the equipment must have no harmful effects, irrespective of its direction.
			5	Protection against water jets	Water directed at the equipment from a nozzle must have no harmful effects, irrespective of its direction.
3	Protection against solid foreign objects > 2.5 mm	Protection against contact with live or internal moving parts with tools, wires or the like with a thickness greater than 2.5 mm. Protection against the penetration of solid foreign objects with a diameter greater than 2.5 mm.	6	Protection against flooding	Water must have no harmful effects in case of temporary flooding.
			7	Protection against immersion	Water must not ingress to such an extent that it causes harmful effects when the equipment is immersed in water in accordance with the defined pressure and time conditions.
4	Protection against solid foreign objects > 1 mm	Protection against contact with live or internal moving parts with tools, wires or the like with a thickness greater than 1 mm. Protection against the penetration of solid foreign objects with a diameter greater than 1 mm.	8	Protection against submersion	Water must not ingress to such an extent that it causes harmful effects when the equipment is immersed in water in accordance with the defined pressure conditions but for an unspecified time.
5	Protection against dust deposits	Full protection against contact with live or internal moving parts. Protection against harmful dust deposits. The ingress of dust is not fully prevented, but dust may not enter to such an extent that the functioning of the device is impaired.		Example for specification of a degree of protection:	Code letters: IP First code number: 4 Second code number: 0
6	Protection against dust ingress	Full protection against contact with live or internal moving parts. No ingress of dust.			

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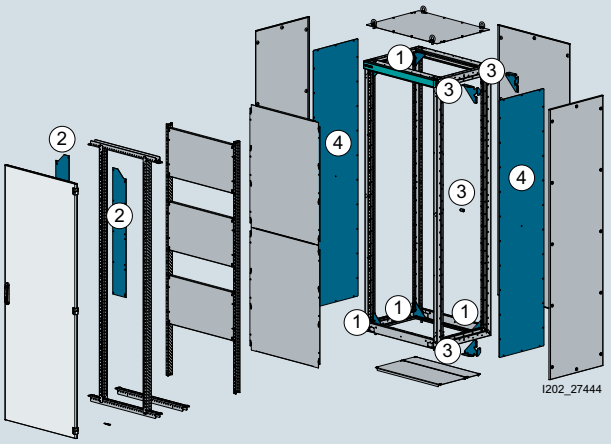
Earthquake-prepared, unequipped, empty enclosures

Overview

Components



1 Upgrade kit for earthquake reinforcement
2 Earthquake supplementary kit for swing frame
3 Earthquake supplementary kit for intermediate panel
4 Intermediate panel

Components of an earthquake-prepared empty enclosure

Purpose of an earthquake test

Checking electrical installation of the ready-for-operation cubicle under dynamic forces

- No control system failure
- No shutdown of processes

Earthquake protection cannot be warranted alone by using an earthquake-reinforced unequipped, empty enclosure.

SIVACON sicube offers users stability-enhancing elements.

The effectiveness of these stabilizing measures has been proven by successful tests in compliance with the following specifications:

- IEC 60068-2-6
- IEC 60980
- IEC 60068-2-57
- IBC 2012

Test report statement

An 8MF frame is enabled for dynamic stressing by additional parts.

The frame is loaded with a defined mass and subjected to a standardized earthquake simulation.

The frame withstands this defined dynamic stressing undamaged.

Applicability of the test

Applicability of the test to the removed cubicle depends on:

- Type of mounting arrangement, i.e. standalone or cubicle suite
- Dimensions of cubicles
- Installed mass
- Position of center of mass
- Required stress level of the earthquake simulation
- Necessary operability of installed devices and duration

Configuration information

Users can completely configure an earthquake-prepared cubicle themselves in all standard sizes, see page 16/10, Configuration information.

It is also possible to order a pre-configured complete cubicle, see page 16/51.

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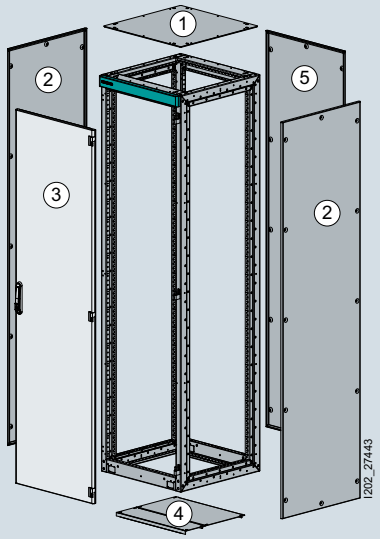
Overview

Components



1. Roof, sendzimir-galvanized with conductive seal
2. Side panel, powder-coated on one side with conductive seal
3. Door, powder-coated on one side with conductive seal
4. Base plate, sendzimir-galvanized with conductive seal
5. Rear panel, powder-coated on one side with conductive seal

Components of an EMC cubicle

Principles of EMC

Electromagnetic compatibility is achieved where the functioning of potentially susceptible devices is not influenced by the existing interference sources.

If two devices are not electromagnetically compatible, it is possible to either reduce the interference emission of the interference source or increase the immunity of the potentially susceptible device.

Interference emission and interference immunity

EMC is dependent on two properties of the devices involved:

- interference emission and
- immunity to interference

A device may be both an interference source and a potentially susceptible device. The power unit of a converter, for example, is to be seen as an interference source, whereas the sensor, the control section and the evaluation circuit represent a potentially susceptible device.

Interference immunity describes the behavior of a device when subjected to electromagnetic interference. The demands and evaluation criteria for the behavior of devices in industrial environments are laid down in the standard EN 50082-2.

What is electromagnetic compatibility (EMC)?

Electromagnetic compatibility (EMC) is the ability of a device, an installation or a system to operate satisfactorily in the electromagnetic environment without causing electromagnetic interference itself that would be unacceptable for all devices, installations or systems existing in that environment.

How does EMC screening work?

High-frequency, electromagnetic alternating fields can only be completely shielded with adequately thick electrically conductive, all-round enclosed shells. The cubicle interior is not coated and is thus electrically conductive. The EMC seal is required to ensure uninterrupted all-round contact, thus providing a sealed electrically conductive enclosure.

Configuration information

The size of the EMC unequipped, empty enclosure can be chosen freely within the scope of standard dimensions.

An EMC cubicle must be sheathed completely with EMC components (base, top, side panel, rear panel and door).

A suite of EMC cubicles is possible.

see page 16/10, Configuration information

Technical specifications

Degree of protection	IP40
Safety classes	I
Material	Sheet steel
Surface	On one side Powder-coated
Color	RAL 7035 (light gray)
Seal	Metallically conductive

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Configuration information

Overview

Cubicles in a defined degree of protection

Elements of the standard cubicle:

- Frame, roof plate, base plate, side panels, rear panel
- All single parts with a higher degree of protection can be installed

	Frame	Roof plate	Roof trough	Side panels	Rear panel	Door	Upgrade kit	Base plate	Trim strips
IP20	Yes	Ventilated	No	No seal	No seal	Ventilated	No	With sub-divisions	Yes
IP21	Yes	Ventilated	Yes	No seal	No seal	Ventilated	No	With sub-divisions	Yes
IP40	Yes	Closed/ ventilated	No	No seal	No seal	Closed/ ventilated	No/ Yes	Closed	Yes
IP41	Yes	Closed/ ventilated	Yes	No seal	No seal	Closed/ ventilated	No/ Yes	Closed	Yes
IP55	Yes	Closed/ with seal	No	With seal	With seal	Closed	No	Closed with seal	Yes

Earthquake-prepared cubicles

	Frame	Roof plate	Partitions	Side panels	Upgrade kit	Door	Mounting plate[1)]	Base plate	Trim strips
V1	2200	Yes	2 units	Yes	Yes	Yes, but no glass door	2 x 1000 mm	Yes	Yes
V2	2000	Yes	2 units	Yes	Yes	Yes, but no glass door	1 x 1000 mm 1 x 800 mm	Yes	Yes
V3	1800	Yes	2 units	Yes	Yes	Yes, but no glass door	2 x 800 mm	Yes	Yes

Cubicles in EMC version

	Frame	Roof plate	Roof trough	Side panels	Rear panel	Door	Upgrade kit	Base plate	Trim strips
IP40 EMC	Yes	Roof EMC	No	Wall EMC	Wall EMC	Single door/ double door EMC	No	Base EMC	Yes

1) Mounting plates for direct mounting on the frame

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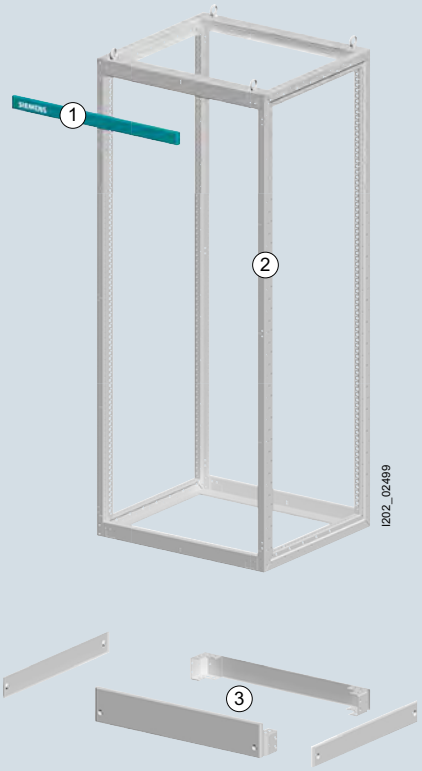
Overview



1 Trim strip
2 Frame
3 Base and base covers

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Screwed frames

Selection and ordering data

Height	Width	Depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
mm	mm	mm							kg
2.5 mm sheet steel, sendzimir-galvanized									
1800	600	400		8MF1864-2GS30		1	1 unit	1BS	38.000
		600		8MF1866-2GS30		1	1 unit	1BS	40.000
		800		8MF1868-2GS30		1	1 unit	1BS	43.000
		1000		8MF1860-2GS30		1	1 unit	1BS	46.000
	800	400		8MF1884-2GS30		1	1 unit	1BS	41.000
		600		8MF1886-2GS30		1	1 unit	1BS	43.000
		800		8MF1888-2GS30		1	1 unit	1BS	46.000
		1000		8MF1880-2GS30		1	1 unit	1BS	49.000
	900	400		8MF1894-2GS30		1	1 unit	1BS	42.000
		600		8MF1896-2GS30		1	1 unit	1BS	45.000
		800		8MF1898-2GS30		1	1 unit	1BS	48.000
		1000		8MF1890-2GS30		1	1 unit	1BS	51.000
	1000	400		8MF1804-2GS30		1	1 unit	1BS	43.000
		600		8MF1806-2GS30		1	1 unit	1BS	46.000
		800		8MF1808-2GS30		1	1 unit	1BS	49.000
		1000		8MF1800-2GS30		1	1 unit	1BS	52.000
	1200	400		8MF1824-2GS30		1	1 unit	1BS	46.000
		600		8MF1826-2GS30		1	1 unit	1BS	49.000
		800		8MF1828-2GS30		1	1 unit	1BS	52.000
		1000		8MF1820-2GS30		1	1 unit	1BS	55.000
2000	600	400		8MF1064-2GS30		1	1 unit	1BS	40.000
		600		8MF1066-2GS30		1	1 unit	1BS	43.000
		800		8MF1068-2GS30		1	1 unit	1BS	46.000
		1000		8MF1060-2GS30		1	1 unit	1BS	49.000
	800	400		8MF1084-2GS30		1	1 unit	1BS	43.000
		600		8MF1086-2GS30		1	1 unit	1BS	46.000
		800		8MF1088-2GS30		1	1 unit	1BS	49.000
		1000		8MF1080-2GS30		1	1 unit	1BS	52.000
	900	400		8MF1094-2GS30		1	1 unit	1BS	45.000
		600		8MF1096-2GS30		1	1 unit	1BS	47.000
		800		8MF1098-2GS30		1	1 unit	1BS	50.000
		1000		8MF1090-2GS30		1	1 unit	1BS	53.000
	1000	400		8MF1004-2GS30		1	1 unit	1BS	46.000
		600		8MF1006-2GS30		1	1 unit	1BS	49.000
		800		8MF1008-2GS30		1	1 unit	1BS	52.000
		1000		8MF1000-2GS30		1	1 unit	1BS	55.000
	1200	400		8MF1024-2GS30		1	1 unit	1BS	49.000
		600		8MF1026-2GS30		1	1 unit	1BS	52.000
		800		8MF1028-2GS30		1	1 unit	1BS	55.000
		1000		8MF1020-2GS30		1	1 unit	1BS	58.000
2200	600	400		8MF1264-2GS30		1	1 unit	1BS	43.000
		600		8MF1266-2GS30		1	1 unit	1BS	45.000
		800		8MF1268-2GS30		1	1 unit	1BS	48.000
		1000		8MF1260-2GS30		1	1 unit	1BS	51.000
	800	400		8MF1284-2GS30		1	1 unit	1BS	46.000
		600		8MF1286-2GS30		1	1 unit	1BS	49.000
		800		8MF1288-2GS30		1	1 unit	1BS	51.000
		1000		8MF1280-2GS30		1	1 unit	1BS	54.000
	900	400		8MF1294-2GS30		1	1 unit	1BS	47.000
		600		8MF1296-2GS30		1	1 unit	1BS	50.000
		800		8MF1298-2GS30		1	1 unit	1BS	53.000
		1000		8MF1290-2GS30		1	1 unit	1BS	56.000
	1000	400		8MF1204-2GS30		1	1 unit	1BS	49.000
		600		8MF1206-2GS30		1	1 unit	1BS	51.000
		800		8MF1208-2GS30		1	1 unit	1BS	54.000
		1000		8MF1200-2GS30		1	1 unit	1BS	57.000
	1200	400		8MF1224-2GS30		1	1 unit	1BS	52.000
		600		8MF1226-2GS30		1	1 unit	1BS	54.000
		800		8MF1228-2GS30		1	1 unit	1BS	57.000
		1000		8MF1220-2GS30		1	1 unit	1BS	60.000

* You can order this quantity or a multiple thereof.

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Selection and ordering data

	Version	Width	Depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	mm							kg
Base										
	Base									
	1 set = 4 feet and 2 covers for the width									
	Height 100 mm									
		600	--		8MF1060-2CS		1	1 set	1BS	5.000
		800			8MF1080-2CS		1	1 set	1BS	6.000
		900			8MF1090-2CS		1	1 set	1BS	6.500
		1000			8MF1000-2CS		1	1 set	1BS	7.000
		1200			8MF1020-2CS		1	1 set	1BS	7.000
	Height 200 mm									
		600	--		8MF1260-2CS		1	1 unit	1BS	10.000
		800			8MF1280-2CS		1	1 unit	1BS	12.000
		900			8MF1290-2CS		1	1 unit	1BS	13.000
		1000			8MF1200-2CS		1	1 unit	1BS	14.000
		1200			8MF1220-2CS		1	1 unit	1BS	16.000
	Base covers									
	1 set = 2 covers for the depth									
	Height 100 mm									
			400		8MF1004-2CT		1	1 set	1BS	1.800
			600		8MF1006-2CT		1	1 set	1BS	1.800
			800		8MF1008-2CT		1	1 set	1BS	2.400
			1000		8MF1000-2CT		1	1 set	1BS	3.000
	Height 200 mm									
			400		8MF1204-2CT		1	1 unit	1BS	2.400
			600		8MF1206-2CT		1	1 unit	1BS	3.600
			800		8MF1208-2CT		1	1 unit	1BS	4.800
			1000		8MF1200-2CT		1	1 unit	1BS	6.000
Transport										
	Transport eyebolts				8MF1000-2CK		1	1 set	1BS	1.000
	1 set = 4 units									
	Transport brackets									
	1 set = 2 units									
		600	--		8MF1060-2CW		1	1 set	1BS	4.600
		800			8MF1080-2CW		1	1 set	1BS	6.200
		900			8MF1090-2CW		1	1 set	1BS	7.600
		1000			8MF1000-2CW		1	1 set	1BS	8.500
		1200			8MF1020-2CW		1	1 set	1BS	9.000

* You can order this quantity or a multiple thereof.

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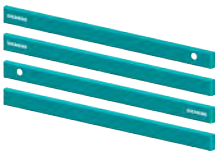
Accessories

	Version	Width	Depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	mm							kg
Trim strips										
	**With Siemens logo and cutout for indicator lights, right**									
		600	--		8MF1060-2CD17		1	1 unit	1BS	0.400
		800			8MF1080-2CD17		1	1 unit	1BS	0.500
		900			8MF1090-2CD17		1	1 unit	1BS	0.550
		1000			8MF1000-2CD17		1	1 unit	1BS	0.600
		1200			8MF1020-2CD17		1	1 unit	1BS	0.720
	With Siemens logo, without cutout for indicator lights									
		600	--		8MF1060-2CD10		1	1 unit	1BS	0.400
		800			8MF1080-2CD10		1	1 unit	1BS	0.500
		900			8MF1090-2CD10		1	1 unit	1BS	0.550
		1000			8MF1000-2CD10		1	1 unit	1BS	0.600
		1200			8MF1020-2CD10		1	1 unit	1BS	0.720
	With Siemens logo and cutout for indicator lights, left									
		600	--		8MF1060-2CD16		1	1 unit	1BS	0.400
		800			8MF1080-2CD16		1	1 unit	1BS	0.500
		900			8MF1090-2CD16		1	1 unit	1BS	0.550
		1000			8MF1000-2CD16		1	1 unit	1BS	0.600
		1200			8MF1020-2CD16		1	1 unit	1BS	0.720
	Without Siemens logo, without cutout for indicator lights									
		600	--		8MF1060-2CD00		1	1 unit	1BS	0.400
		800			8MF1080-2CD00		1	1 unit	1BS	0.500
		900			8MF1090-2CD00		1	1 unit	1BS	0.550
		1000			8MF1000-2CD00		1	1 unit	1BS	0.600
		1200			8MF1020-2CD00		1	1 unit	1BS	0.720
Cubicle suites										
	Set of screws for cubicle suites				8MF1000-2CA		1	1 set	1BS	0.300
	Sealing tape for cubicle suites in IP55				8MF1000-2CB		1	1 set	1BS	0.050
	Sealing tape for EMC cubicle suites				8MF1000-2CE		1	1 unit	1BS	0.500
Universal brackets										
	For mounting expansion elements • For ordering replacements • Required quantity is included with the expansion elements • 10 units				8MF1000-2CP		1	10 units	1BS	0.700

* You can order this quantity or a multiple thereof.

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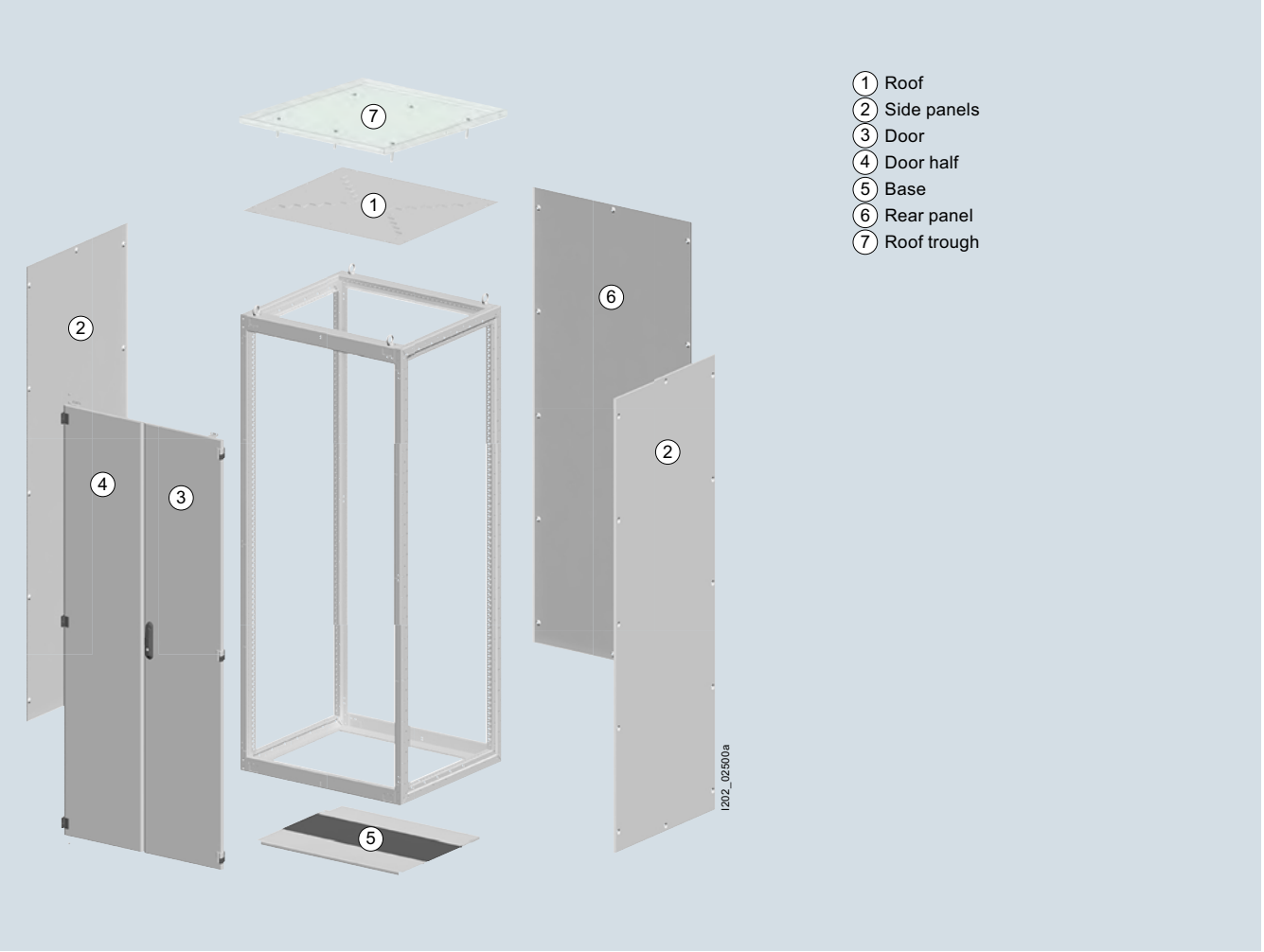
Overview



The IP value documented for individual enclosure parts specifies which maximum degree of protection can be achieved for the enclosure when the part is installed.

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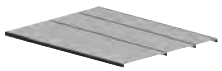
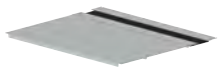
Bases

Selection and ordering data

	Width	Depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm							kg
Bases, 2.0 mm sheet steel, sendzimir-galvanized									
	Note: If no base plate is installed, a higher degree of protection can be achieved by placing the cubicle directly on the ground								
	**Base, closed IP55**								
	600	400		8MF1064-2UB12-0		1	1 unit	1BS	2.600
		600		8MF1066-2UB12-0		1	1 unit	1BS	4.300
		800		8MF1068-2UB12-0		1	1 unit	1BS	6.200
		1000		8MF1060-2UB12-0		1	1 unit	1BS	7.900
	800	400		8MF1084-2UB12-0		1	1 unit	1BS	3.600
		600		8MF1086-2UB12-0		1	1 unit	1BS	5.900
		800		8MF1088-2UB12-0		1	1 unit	1BS	8.500
		1000		8MF1080-2UB12-0		1	1 unit	1BS	10.800
	900	400		8MF1094-2UB12-0		1	1 unit	1BS	4.300
		600		8MF1096-2UB12-0		1	1 unit	1BS	6.700
		800		8MF1098-2UB12-0		1	1 unit	1BS	9.600
		1000		8MF1090-2UB12-0		1	1 unit	1BS	12.300
	1000	400		8MF1004-2UB12-0		1	1 unit	1BS	4.600
		600		8MF1006-2UB12-0		1	1 unit	1BS	7.500
		800		8MF1008-2UB12-0		1	1 unit	1BS	11.000
		1000		8MF1000-2UB12-0		1	1 unit	1BS	13.700
	1200	400		8MF1024-2UB12-0		1	1 unit	1BS	5.600
		600		8MF1026-2UB12-0		1	1 unit	1BS	9.100
		800		8MF1028-2UB12-0		1	1 unit	1BS	13.200
		1000		8MF1020-2UB12-0		1	1 unit	1BS	16.800
	Base, split IP30								
	600	400		8MF1064-2UB22-0		1	1 unit	1BS	2.600
		600		8MF1066-2UB22-0		1	1 unit	1BS	4.300
		800		8MF1068-2UB22-0		1	1 unit	1BS	6.200
		1000		8MF1060-2UB22-0		1	1 unit	1BS	7.900
	800	400		8MF1084-2UB22-0		1	1 unit	1BS	3.600
		600		8MF1086-2UB22-0		1	1 unit	1BS	5.900
		800		8MF1088-2UB22-0		1	1 unit	1BS	8.500
		1000		8MF1080-2UB22-0		1	1 unit	1BS	10.800
	900	400		8MF1094-2UB22-0		1	1 unit	1BS	4.300
		600		8MF1096-2UB22-0		1	1 unit	1BS	6.700
		800		8MF1098-2UB22-0		1	1 unit	1BS	9.600
		1000		8MF1090-2UB22-0		1	1 unit	1BS	12.300
	1000	400		8MF1004-2UB22-0		1	1 unit	1BS	4.600
		600		8MF1006-2UB22-0		1	1 unit	1BS	7.500
		800		8MF1008-2UB22-0		1	1 unit	1BS	11.000
		1000		8MF1000-2UB22-0		1	1 unit	1BS	13.700
	1200	400		8MF1024-2UB22-0		1	1 unit	1BS	5.600
		600		8MF1026-2UB22-0		1	1 unit	1BS	9.100
		800		8MF1028-2UB22-0		1	1 unit	1BS	13.200
		1000		8MF1020-2UB22-0		1	1 unit	1BS	16.800
	**Base, with cable entry IP00**								
	600	400		8MF1064-2UB32-0		1	1 unit	1BS	3.100
		600		8MF1066-2UB32-0		1	1 unit	1BS	4.400
		800		8MF1068-2UB32-0		1	1 unit	1BS	6.200
		1000		8MF1060-2UB32-0		1	1 unit	1BS	8.000
	800	400		8MF1084-2UB32-0		1	1 unit	1BS	4.900
		600		8MF1086-2UB32-0		1	1 unit	1BS	7.200
		800		8MF1088-2UB32-0		1	1 unit	1BS	9.800
		1000		8MF1080-2UB32-0		1	1 unit	1BS	12.100
	900	400		8MF1094-2UB32-0		1	1 unit	1BS	4.200
		600		8MF1096-2UB32-0		1	1 unit	1BS	6.800
		800		8MF1098-2UB32-0		1	1 unit	1BS	9.900
		1000		8MF1090-2UB32-0		1	1 unit	1BS	12.300
	1000	400		8MF1004-2UB32-0		1	1 unit	1BS	5.300
		600		8MF1006-2UB32-0		1	1 unit	1BS	7.600
		800		8MF1008-2UB32-0		1	1 unit	1BS	11.000
		1000		8MF1000-2UB32-0		1	1 unit	1BS	13.900
	1200	400		8MF1024-2UB32-0		1	1 unit	1BS	6.600
		600		8MF1026-2UB32-0		1	1 unit	1BS	9.200
		800		8MF1028-2UB32-0		1	1 unit	1BS	13.400
		1000		8MF1020-2UB32-0		1	1 unit	1BS	17.000

* You can order this quantity or a multiple thereof.

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Width	Depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
mm	mm							kg
Base EMC IP40, closed								
600	400		**8MF1064-2UB42-0**		1	1 unit	1BS	2.600
	600		**8MF1066-2UB42-0**		1	1 unit	1BS	4.300
	800		**8MF1068-2UB42-0**		1	1 unit	1BS	6.200
	1000		**8MF1060-2UB42-0**		1	1 unit	1BS	7.900
800	400		**8MF1084-2UB42-0**		1	1 unit	1BS	3.600
	600		**8MF1086-2UB42-0**		1	1 unit	1BS	5.900
	800		**8MF1088-2UB42-0**		1	1 unit	1BS	8.500
	1000		**8MF1080-2UB42-0**		1	1 unit	1BS	10.800
900	400		**8MF1094-2UB42-0**		1	1 unit	1BS	4.300
	600		**8MF1096-2UB42-0**		1	1 unit	1BS	6.700
	800		**8MF1098-2UB42-0**		1	1 unit	1BS	9.600
	1000		**8MF1090-2UB42-0**		1	1 unit	1BS	12.300
1000	400		**8MF1004-2UB42-0**		1	1 unit	1BS	4.600
	600		**8MF1006-2UB42-0**		1	1 unit	1BS	7.500
	800		**8MF1008-2UB42-0**		1	1 unit	1BS	11.000
	1000		**8MF1000-2UB42-0**		1	1 unit	1BS	13.700
1200	400		**8MF1024-2UB42-0**		1	1 unit	1BS	5.600
	600		**8MF1026-2UB42-0**		1	1 unit	1BS	9.100
	800		**8MF1028-2UB42-0**		1	1 unit	1BS	13.200
	1000		**8MF1020-2UB42-0**		1	1 unit	1BS	16.800

*** You can order this quantity or a multiple thereof.**

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Roofs

Selection and ordering data

	Width	Depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm							kg
Roofs, 1.5 mm sheet steel, sendzimir-galvanized									
	Roof plate closed IP40								
	600	400		8MF1064-2UD10-0A		1	1 unit	1BS	3.100
		600		8MF1066-2UD10-0A		1	1 unit	1BS	4.600
		800		8MF1068-2UD10-0A		1	1 unit	1BS	6.100
		1000		8MF1060-2UD10-0A		1	1 unit	1BS	7.200
	800	400		8MF1084-2UD10-0A		1	1 unit	1BS	4.100
		600		8MF1086-2UD10-0A		1	1 unit	1BS	6.140
		800		8MF1088-2UD10-0A		1	1 unit	1BS	7.900
		1000		8MF1080-2UD10-0A		1	1 unit	1BS	9.600
	900	400		8MF1094-2UD10-0A		1	1 unit	1BS	4.300
		600		8MF1096-2UD10-0A		1	1 unit	1BS	6.400
		800		8MF1098-2UD10-0A		1	1 unit	1BS	9.100
		1000		8MF1090-2UD10-0A		1	1 unit	1BS	11.100
	1000	400		8MF1004-2UD10-0A		1	1 unit	1BS	5.100
		600		8MF1006-2UD10-0A		1	1 unit	1BS	7.300
		800		8MF1008-2UD10-0A		1	1 unit	1BS	9.600
		1000		8MF1000-2UD10-0A		1	1 unit	1BS	12.100
	1200	400		8MF1024-2UD10-0A		1	1 unit	1BS	6.000
		600		8MF1026-2UD10-0A		1	1 unit	1BS	8.700
		800		8MF1028-2UD10-0A		1	1 unit	1BS	11.650
		1000		8MF1020-2UD10-0A		1	1 unit	1BS	14.200
	Roof plate closed IP55, foamed seal								
	600	400		8MF1064-2UD11-0A		1	1 unit	1BS	3.100
		600		8MF1066-2UD11-0A		1	1 unit	1BS	4.600
		800		8MF1068-2UD11-0A		1	1 unit	1BS	6.100
		1000		8MF1060-2UD11-0A		1	1 unit	1BS	7.300
	800	400		8MF1084-2UD11-0A		1	1 unit	1BS	4.100
		600		8MF1086-2UD11-0A		1	1 unit	1BS	6.140
		800		8MF1088-2UD11-0A		1	1 unit	1BS	7.900
		1000		8MF1080-2UD11-0A		1	1 unit	1BS	9.600
	900	400		8MF1094-2UD11-0A		1	1 unit	1BS	4.300
		600		8MF1096-2UD11-0A		1	1 unit	1BS	6.400
		800		8MF1098-2UD11-0A		1	1 unit	1BS	9.100
		1000		8MF1090-2UD11-0A		1	1 unit	1BS	11.100
	1000	400		8MF1004-2UD11-0A		1	1 unit	1BS	5.100
		600		8MF1006-2UD11-0A		1	1 unit	1BS	7.300
		800		8MF1008-2UD11-0A		1	1 unit	1BS	9.600
		1000		8MF1000-2UD11-0A		1	1 unit	1BS	12.100
	1200	400		8MF1024-2UD11-0A		1	1 unit	1BS	6.100
		600		8MF1026-2UD11-0A		1	1 unit	1BS	8.700
		800		8MF1028-2UD11-0A		1	1 unit	1BS	11.650
		1000		8MF1020-2UD11-0A		1	1 unit	1BS	14.300
	Roof plate perforated IP20								
	600	400		8MF1064-2UD20-0A		1	1 unit	1BS	3.100
		600		8MF1066-2UD20-0A		1	1 unit	1BS	4.600
		800		8MF1068-2UD20-0A		1	1 unit	1BS	6.100
		1000		8MF1060-2UD20-0A		1	1 unit	1BS	7.200
	800	400		8MF1084-2UD20-0A		1	1 unit	1BS	4.100
		600		8MF1086-2UD20-0A		1	1 unit	1BS	6.100
		800		8MF1088-2UD20-0A		1	1 unit	1BS	7.900
		1000		8MF1080-2UD20-0A		1	1 unit	1BS	9.600
	900	400		8MF1094-2UD20-0A		1	1 unit	1BS	4.300
		600		8MF1096-2UD20-0A		1	1 unit	1BS	6.400
		800		8MF1098-2UD20-0A		1	1 unit	1BS	90.100
		1000		8MF1090-2UD20-0A		1	1 unit	1BS	11.100
	1000	400		8MF1004-2UD20-0A		1	1 unit	1BS	5.100
		600		8MF1006-2UD20-0A		1	1 unit	1BS	7.200
		800		8MF1008-2UD20-0A		1	1 unit	1BS	9.600
		1000		8MF1000-2UD20-0A		1	1 unit	1BS	12.100
	1200	400		8MF1024-2UD20-0A		1	1 unit	1BS	6.000
		600		8MF1026-2UD20-0A		1	1 unit	1BS	8.600
		800		8MF1028-2UD20-0A		1	1 unit	1BS	11.650
		1000		8MF1020-2UD20-0A		1	1 unit	1BS	14.200

* You can order this quantity or a multiple thereof.

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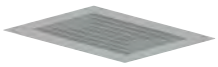
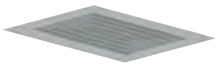
	Width	Depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm							kg
	**Roof plate with ventilation fins IP40**								
	600	400		8MF1064-2UD30-0A		1	1 unit	1BS	3.100
		600		8MF1066-2UD30-0A		1	1 unit	1BS	4.600
		800		8MF1068-2UD30-0A		1	1 unit	1BS	6.100
		1000		8MF1060-2UD30-0A		1	1 unit	1BS	7.200
	800	400		8MF1084-2UD30-0A		1	1 unit	1BS	4.100
		600		8MF1086-2UD30-0A		1	1 unit	1BS	6.100
		800		8MF1088-2UD30-0A		1	1 unit	1BS	7.900
		1000		8MF1080-2UD30-0A		1	1 unit	1BS	9.600
	900	400		8MF1094-2UD30-0A		1	1 unit	1BS	4.300
		600		8MF1096-2UD30-0A		1	1 unit	1BS	6.400
		800		8MF1098-2UD30-0A		1	1 unit	1BS	9.100
		1000		8MF1090-2UD30-0A		1	1 unit	1BS	11.100
	1000	400		8MF1004-2UD30-0A		1	1 unit	1BS	5.100
		600		8MF1006-2UD30-0A		1	1 unit	1BS	7.200
		800		8MF1008-2UD30-0A		1	1 unit	1BS	9.600
		1000		8MF1000-2UD30-0A		1	1 unit	1BS	12.100
	1200	400		8MF1024-2UD30-0A		1	1 unit	1BS	6.000
		600		8MF1026-2UD30-0A		1	1 unit	1BS	8.600
		800		8MF1028-2UD30-0A		1	1 unit	1BS	11.650
		1000		8MF1020-2UD30-0A		1	1 unit	1BS	14.200
	**Roof EMC IP40, metallically conductive seal, roof plate sealed**								
	600	400		8MF1064-2UD12-0A		1	1 unit	1BS	3.000
		600		8MF1066-2UD12-0A		1	1 unit	1BS	4.500
		800		8MF1068-2UD12-0A		1	1 unit	1BS	6.000
		1000		8MF1060-2UD12-0A		1	1 unit	1BS	7.200
	800	400		8MF1084-2UD12-0A		1	1 unit	1BS	4.000
		600		8MF1086-2UD12-0A		1	1 unit	1BS	6.000
		800		8MF1088-2UD12-0A		1	1 unit	1BS	7.800
		1000		8MF1080-2UD12-0A		1	1 unit	1BS	9.500
	900	400		8MF1094-2UD12-0A		1	1 unit	1BS	4.200
		600		8MF1096-2UD12-0A		1	1 unit	1BS	6.300
		800		8MF1098-2UD12-0A		1	1 unit	1BS	9.000
		1000		8MF1090-2UD12-0A		1	1 unit	1BS	11.000
	1000	400		8MF1004-2UD12-0A		1	1 unit	1BS	5.000
		600		8MF1006-2UD12-0A		1	1 unit	1BS	7.200
		800		8MF1008-2UD12-0A		1	1 unit	1BS	9.500
		1000		8MF1000-2UD12-0A		1	1 unit	1BS	12.000
	1200	400		8MF1024-2UD12-0A		1	1 unit	1BS	6.000
		600		8MF1026-2UD12-0A		1	1 unit	1BS	8.600
		800		8MF1028-2UD12-0A		1	1 unit	1BS	11.500
		1000		8MF1020-2UD12-0A		1	1 unit	1BS	14.200
	Roof troughs IPX1								
	To increase the degree of protection in the case of ventilated roof plates								
	600	400		8MF1064-2VH		1	1 unit	1BS	4.800
		600		8MF1066-2VH		1	1 unit	1BS	6.000
		800		8MF1068-2VH		1	1 unit	1BS	7.500
		1000		8MF1060-2VH		1	1 unit	1BS	9.000
	800	400		8MF1084-2VH		1	1 unit	1BS	6.000
		600		8MF1086-2VH		1	1 unit	1BS	8.000
		800		8MF1088-2VH		1	1 unit	1BS	10.000
		1000		8MF1080-2VH		1	1 unit	1BS	12.000
	900	400		8MF1094-2VH		1	1 unit	1BS	6.500
		600		8MF1096-2VH		1	1 unit	1BS	8.800
		800		8MF1098-2VH		1	1 unit	1BS	11.000
		1000		8MF1090-2VH		1	1 unit	1BS	13.000
	1000	400		8MF1004-2VH		1	1 unit	1BS	7.000
		600		8MF1006-2VH		1	1 unit	1BS	9.500
		800		8MF1008-2VH		1	1 unit	1BS	12.000
		1000		8MF1000-2VH		1	1 unit	1BS	14.500
	1200	400		8MF1024-2VH		1	1 unit	1BS	8.500
		600		8MF1026-2VH		1	1 unit	1BS	11.500
		800		8MF1028-2VH		1	1 unit	1BS	14.000
		1000		8MF1020-2VH		1	1 unit	1BS	16.500
	Roof tray rim								
	Order in the corresponding depth in duplicable along with the roof trough for every single cubicle or every cubicle row.	400		8MF1004-2VB		1	1 unit	1BS	1.400
		600		8MF1006-2VB		1	1 unit	1BS	2.000
		800		8MF1008-2VB		1	1 unit	1BS	2.500
		1000		8MF1000-2VB		1	1 unit	1BS	3.000

*** You can order this quantity or a multiple thereof.**

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Selection and ordering data

	Height	Width (rear panel)/ depth (side panel)	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm							kg
Side/rear panel, 1.5 mm sheet steel, powder-coated on both sides RAL 7035[1)]									
	IP40								
	1800	400		8MF1840-2UW60-1C		1	1 unit	1BS	9.000
		600		8MF1860-2UW60-1C		1	1 unit	1BS	13.400
		800		8MF1880-2UW60-1C		1	1 unit	1BS	17.900
		900		8MF1890-2UW60-1C		1	1 unit	1BS	20.200
		1000		8MF1800-2UW60-1C		1	1 unit	1BS	22.400
		1200		8MF1820-2UW60-1C		1	1 unit	1BS	26.900
	2000	400		8MF1040-2UW60-1C		1	1 unit	1BS	10.000
		600		8MF1060-2UW60-1C		1	1 unit	1BS	14.900
		800		8MF1080-2UW60-1C		1	1 unit	1BS	19.900
		900		8MF1090-2UW60-1C		1	1 unit	1BS	22.400
		1000		8MF1000-2UW60-1C		1	1 unit	1BS	24.900
		1200		8MF1020-2UW60-1C		1	1 unit	1BS	29.900
	2200	400		8MF1240-2UW60-1C		1	1 unit	1BS	11.000
		600		8MF1260-2UW60-1C		1	1 unit	1BS	16.400
		800		8MF1280-2UW60-1C		1	1 unit	1BS	21.900
		900		8MF1290-2UW60-1C		1	1 unit	1BS	24.700
		1000		8MF1200-2UW60-1C		1	1 unit	1BS	27.400
		1200		8MF1220-2UW60-1C		1	1 unit	1BS	32.900
	IP55, foamed seal								
	1800	400		8MF1840-2UW61-1C		1	1 unit	1BS	9.000
		600		8MF1860-2UW61-1C		1	1 unit	1BS	13.400
		800		8MF1880-2UW61-1C		1	1 unit	1BS	17.900
		900		8MF1890-2UW61-1C		1	1 unit	1BS	20.200
		1000		8MF1800-2UW61-1C		1	1 unit	1BS	22.400
		1200		8MF1820-2UW61-1C		1	1 unit	1BS	26.900
	2000	400		8MF1040-2UW61-1C		1	1 unit	1BS	10.000
		600		8MF1060-2UW61-1C		1	1 unit	1BS	14.900
		800		8MF1080-2UW61-1C		1	1 unit	1BS	19.900
		900		8MF1090-2UW61-1C		1	1 unit	1BS	22.400
		1000		8MF1000-2UW61-1C		1	1 unit	1BS	24.900
		1200		8MF1020-2UW61-1C		1	1 unit	1BS	29.900
	2200	400		8MF1240-2UW61-1C		1	1 unit	1BS	11.000
		600		8MF1260-2UW61-1C		1	1 unit	1BS	16.400
		800		8MF1280-2UW61-1C		1	1 unit	1BS	21.900
		900		8MF1290-2UW61-1C		1	1 unit	1BS	24.700
		1000		8MF1200-2UW61-1C		1	1 unit	1BS	27.400
		1200		8MF1220-2UW61-1C		1	1 unit	1BS	32.900
	EMC, IP40, metallically conductive seal								
	1800	400		8MF1840-2UW62-1B		1	1 unit	1BS	8.964
		600		8MF1860-2UW62-1B		1	1 unit	1BS	13.446
		800		8MF1880-2UW62-1B		1	1 unit	1BS	17.928
		900		8MF1890-2UW62-1B		1	1 unit	1BS	20.169
		1000		8MF1800-2UW62-1B		1	1 unit	1BS	22.410
		1200		8MF1820-2UW62-1B		1	1 unit	1BS	26.892
	2000	400		8MF1040-2UW62-1B		1	1 unit	1BS	9.960
		600		8MF1060-2UW62-1B		1	1 unit	1BS	14.940
		800		8MF1080-2UW62-1B		1	1 unit	1BS	19.920
		900		8MF1090-2UW62-1B		1	1 unit	1BS	22.410
		1000		8MF1000-2UW62-1B		1	1 unit	1BS	24.900
		1200		8MF1020-2UW62-1B		1	1 unit	1BS	29.880
	2200	400		8MF1240-2UW62-1B		1	1 unit	1BS	10.956
		600		8MF1260-2UW62-1B		1	1 unit	1BS	16.434
		800		8MF1280-2UW62-1B		1	1 unit	1BS	21.912
		900		8MF1290-2UW62-1B		1	1 unit	1BS	24.651
		1000		8MF1200-2UW62-1B		1	1 unit	1BS	27.390
		1200		8MF1220-2UW62-1B		1	1 unit	1BS	32.868
Intermediate panel, 2.5 mm sheet steel, sendzimir-galvanized									
	1800	400		8MF1840-2UW70-3C		1	1 unit	1BS	10.500
		600		8MF1860-2UW70-3C		1	1 unit	1BS	17.300
		800		8MF1880-2UW70-3C		1	1 unit	1BS	24.100
		1000		8MF1800-2UW70-3C		1	1 unit	1BS	30.900
	2000	400		8MF1040-2UW70-3C		1	1 unit	1BS	11.700
		600		8MF1060-2UW70-3C		1	1 unit	1BS	19.300
		800		8MF1080-2UW70-3C		1	1 unit	1BS	26.900
		1000		8MF1000-2UW70-3C		1	1 unit	1BS	34.500
	2200	400		8MF1240-2UW70-3C		1	1 unit	1BS	12.900
		600		8MF1260-2UW70-3C		1	1 unit	1BS	21.300
		800		8MF1280-2UW70-3C		1	1 unit	1BS	29.700
		1000		8MF1200-2UW70-3C		1	1 unit	1BS	38.100

[1)] Width when used as a rear panel, depth when used as a side panel.

* You can order this quantity or a multiple thereof.

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Overview

The following door variants are available:

- Single doors for cubicle width < 900 mm
- Double doors for cubicle width ≥ 900 mm

Single and double doors can be installed on both the front and rear sides.

Left- and right-hand hinges can each be changed over with the applicable hinge set.

Asymmetrical door sizes can be installed provided the total of both door widths corresponds to the cubicle width.

Selection and ordering data

	Height	Width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm							kg
Doors, 1.5 mm sheet steel, powder-coated on both sides RAL 7035									
	Right-hand hinge, IP55, foamed seal								
	1800	300		8MF1830-2UT14-0BA2		1	1 unit	1BS	8.570
		400		8MF1840-2UT14-0BA2		1	1 unit	1BS	10.660
		450		8MF1870-2UT14-0BA2		1	1 unit	1BS	11.700
		500		8MF1850-2UT14-0BA2		1	1 unit	1BS	12.740
		600		8MF1860-2UT14-0BA2		1	1 unit	1BS	14.800
		800		8MF1880-2UT14-0BA2		1	1 unit	1BS	19.000
		900		8MF1890-2UT14-0BA2		1	1 unit	1BS	21.090
	2000	300		8MF1030-2UT14-0BA2		1	1 unit	1BS	9.440
		400		8MF1040-2UT14-0BA2		1	1 unit	1BS	11.770
		450		8MF1070-2UT14-0BA2		1	1 unit	1BS	12.930
		500		8MF1050-2UT14-0BA2		1	1 unit	1BS	14.090
		600		8MF1060-2UT14-0BA2		1	1 unit	1BS	16.400
		800		8MF1080-2UT14-0BA2		1	1 unit	1BS	21.070
		900		8MF1090-2UT14-0BA2		1	1 unit	1BS	23.400
	2200	300		8MF1230-2UT14-0BA2		1	1 unit	1BS	10.300
		400		8MF1240-2UT14-0BA2		1	1 unit	1BS	12.870
		450		8MF1270-2UT14-0BA2		1	1 unit	1BS	14.500
		500		8MF1250-2UT14-0BA2		1	1 unit	1BS	15.430
		600		8MF1260-2UT14-0BA2		1	1 unit	1BS	18.000
		800		8MF1280-2UT14-0BA2		1	1 unit	1BS	23.140
		900		8MF1290-2UT14-0BA2		1	1 unit	1BS	25.700
	Left-hand hinge, IP55, foamed seal								
	1800	300		8MF1830-2UT15-0BA2		1	1 unit	1BS	8.570
		400		8MF1840-2UT15-0BA2		1	1 unit	1BS	10.660
		450		8MF1870-2UT15-0BA2		1	1 unit	1BS	11.700
		500		8MF1850-2UT15-0BA2		1	1 unit	1BS	12.470
		600		8MF1860-2UT15-0BA2		1	1 unit	1BS	14.800
		800		8MF1880-2UT15-0BA2		1	1 unit	1BS	19.000
		900		8MF1890-2UT15-0BA2		1	1 unit	1BS	21.090
	2000	300		8MF1030-2UT15-0BA2		1	1 unit	1BS	9.440
		400		8MF1040-2UT15-0BA2		1	1 unit	1BS	11.770
		450		8MF1070-2UT15-0BA2		1	1 unit	1BS	12.930
		500		8MF1050-2UT15-0BA2		1	1 unit	1BS	14.090
		600		8MF1060-2UT15-0BA2		1	1 unit	1BS	16.400
		800		8MF1080-2UT15-0BA2		1	1 unit	1BS	21.070
		900		8MF1090-2UT15-0BA2		1	1 unit	1BS	23.400
	2200	300		8MF1230-2UT15-0BA2		1	1 unit	1BS	10.400
		400		8MF1240-2UT15-0BA2		1	1 unit	1BS	12.870
		450		8MF1270-2UT15-0BA2		1	1 unit	1BS	14.250
		500		8MF1250-2UT15-0BA2		1	1 unit	1BS	15.530
		600		8MF1260-2UT15-0BA2		1	1 unit	1BS	18.000
		800		8MF1280-2UT15-0BA2		1	1 unit	1BS	23.140
		900		8MF1290-2UT15-0BA2		1	1 unit	1BS	25.000

* You can order this quantity or a multiple thereof.

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Doors

	Height	Width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm							kg
	Right-hand hinge, with ventilation slits, IP20								
	1800	300		8MF1830-2UT14-1BA2		1	1 unit	1BS	8.500
		400		8MF1840-2UT14-1BA2		1	1 unit	1BS	11.000
		450		8MF1870-2UT14-1BA2		1	1 unit	1BS	12.000
		500		8MF1850-2UT14-1BA2		1	1 unit	1BS	14.000
		600		8MF1860-2UT14-1BA2		1	1 unit	1BS	14.800
		800		8MF1880-2UT14-1BA2		1	1 unit	1BS	19.000
		900		8MF1890-2UT14-1BA2		1	1 unit	1BS	21.000
	2000	300		8MF1030-2UT14-1BA2		1	1 unit	1BS	9.430
		400		8MF1040-2UT14-1BA2		1	1 unit	1BS	13.500
		450		8MF1070-2UT14-1BA2		1	1 unit	1BS	14.800
		500		8MF1050-2UT14-1BA2		1	1 unit	1BS	16.100
		600		8MF1060-2UT14-1BA2		1	1 unit	1BS	16.400
		800		8MF1080-2UT14-1BA2		1	1 unit	1BS	21.070
		900		8MF1090-2UT14-1BA2		1	1 unit	1BS	23.400
	2200	300		8MF1230-2UT14-1BA2		1	1 unit	1BS	10.400
		400		8MF1240-2UT14-1BA2		1	1 unit	1BS	12.870
		450		8MF1270-2UT14-1BA2		1	1 unit	1BS	14.250
		500		8MF1250-2UT14-1BA2		1	1 unit	1BS	15.530
		600		8MF1260-2UT14-1BA2		1	1 unit	1BS	18.000
		800		8MF1280-2UT14-1BA2		1	1 unit	1BS	23.800
		900		8MF1290-2UT14-1BA2		1	1 unit	1BS	25.000
	Left-hand hinge, with ventilation slits, IP20								
	1800	300		8MF1830-2UT15-1BA2		1	1 unit	1BS	8.500
		400		8MF1840-2UT15-1BA2		1	1 unit	1BS	11.000
		450		8MF1870-2UT15-1BA2		1	1 unit	1BS	12.000
		500		8MF1850-2UT15-1BA2		1	1 unit	1BS	14.000
		600		8MF1860-2UT15-1BA2		1	1 unit	1BS	14.800
		800		8MF1880-2UT15-1BA2		1	1 unit	1BS	19.000
		900		8MF1890-2UT15-1BA2		1	1 unit	1BS	21.000
	2000	300		8MF1030-2UT15-1BA2		1	1 unit	1BS	9.430
		400		8MF1040-2UT15-1BA2		1	1 unit	1BS	13.500
		450		8MF1070-2UT15-1BA2		1	1 unit	1BS	14.800
		500		8MF1050-2UT15-1BA2		1	1 unit	1BS	16.100
		600		8MF1060-2UT15-1BA2		1	1 unit	1BS	16.400
		800		8MF1080-2UT15-1BA2		1	1 unit	1BS	21.070
		900		8MF1090-2UT15-1BA2		1	1 unit	1BS	23.400
	2200	300		8MF1230-2UT15-1BA2		1	1 unit	1BS	10.400
		400		8MF1240-2UT15-1BA2		1	1 unit	1BS	12.870
		450		8MF1270-2UT15-1BA2		1	1 unit	1BS	16.100
		500		8MF1250-2UT15-1BA2		1	1 unit	1BS	15.530
		600		8MF1260-2UT15-1BA2		1	1 unit	1BS	18.000
		800		8MF1280-2UT15-1BA2		1	1 unit	1BS	23.400
		900		8MF1290-2UT15-1BA2		1	1 unit	1BS	25.000
Doors, 1.5 mm sheet steel, powder-coated on one side RAL 7035									
	Right-hand hinge, EMC version, IP40, metallically conductive seal								
	1800	300		8MF1830-2UT14-0CA1		1	1 unit	1BS	8.471
		400		8MF1840-2UT14-0CA1		1	1 unit	1BS	10.557
		450		8MF1870-2UT14-0CA1		1	1 unit	1BS	11.600
		500		8MF1850-2UT14-0CA1		1	1 unit	1BS	12.643
		600		8MF1860-2UT14-0CA1		1	1 unit	1BS	14.729
		800		8MF1880-2UT14-0CA1		1	1 unit	1BS	18.900
		900		8MF1890-2UT14-0CA1		1	1 unit	1BS	20.986
	2000	300		8MF1030-2UT14-0CA1		1	1 unit	1BS	9.342
		400		8MF1040-2UT14-0CA1		1	1 unit	1BS	11.668
		450		8MF1070-2UT14-0CA1		1	1 unit	1BS	12.831
		500		8MF1050-2UT14-0CA1		1	1 unit	1BS	13.994
		600		8MF1060-2UT14-0CA1		1	1 unit	1BS	16.320
		800		8MF1080-2UT14-0CA1		1	1 unit	1BS	20.971
		900		8MF1090-2UT14-0CA1		1	1 unit	1BS	23.297
	2200	300		8MF1230-2UT14-0CA1		1	1 unit	1BS	10.300
		400		8MF1240-2UT14-0CA1		1	1 unit	1BS	12.867
		450		8MF1270-2UT14-0CA1		1	1 unit	1BS	14.151
		500		8MF1250-2UT14-0CA1		1	1 unit	1BS	15.434
		600		8MF1260-2UT14-0CA1		1	1 unit	1BS	18.001
		800		8MF1280-2UT14-0CA1		1	1 unit	1BS	23.135
		900		8MF1290-2UT14-0CA1		1	1 unit	1BS	25.702

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	Height	Width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm							kg
	Left-hand hinge, EMC version, IP40, metallically conductive seal								
	1800	300		8MF1830-2UT15-0CA1		1	1 unit	1BS	8.471
		400		8MF1840-2UT15-0CA1		1	1 unit	1BS	10.557
		450		8MF1870-2UT15-0CA1		1	1 unit	1BS	11.600
		500		8MF1850-2UT15-0CA1		1	1 unit	1BS	12.643
		600		8MF1860-2UT15-0CA1		1	1 unit	1BS	14.729
		800		8MF1880-2UT15-0CA1		1	1 unit	1BS	18.900
		900		8MF1890-2UT15-0CA1		1	1 unit	1BS	20.986
	2000	300		8MF1030-2UT15-0CA1		1	1 unit	1BS	9.342
		400		8MF1040-2UT15-0CA1		1	1 unit	1BS	11.668
		450		8MF1070-2UT15-0CA1		1	1 unit	1BS	12.831
		500		8MF1050-2UT15-0CA1		1	1 unit	1BS	13.994
		600		8MF1060-2UT15-0CA1		1	1 unit	1BS	16.320
		800		8MF1080-2UT15-0CA1		1	1 unit	1BS	20.971
		900		8MF1090-2UT15-0CA1		1	1 unit	1BS	23.297
	2200	300		8MF1230-2UT15-0CA1		1	1 unit	1BS	10.300
		400		8MF1240-2UT15-0CA1		1	1 unit	1BS	12.867
		450		8MF1270-2UT15-0CA1		1	1 unit	1BS	14.151
		500		8MF1250-2UT15-0CA1		1	1 unit	1BS	15.434
		600		8MF1260-2UT15-0CA1		1	1 unit	1BS	18.001
		800		8MF1280-2UT15-0CA1		1	1 unit	1BS	23.135
		900		8MF1290-2UT15-0CA1		1	1 unit	1BS	25.702
Doors, 1.5 mm sheet steel with safety glass insert, powder-coated on both sides RAL 7035									
	Right-hand hinge, IP55								
	1800	400		8MF1840-2UT14-0BE2		1	1 unit	1BS	11.000
		450		8MF1870-2UT14-0BE2		1	1 unit	1BS	14.800
		500		8MF1850-2UT14-0BE2		1	1 unit	1BS	14.800
		600		8MF1860-2UT14-0BE2		1	1 unit	1BS	18.000
		800		8MF1880-2UT14-0BE2		1	1 unit	1BS	19.000
		900		8MF1890-2UT14-0BE2		1	1 unit	1BS	21.000
	2000	400		8MF1040-2UT14-0BE2		1	1 unit	1BS	13.500
		450		8MF1070-2UT14-0BE2		1	1 unit	1BS	16.400
		500		8MF1050-2UT14-0BE2		1	1 unit	1BS	16.100
		600		8MF1060-2UT14-0BE2		1	1 unit	1BS	18.000
		800		8MF1080-2UT14-0BE2		1	1 unit	1BS	21.047
		900		8MF1090-2UT14-0BE2		1	1 unit	1BS	23.400
	2200	400		8MF1240-2UT14-0BE2		1	1 unit	1BS	12.870
		450		8MF1270-2UT14-0BE2		1	1 unit	1BS	14.250
		500		8MF1250-2UT14-0BE2		1	1 unit	1BS	15.530
		600		8MF1260-2UT14-0BE2		1	1 unit	1BS	19.000
		800		8MF1280-2UT14-0BE2		1	1 unit	1BS	23.800
		900		8MF1290-2UT14-0BE2		1	1 unit	1BS	25.000
	Left-hand hinge, IP55								
	1800	400		8MF1840-2UT15-0BE2		1	1 unit	1BS	11.000
		450		8MF1870-2UT15-0BE2		1	1 unit	1BS	12.000
		500		8MF1850-2UT15-0BE2		1	1 unit	1BS	14.000
		600		8MF1860-2UT15-0BE2		1	1 unit	1BS	17.000
		800		8MF1880-2UT15-0BE2		1	1 unit	1BS	19.000
		900		8MF1890-2UT15-0BE2		1	1 unit	1BS	21.000
	2000	400		8MF1040-2UT15-0BE2		1	1 unit	1BS	13.500
		450		8MF1070-2UT15-0BE2		1	1 unit	1BS	14.800
		500		8MF1050-2UT15-0BE2		1	1 unit	1BS	16.400
		600		8MF1060-2UT15-0BE2		1	1 unit	1BS	18.000
		800		8MF1080-2UT15-0BE2		1	1 unit	1BS	21.070
		900		8MF1090-2UT15-0BE2		1	1 unit	1BS	23.400
	2200	400		8MF1240-2UT15-0BE2		1	1 unit	1BS	12.870
		450		8MF1270-2UT15-0BE2		1	1 unit	1BS	14.250
		500		8MF1250-2UT15-0BE2		1	1 unit	1BS	14.250
		600		8MF1260-2UT15-0BE2		1	1 unit	1BS	18.000
		800		8MF1280-2UT15-0BE2		1	1 unit	1BS	23.800
		900		8MF1290-2UT15-0BE2		1	1 unit	1BS	25.000

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Doors

	Height	Width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm							kg
Door halves, 1.5 mm sheet steel									
	Left-hand hinge, IP55								
	1800	400		8MF1840-2UT25-0BA2		1	1 unit	1BS	11.000
		450		8MF1870-2UT25-0BA2		1	1 unit	1BS	12.000
		500		8MF1850-2UT25-0BA2		1	1 unit	1BS	14.000
		600		8MF1860-2UT25-0BA2		1	1 unit	1BS	14.800
		800		8MF1880-2UT25-0BA2		1	1 unit	1BS	19.000
		900		8MF1890-2UT25-0BA2		1	1 unit	1BS	21.000
	2000	400		8MF1040-2UT25-0BA2		1	1 unit	1BS	13.500
		450		8MF1070-2UT25-0BA2		1	1 unit	1BS	14.800
		500		8MF1050-2UT25-0BA2		1	1 unit	1BS	16.100
		600		8MF1060-2UT25-0BA2		1	1 unit	1BS	16.400
		800		8MF1080-2UT25-0BA2		1	1 unit	1BS	21.070
		900		8MF1090-2UT25-0BA2		1	1 unit	1BS	23.400
	2200	400		8MF1240-2UT25-0BA2		1	1 unit	1BS	13.500
		450		8MF1270-2UT25-0BA2		1	1 unit	1BS	14.800
		500		8MF1250-2UT25-0BA2		1	1 unit	1BS	16.100
		600		8MF1260-2UT25-0BA2		1	1 unit	1BS	18.600
		800		8MF1280-2UT25-0BA2		1	1 unit	1BS	23.800
		900		8MF1290-2UT25-0BA2		1	1 unit	1BS	25.000
	Left-hand hinge, with ventilation slits, IP20								
	1800	400		8MF1840-2UT25-1BA2		1	1 unit	1BS	11.000
		450		8MF1870-2UT25-1BA2		1	1 unit	1BS	12.000
		500		8MF1850-2UT25-1BA2		1	1 unit	1BS	14.000
		600		8MF1860-2UT25-1BA2		1	1 unit	1BS	17.000
		800		8MF1880-2UT25-1BA2		1	1 unit	1BS	19.000
		900		8MF1890-2UT25-1BA2		1	1 unit	1BS	21.000
	2000	400		8MF1040-2UT25-1BA2		1	1 unit	1BS	13.500
		450		8MF1070-2UT25-1BA2		1	1 unit	1BS	14.800
		500		8MF1050-2UT25-1BA2		1	1 unit	1BS	16.100
		600		8MF1060-2UT25-1BA2		1	1 unit	1BS	18.000
		800		8MF1080-2UT25-1BA2		1	1 unit	1BS	21.070
		900		8MF1090-2UT25-1BA2		1	1 unit	1BS	23.400
	2200	400		8MF1240-2UT25-1BA2		1	1 unit	1BS	12.870
		450		8MF1270-2UT25-1BA2		1	1 unit	1BS	18.000
		500		8MF1250-2UT25-1BA2		1	1 unit	1BS	15.530
		600		8MF1260-2UT25-1BA2		1	1 unit	1BS	20.000
		800		8MF1280-2UT25-1BA2		1	1 unit	1BS	23.800
		900		8MF1290-2UT25-1BA2		1	1 unit	1BS	25.000
Door halves, 1.5 mm sheet steel, powder-coated on one side RAL 7035									
	Left-hand hinge, EMC version, IP40								
	1800	400		8MF1840-2UT25-0CA1		1	1 unit	1BS	11.000
		450		8MF1870-2UT25-0CA1		1	1 unit	1BS	12.000
		500		8MF1850-2UT25-0CA1		1	1 unit	1BS	13.000
		600		8MF1860-2UT25-0CA1		1	1 unit	1BS	15.200
		800		8MF1880-2UT25-0CA1		1	1 unit	1BS	19.500
		900		8MF1890-2UT25-0CA1		1	1 unit	1BS	21.500
	2000	400		8MF1040-2UT25-0CA1		1	1 unit	1BS	12.000
		450		8MF1070-2UT25-0CA1		1	1 unit	1BS	13.500
		500		8MF1050-2UT25-0CA1		1	1 unit	1BS	14.500
		600		8MF1060-2UT25-0CA1		1	1 unit	1BS	17.000
		800		8MF1080-2UT25-0CA1		1	1 unit	1BS	21.500
		900		8MF1090-2UT25-0CA1		1	1 unit	1BS	24.000
	2200	400		8MF1240-2UT25-0CA1		1	1 unit	1BS	13.511
		450		8MF1270-2UT25-0CA1		1	1 unit	1BS	14.795
		500		8MF1250-2UT25-0CA1		1	1 unit	1BS	16.078
		600		8MF1260-2UT25-0CA1		1	1 unit	1BS	18.645
		800		8MF1280-2UT25-0CA1		1	1 unit	1BS	23.779
		900		8MF1290-2UT25-0CA1		1	1 unit	1BS	26.346

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	Height	Width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm							kg
Door halves, 1.5 mm sheet steel with safety glass insert									
	Left-hand hinge								
	1800	400		8MF1840-2UT25-0BE2		1	1 unit	1BS	11.000
		450		8MF1870-2UT25-0BE2		1	1 unit	1BS	12.000
		500		8MF1850-2UT25-0BE2		1	1 unit	1BS	14.000
		600		8MF1860-2UT25-0BE2		1	1 unit	1BS	17.000
		800		8MF1880-2UT25-0BE2		1	1 unit	1BS	19.000
		900		8MF1890-2UT25-0BE2		1	1 unit	1BS	21.000
	2000	400		8MF1040-2UT25-0BE2		1	1 unit	1BS	13.500
		450		8MF1070-2UT25-0BE2		1	1 unit	1BS	14.800
		500		8MF1050-2UT25-0BE2		1	1 unit	1BS	16.100
		600		8MF1060-2UT25-0BE2		1	1 unit	1BS	18.000
		800		8MF1080-2UT25-0BE2		1	1 unit	1BS	21.070
		900		8MF1090-2UT25-0BE2		1	1 unit	1BS	23.400
	2200	400		8MF1240-2UT25-0BE2		1	1 unit	1BS	12.870
		450		8MF1270-2UT25-0BE2		1	1 unit	1BS	14.250
		500		8MF1250-2UT25-0BE2		1	1 unit	1BS	15.530
		600		8MF1260-2UT25-0BE2		1	1 unit	1BS	19.000
		800		8MF1280-2UT25-0BE2		1	1 unit	1BS	23.400
		900		8MF1290-2UT25-0BE2		1	1 unit	1BS	25.000
Assembly kit IP2X upgrade to IP4X to upgrade doors with ventilation slits									
		300		8MF1030-2HM		1	1 unit	1BS	0.430
		400		8MF1040-2HM		1	1 unit	1BS	0.552
		450		8MF1070-2HM		1	1 unit	1BS	0.600
		500		8MF1050-2HM		1	1 unit	1BS	0.680
		600		8MF1060-2HM		1	1 unit	1BS	0.800
		800		8MF1080-2HM		1	1 unit	1BS	1.100
		900		8MF1090-2HM		1	1 unit	1BS	1.700

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Modular doors

Selection and ordering data

	Height	Width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm							kg
Modular doors, 1.5 mm sheet steel, escutcheon with two-way interlocking mechanism, powder-coated on both sides RAL 7035[1)]									
	Additional holes are required in the frame. These are produced by the manufacturer when a mounted unequipped, empty enclosure is ordered.								
	Right-hand hinge, IP40								
	300	600		**8MF1360-2UT34-0BA2**		1	1 unit	1BS	3.238
		800		**8MF1380-2UT34-0BA2**		1	1 unit	1BS	4.063
	400	600		**8MF1460-2UT34-0BA2**		1	1 unit	1BS	4.031
		800		**8MF1480-2UT34-0BA2**		1	1 unit	1BS	5.095
	500	600		**8MF1560-2UT34-0BA2**		1	1 unit	1BS	4.828
		800		**8MF1580-2UT34-0BA2**		1	1 unit	1BS	6.132
	600	600		**8MF1660-2UT34-0BA2**		1	1 unit	1BS	5.625
		800		**8MF1680-2UT34-0BA2**		1	1 unit	1BS	7.169
	700	600		**8MF1760-2UT34-0BA2**		1	1 unit	1BS	6.422
		800		**8MF1780-2UT34-0BA2**		1	1 unit	1BS	8.206
	800	600		**8MF1860-2UT34-0BA2**		1	1 unit	1BS	7.219
		800		**8MF1880-2UT34-0BA2**		1	1 unit	1BS	9.243
	900	600		**8MF1960-2UT34-0BA2**		1	1 unit	1BS	8.016
		800		**8MF1980-2UT34-0BA2**		1	1 unit	1BS	10.280
	1000	600		**8MF1060-2UT34-0BA2**		1	1 unit	1BS	8.813
		800		**8MF1080-2UT34-0BA2**		1	1 unit	1BS	11.317
	1100	600		**8MF1160-2UT34-0BA2**		1	1 unit	1BS	9.610
		800		**8MF1180-2UT34-0BA2**		1	1 unit	1BS	12.354
	1200	600		**8MF1260-2UT34-0BA2**		1	1 unit	1BS	10.407
		800		**8MF1280-2UT34-0BA2**		1	1 unit	1BS	13.390
Stop profile									
		600		**8MF1060-2AK14-0**		1	1 unit	1BS	1.000
		800		**8MF1080-2AK14-0**		1	1 unit	1BS	1.330

[1)] Additionally order the number of stop profiles reduced by one (4 modular doors correspond to 3 stop profiles).

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Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
								kg
	Rotary handle, standard		**8MF1000-2VP**		1	1 unit	1BS	0.200
	Rotary handle insert[1]							
	Double-bit key		**8MF1000-2VA**		1	1 unit	1BS	0.200
	Square key		**8MF1000-2VC**		1	1 unit	1BS	0.100
	Triangular key		**8MF1000-2VD**		1	1 unit	1BS	0.100
	Daimler		**8MF1000-2VE**		1	1 unit	1BS	0.100
	Cylinder lock		**8MF1000-2VF**		1	1 unit	1BS	0.100
	Rotary handle with padlock		**8MF1000-2VN**		1	1 unit	1BS	0.150
	Circuit diagram pocket[2]							
	Plastic		**8MF1000-2VK**		1	1 unit	1BS	0.200
	Steel A4 upright		**8MF1000-2VU**		1	1 unit	1BS	2.400
	Hinge set							
	For conversion from right-hinged to left-hinged or vice versa							
	Right-hand hinge		**8MF1000-2VW**		1	1 set	1BS	0.350
	Left-hand hinge		**8MF1000-2VT**		1	1 set	1BS	0.350
	Installation material							
	Screw M6x12		**8MF1000-2VS**		1	1 unit	1BS	0.300
	Contact washer, size 6		**8MF1000-2VJ**		1	1 unit	1BS	0.200
	Position switch for mounting as door contact							
	• 1 NO + 1 NC		**8MF1000-2VL**		1	1 unit	1BS	0.200
	• 1 NO + 2 NC		**8MF1000-2VR**		1	1 unit	1BS	0.200
	Multi-purpose strips for door reinforcement[2]							
	Height							
	1800 mm		**8MF1008-2VM**		1	1 unit	1BS	2.800
	2000 mm		**8MF1000-2VM**		1	1 unit	1BS	3.200
	2200 mm		**8MF1002-2VM**		1	1 unit	1BS	3.600
	Door stay		**8MF1000-2VG**		1	1 unit	1BS	0.600
	Variable opening angle Mounting optionally top or bottom							

1) Not suitable for door halves
2) Cannot be used for glass doors

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*** You can order this quantity or a multiple thereof.**

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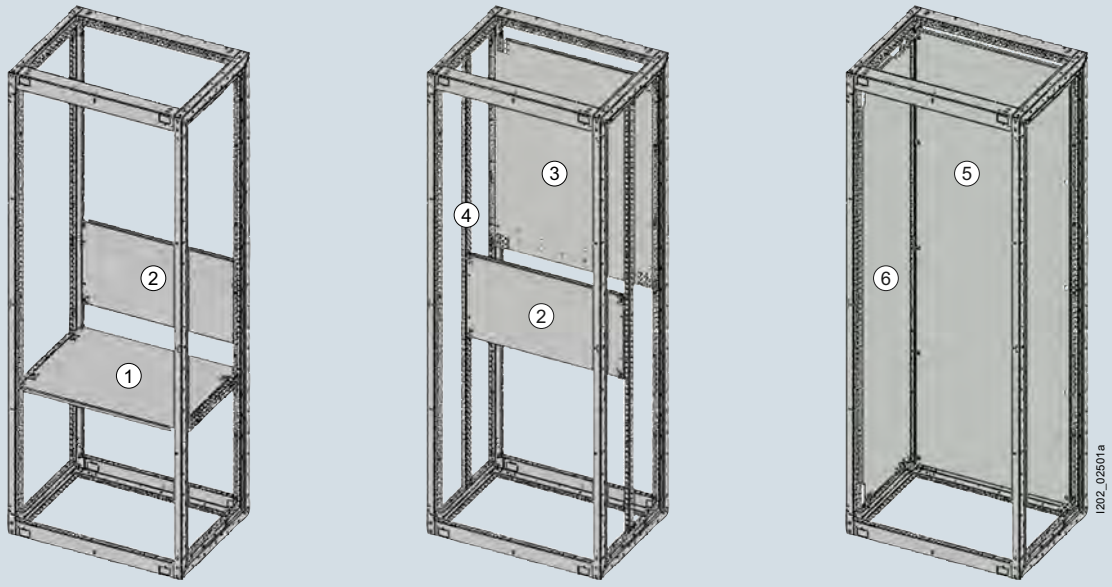
General data

Overview



1 Shelf
2 Mounting plate for mounting with universal bracket
3 Mounting plate for direct mounting on the frame
4 Mounting rails (for installing the mounting plate in the depth)
5 Rear mounting panel
6 Side mounting panel

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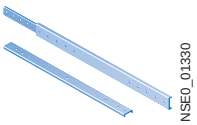
Selection and ordering data

	Width	Depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm							kg
Shelf, sheet steel									
	2.0 mm sheet steel, sendzimir-galvanized • Rails for mounting are included in the scope of supply • Cannot be combined with mounting panels • Pay attention to space requirement in case of more than one shelf								
	600	400		8MF1064-2AF20		1	1 unit	1BS	4.200
		600		8MF1066-2AF20		1	1 unit	1BS	5.860
		800		8MF1068-2AF20		1	1 unit	1BS	9.800
		1000		8MF1060-2AF20		1	1 unit	1BS	13.000
	800	400		8MF1084-2AF20		1	1 unit	1BS	5.450
		600		8MF1086-2AF20		1	1 unit	1BS	7.800
		800		8MF1088-2AF20		1	1 unit	1BS	12.200
		1000		8MF1080-2AF20		1	1 unit	1BS	15.400
	900	400		8MF1094-2AF20		1	1 unit	1BS	6.200
		600		8MF1096-2AF20		1	1 unit	1BS	8.650
		800		8MF1098-2AF20		1	1 unit	1BS	13.500
		1000		8MF1090-2AF20		1	1 unit	1BS	16.700
	1000	400		8MF1004-2AF20		1	1 unit	1BS	6.700
		600		8MF1006-2AF20		1	1 unit	1BS	9.600
		800		8MF1008-2AF20		1	1 unit	1BS	14.800
		1000		8MF1000-2AF20		1	1 unit	1BS	18.000
	1200	400		8MF1024-2AF20		1	1 unit	1BS	7.900
		600		8MF1026-2AF20		1	1 unit	1BS	11.500
		800		8MF1028-2AF20		1	1 unit	1BS	17.400
		1000		8MF1020-2AF20		1	1 unit	1BS	20.500
 NSE0_01330	**Assembly kit, telescopic rails** For withdrawable shelves								
		300[1]		8MF1003-2HF		1	1 unit	1BS	1.400
		600[2]		8MF1006-2HF		1	1 unit	1BS	2.700

[1] Suitable for cubicle depth 400 and 600.

[2] Suitable for cubicle depth 800 and 1000.

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Mounting plates for mounting with universal bracket

Overview

Mounting on frame using supplied universal bracket or on cubicle-high universal mounting rails (not included in the scope of supply; see page 16/34).

Pay attention to the space requirement in the case of more than one mounting plate.

Selection and ordering data

	Height	Width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm							kg
Mounting plates, sheet steel									
	2.0 mm sheet steel, sendzimir-galvanized								
	100	600		8MF1160-2AM02-0		1	1 unit	1BS	1.300
		800		8MF1180-2AM02-0		1	1 unit	1BS	1.720
		900		8MF1190-2AM02-0		1	1 unit	1BS	1.940
		1000		8MF1100-2AM02-0		1	1 unit	1BS	2.150
		1200		8MF1120-2AM02-0		1	1 unit	1BS	2.570
	200	600		8MF1260-2AM02-0		1	1 unit	1BS	2.240
		800		8MF1280-2AM02-0		1	1 unit	1BS	3.000
		900		8MF1290-2AM02-0		1	1 unit	1BS	3.350
		1000		8MF1200-2AM02-0		1	1 unit	1BS	3.720
		1200		8MF1220-2AM02-0		1	1 unit	1BS	4.460
	300	600		8MF1360-2AM02-0		1	1 unit	1BS	3.070
		800		8MF1380-2AM02-0		1	1 unit	1BS	4.140
		900		8MF1390-2AM02-0		1	1 unit	1BS	4.670
		1000		8MF1300-2AM02-0		1	1 unit	1BS	5.200
		1200		8MF1320-2AM02-0		1	1 unit	1BS	6.260
	400	600		8MF1460-2AM02-0		1	1 unit	1BS	3.910
		800		8MF1480-2AM02-0		1	1 unit	1BS	5.290
		900		8MF1490-2AM02-0		1	1 unit	1BS	5.980
		1000		8MF1400-2AM02-0		1	1 unit	1BS	6.670
		1200		8MF1420-2AM02-0		1	1 unit	1BS	8.060
	600	600		8MF1660-2AM02-0		1	1 unit	1BS	5.580
		800		8MF1680-2AM02-0		1	1 unit	1BS	7.600
		900		8MF1690-2AM02-0		1	1 unit	1BS	8.610
		1000		8MF1600-2AM02-0		1	1 unit	1BS	9.620
		1200		8MF1620-2AM02-0		1	1 unit	1BS	11.650
	800	600		8MF1860-2AM02-0		1	1 unit	1BS	7.250
		800		8MF1880-2AM02-0		1	1 unit	1BS	9.910
		900		8MF1890-2AM02-0		1	1 unit	1BS	11.240
		1000		8MF1800-2AM02-0		1	1 unit	1BS	12.570
		1200		8MF1820-2AM02-0		1	1 unit	1BS	15.240
	2.0 mm sheet steel, sendzimir-galvanized, perforated version								
	100	600		8MF1160-2AM12-0		1	1 unit	1BS	1.300
		800		8MF1180-2AM12-0		1	1 unit	1BS	1.720
		900		8MF1190-2AM12-0		1	1 unit	1BS	1.940
		1000		8MF1100-2AM12-0		1	1 unit	1BS	2.150
		1200		8MF1120-2AM12-0		1	1 unit	1BS	2.570
	200	600		8MF1260-2AM12-0		1	1 unit	1BS	2.240
		800		8MF1280-2AM12-0		1	1 unit	1BS	3.000
		900		8MF1290-2AM12-0		1	1 unit	1BS	3.350
		1000		8MF1200-2AM12-0		1	1 unit	1BS	3.720
		1200		8MF1220-2AM12-0		1	1 unit	1BS	4.460
	300	600		8MF1360-2AM12-0		1	1 unit	1BS	3.070
		800		8MF1380-2AM12-0		1	1 unit	1BS	4.140
		900		8MF1390-2AM12-0		1	1 unit	1BS	4.670
		1000		8MF1300-2AM12-0		1	1 unit	1BS	5.200
		1200		8MF1320-2AM12-0		1	1 unit	1BS	6.260
	400	600		8MF1460-2AM12-0		1	1 unit	1BS	3.910
		800		8MF1480-2AM12-0		1	1 unit	1BS	5.290
		900		8MF1490-2AM12-0		1	1 unit	1BS	5.980
		1000		8MF1400-2AM12-0		1	1 unit	1BS	6.670
		1200		8MF1420-2AM12-0		1	1 unit	1BS	8.060
	600	600		8MF1660-2AM12-0		1	1 unit	1BS	5.580
		800		8MF1680-2AM12-0		1	1 unit	1BS	7.600
		900		8MF1690-2AM12-0		1	1 unit	1BS	8.610
		1000		8MF1600-2AM12-0		1	1 unit	1BS	9.620
		1200		8MF1620-2AM12-0		1	1 unit	1BS	11.650
	800	600		8MF1860-2AM12-0		1	1 unit	1BS	7.250
		800		8MF1880-2AM12-0		1	1 unit	1BS	9.910
		900		8MF1890-2AM12-0		1	1 unit	1BS	11.240
		1000		8MF1800-2AM12-0		1	1 unit	1BS	12.570
		1200		8MF1820-2AM12-0		1	1 unit	1BS	15.240

* You can order this quantity or a multiple thereof.

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Overview

For expansion with mounting plates for direct mounting on the frame, pay attention to the space requirement in the case of more than one mounting plate.

Selection and ordering data

	Height	Width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm							kg
Mounting plates, sheet steel									
	2.0 mm sheet steel, sendzimir-galvanized								
	800	600		**8MF1860-2AA02-0**		1	1 unit	1BS	8.000
	1000			**8MF1060-2AA02-0**		1	1 unit	1BS	9.500
	800	800		**8MF1880-2AA02-0**		1	1 unit	1BS	11.000
	1000			**8MF1080-2AA02-0**		1	1 unit	1BS	11.500
	800	900		**8MF1890-2AA02-0**		1	1 unit	1BS	12.000
	1000			**8MF1090-2AA02-0**		1	1 unit	1BS	15.000
	800	1000		**8MF1800-2AA02-0**		1	1 unit	1BS	13.000
	1000			**8MF1000-2AA02-0**		1	1 unit	1BS	16.500
	800	1200		**8MF1820-2AA02-0**		1	1 unit	1BS	16.000
	1000			**8MF1020-2AA02-0**		1	1 unit	1BS	20.000
	2.0 mm sheet steel, sendzimir-galvanized, perforated version								
	800	600		**8MF1860-2AA12-0**		1	1 unit	1BS	8.000
	1000			**8MF1060-2AA12-0**		1	1 unit	1BS	9.500
	800	800		**8MF1880-2AA12-0**		1	1 unit	1BS	11.000
	1000			**8MF1080-2AA12-0**		1	1 unit	1BS	11.500
	800	900		**8MF1890-2AA12-0**		1	1 unit	1BS	12.000
	1000			**8MF1090-2AA12-0**		1	1 unit	1BS	15.000
	800	1000		**8MF1800-2AA12-0**		1	1 unit	1BS	13.000
	1000			**8MF1000-2AA12-0**		1	1 unit	1BS	16.500
	800	1200		**8MF1820-2AA12-0**		1	1 unit	1BS	16.000
	1000			**8MF1020-2AA12-0**		1	1 unit	1BS	20.000

*** You can order this quantity or a multiple thereof.**

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Rear mounting panels

Selection and ordering data

	Height	Width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm							kg
Mounting plate, sheet steel									
	2.5 mm sheet steel, sendzimir-galvanized[1]								
	1800	600		**8MF1860-2AL03-0**		1	1 unit	1BS	21.300
		800		**8MF1880-2AL03-0**		1	1 unit	1BS	28.200
		900		**8MF1890-2AL03-0**		1	1 unit	1BS	31.600
		1000		**8MF1800-2AL03-0**		1	1 unit	1BS	35.000
		1200		**8MF1820-2AL03-0**		1	1 unit	1BS	41.800
	2000	600		**8MF1060-2AL03-0**		1	1 unit	1BS	23.700
		800		**8MF1080-2AL03-0**		1	1 unit	1BS	31.300
		900		**8MF1090-2AL03-0**		1	1 unit	1BS	35.200
		1000		**8MF1000-2AL03-0**		1	1 unit	1BS	39.000
		1200		**8MF1020-2AL03-0**		1	1 unit	1BS	46.600
	2200	600		**8MF1260-2AL03-0**		1	1 unit	1BS	26.100
		800		**8MF1280-2AL03-0**		1	1 unit	1BS	34.500
		900		**8MF1290-2AL03-0**		1	1 unit	1BS	38.700
		1000		**8MF1200-2AL03-0**		1	1 unit	1BS	43.000
		1200		**8MF1220-2AL03-0**		1	1 unit	1BS	51.400
	2.5 mm sheet steel, sendzimir-galvanized, perforated version[1]								
	1800	600		**8MF1860-2AL13-0**		1	1 unit	1BS	21.300
		800		**8MF1880-2AL13-0**		1	1 unit	1BS	28.200
		900		**8MF1890-2AL13-0**		1	1 unit	1BS	31.600
		1000		**8MF1800-2AL13-0**		1	1 unit	1BS	35.000
		1200		**8MF1820-2AL13-0**		1	1 unit	1BS	41.800
	2000	600		**8MF1060-2AL13-0**		1	1 unit	1BS	23.700
		800		**8MF1080-2AL13-0**		1	1 unit	1BS	31.300
		900		**8MF1090-2AL13-0**		1	1 unit	1BS	35.200
		1000		**8MF1000-2AL13-0**		1	1 unit	1BS	39.000
		1200		**8MF1020-2AL13-0**		1	1 unit	1BS	46.600
	2200	600		**8MF1260-2AL13-0**		1	1 unit	1BS	26.100
		800		**8MF1280-2AL13-0**		1	1 unit	1BS	34.500
		900		**8MF1290-2AL13-0**		1	1 unit	1BS	38.700
		1000		**8MF1200-2AL13-0**		1	1 unit	1BS	43.000
		1200		**8MF1220-2AL13-0**		1	1 unit	1BS	51.400

[1] Cannot be combined with shelves.

* You can order this quantity or a multiple thereof.

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Selection and ordering data

Height	Depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
mm	mm							kg
Mounting plate, sheet steel								
2.5 mm sheet steel, sendzimir-galvanized[1]								
1800	400		8MF1804-2AK03-0		1	1 unit	1BS	9.530
	600		8MF1806-2AK03-0		1	1 unit	1BS	15.900
	800		8MF1808-2AK03-0		1	1 unit	1BS	22.300
	1000		8MF1800-2AK03-0		1	1 unit	1BS	28.730
2000	400		8MF1004-2AK03-0		1	1 unit	1BS	10.600
	600		8MF1006-2AK03-0		1	1 unit	1BS	17.800
	800		8MF1008-2AK03-0		1	1 unit	1BS	25.000
	1000		8MF1000-2AK03-0		1	1 unit	1BS	32.200
2200	400		8MF1204-2AK03-0		1	1 unit	1BS	12.600
	600		8MF1206-2AK03-0		1	1 unit	1BS	19.700
	800		8MF1208-2AK03-0		1	1 unit	1BS	27.660
	1000		8MF1200-2AK03-0		1	1 unit	1BS	35.660
2.5 mm sheet steel, sendzimir-galvanized, perforated version[1]								
1800	400		8MF1804-2AK13-0		1	1 unit	1BS	9.530
	600		8MF1806-2AK13-0		1	1 unit	1BS	15.900
	800		8MF1808-2AK13-0		1	1 unit	1BS	22.300
	1000		8MF1800-2AK13-0		1	1 unit	1BS	28.730
2000	400		8MF1004-2AK13-0		1	1 unit	1BS	10.600
	600		8MF1006-2AK13-0		1	1 unit	1BS	17.800
	800		8MF1008-2AK13-0		1	1 unit	1BS	25.000
	1000		8MF1000-2AK13-0		1	1 unit	1BS	32.200
2200	400		8MF1204-2AK13-0		1	1 unit	1BS	12.600
	600		8MF1206-2AK13-0		1	1 unit	1BS	19.700
	800		8MF1208-2AK13-0		1	1 unit	1BS	27.660
	1000		8MF1200-2AK13-0		1	1 unit	1BS	35.660

[1] Cannot be combined with shelves.

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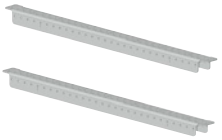
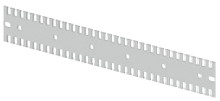
Rails

Overview

- Choose rail 150 mm shorter than the applicable cubicle dimension for mounting in the depth and height (choose a rail with a length of 450 mm for a cubicle depth of 600 mm)
- Choose rail 75 mm shorter than the applicable cubicle dimension for mounting in the width (choose a rail with a length of 525 mm for a cubicle width of 600 mm)
- Universal brackets required for mounting included in the scope of supply
- Rail-to-rail mounting is also possible

Selection and ordering data

	Rail length	Suitable for cubicle height	Suitable for cubicle width	Suitable for cubicle depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm	mm	mm							kg
Universal mounting rails, 2.5 mm sheet steel, sendzimir-galvanized											
	For general interior expansion										
	250	--	--	--		8MF1025-2AS30		1	1 unit	1BS	0.550
	325	--	--	--		8MF1032-2AS30		1	1 unit	1BS	0.680
	350	--	--	--		8MF1035-2AS30		1	1 unit	1BS	0.720
	425	--	--	--		8MF1042-2AS30		1	1 unit	1BS	0.840
	450	--	--	--		8MF1045-2AS30		1	1 unit	1BS	0.880
	525	--	--	--		8MF1052-2AS30		1	1 unit	1BS	1.010
	550	--	--	--		8MF1055-2AS30		1	1 unit	1BS	1.050
	625	--	--	--		8MF1062-2AS30		1	1 unit	1BS	1.170
	650	--	--	--		8MF1065-2AS30		1	1 unit	1BS	1.210
	725	--	--	--		8MF1072-2AS30		1	1 unit	1BS	1.333
	750	--	--	--		8MF1075-2AS30		1	1 unit	1BS	1.380
	825	--	--	--		8MF1082-2AS30		1	1 unit	1BS	1.500
	850	--	--	--		8MF1085-2AS30		1	1 unit	1BS	1.540
	925	--	--	--		8MF1092-2AS30		1	1 unit	1BS	1.660
	1050	--	--	--		8MF1105-2AS30		1	1 unit	1BS	1.870
	1125	--	--	--		8MF1112-2AS30		1	1 unit	1BS	1.990
	1250	--	--	--		8MF1125-2AS30		1	1 unit	1BS	2.200
	1350	--	--	--		8MF1135-2AS30		1	1 unit	1BS	2.360
	1450	--	--	--		8MF1145-2AS30		1	1 unit	1BS	2.530
	1550	--	--	--		8MF1155-2AS30		1	1 unit	1BS	2.690
	1650	--	--	--		8MF1165-2AS30		1	1 unit	1BS	2.860
	1750	--	--	--		8MF1175-2AS30		1	1 unit	1BS	3.020
	1850	--	--	--		8MF1185-2AS30		1	1 unit	1BS	3.190
	1950	--	--	--		8MF1195-2AS30		1	1 unit	1BS	3.350
	2050	--	--	--		8MF1205-2AS30		1	1 unit	1BS	3.520
	2150	--	--	--		8MF1215-2AS30		1	1 unit	1BS	3.680
	2250	--	--	--		8MF1225-2AS30		1	1 unit	1BS	3.850
	Suitable for cubicle height										
	1650	1800	--	--		8MF1165-2AS30		1	1 unit	1BS	2.860
	1850	2000	--	--		8MF1185-2AS30		1	1 unit	1BS	3.190
	2050	2200	--	--		8MF1205-2AS30		1	1 unit	1BS	3.520
	Suitable for cubicle width										
	525	--	600	--		8MF1052-2AS30		1	1 unit	1BS	1.010
	725	--	800	--		8MF1072-2AS30		1	1 unit	1BS	1.333
	825	--	900	--		8MF1082-2AS30		1	1 unit	1BS	1.500
	925	--	1000	--		8MF1092-2AS30		1	1 unit	1BS	1.660
	1125	--	1200	--		8MF1112-2AS30		1	1 unit	1BS	1.990
	Suitable for cubicle depth										
	250	--	--	400		8MF1025-2AS30		1	1 unit	1BS	0.550
	450	--	--	600		8MF1045-2AS30		1	1 unit	1BS	0.880
	650	--	--	800		8MF1065-2AS30		1	1 unit	1BS	1.210
	850	--	--	1000		8MF1085-2AS30		1	1 unit	1BS	1.540
Universal mounting rails, heavy duty [1], sendzimir-galvanized											
	**4.0 mm sheet steel**										
	600	--	--	--		8MF1060-2AH60		1	2 units	1BS	5.600
	800	--	--	--		8MF1080-2AH60		1	2 units	1BS	7.400
	900	--	--	--		8MF1090-2AH60		1	2 units	1BS	8.000
	1000	--	--	--		8MF1000-2AH60		1	2 units	1BS	9.100
	1200	--	--	--		8MF1020-2AH60		1	2 units	1BS	11.100
Serrated rails, for cable fastening, sendzimir-galvanized											
	2.5 mm sheet steel, U shape										
	600	--	--	--		8MF1060-2HC03-0		1	1 unit	1BS	1.200
	800	--	--	--		8MF1080-2HC03-0		1	1 unit	1BS	1.600
	900	--	--	--		8MF1090-2HC03-0		1	1 unit	1BS	1.800
	1000	--	--	--		8MF1000-2HC03-0		1	1 unit	1BS	2.000
	1200	--	--	--		8MF1020-2HC03-0		1	1 unit	1BS	2.200
	**2.5 mm sheet steel, smooth**										
	600	--	--	--		8MF1060-2HC13-0		1	1 unit	1BS	0.900
	800	--	--	--		8MF1080-2HC13-0		1	1 unit	1BS	1.100
	900	--	--	--		8MF1090-2HC13-0		1	1 unit	1BS	1.300
	1000	--	--	--		8MF1000-2HC13-0		1	1 unit	1BS	1.500
	1200	--	--	--		8MF1020-2HC13-0		1	1 unit	1BS	1.700

[1] Can be mounted at top or bottom in the width or depth, load-carrying capacity/set 300 kg

* You can order this quantity or a multiple thereof.

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Selection and ordering data

	Height	Depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm							kg
19" swing frame, 2.0 mm sheet steel, powder-coated, RAL 7035									
	1800	--		8MF1800-2AR02-2		1	1 unit	1BS	16.000
	2000	--		8MF1000-2AR02-2		1	1 unit	1BS	18.000
	2200	--		8MF1200-2AR02-2		1	1 unit	1BS	20.000
19" fixed-mounted, 2.5 mm sheet steel, sendzimir-galvanized[1)]									
	400	--		8MF1100-2AN30		1	1 unit	1BS	1.900
	600	--		8MF1200-2AN30		1	1 unit	1BS	2.900
	800	--		8MF1300-2AN30		1	1 unit	1BS	3.900
	1000	--		8MF1400-2AN30		1	1 unit	1BS	4.800
	1200	--		8MF1500-2AN30		1	1 unit	1BS	5.800
	1400	--		8MF1600-2AN30		1	1 unit	1BS	6.800
	1800	--		8MF1700-2AN30		1	1 unit	1BS	8.200
	2000	--		8MF1800-2AN30		1	1 unit	1BS	9.100
	2200	--		8MF1900-2AN30		1	1 unit	1BS	10.000
19" cover plate for swing frame/fixed-mounted									
	Standard								
	1 HU	--		8MF1000-2AB01		1	1 unit	1BS	0.392
	2 HU	--		8MF1000-2AB02		1	1 unit	1BS	0.650
	3 HU	--		8MF1000-2AB03		1	1 unit	1BS	0.908
	4 HU	--		8MF1000-2AB04		1	1 unit	1BS	1.165
	5 HU	--		8MF1000-2AB05		1	1 unit	1BS	1.423
	6 HU	--		8MF1000-2AB06		1	1 unit	1BS	1.681
	7 HU	--		8MF1000-2AB07		1	1 unit	1BS	1.938
	Ventilated								
	2 HU	--		8MF1000-2AB32		1	1 unit	1BS	0.650
	3 HU	--		8MF1000-2AB33		1	1 unit	1BS	0.900

[1)] Additionally order one set of heavy duty mounting rails in cubicle width. The cubicle must be more than 600 mm wide.

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19" swing frame/fixed-mounted

	Height	Depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm							kg
19" accessories									
	Cover for modular installation devices								
	3 HU	--		8MF1000-2AB31		1	1 unit	1BS	2.000
	Frame 7HU								
	For mounting 7XV75 test switches[1)]								
	7 HU	--		8MF1000-2AB30		1	1 unit	1BS	0.800
	Shelf								
	Cabinet depth at least 600 mm								
	--	230		8MF1000-2AB12		1	1 unit	1BS	3.000
	--	400		8MF1000-2AB14		1	1 unit	1BS	3.500

1) For test switch 7XV75, see also http://w3.siemens.com/smartgrid/global/en/products-systems-solutions/Protection/accessories/test-equipment/Pages/7XV75.aspx

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* You can order this quantity or a multiple thereof.

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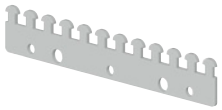
Selection and ordering data

	Height	Width	Depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm	mm							kg
	Universal brackets for mounting expansion elements 10 units				**8MF1000-2CP**		1	10 units	1BS	0.700
	**Toothed bars** Installed on mounting rail Length 100 mm				**8MF1000-2HC**		1	1 unit	1BS	0.200
	Standard mounting rails (1 m)									
	7.50				**8MF1500-2HS**		1	1 unit	1BS	0.400
	15.00				**8MF1100-2HS**		1	1 unit	1BS	1.000
	Upgrade kit for earthquake reinforcement[1)]				**8MF1000-2HA**		1	1 unit	1BS	8.000
	Earthquake supplementary kit[1)] **for swing frame**				**8MF1000-2HE**		1	1 unit	1BS	6.000
	Earthquake supplementary kit[1)] **for in-depth offset mounting plate**				**8MF1000-2HW**		1	1 unit	1BS	0.500
	Heater plate				**8MF1000-2HG**		1	1 unit	1BS	1.000

[1)] see page 16/10, Configuration information

* You can order this quantity or a multiple thereof.

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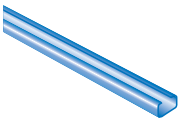
Accessories

	Height	Width	Depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm	mm							kg
	Cable clamping rails (1 m) for cubicle width									
	C30	600	--		8MF1360-2HH		1	1 unit	1BS	0.450
	C40				8MF1460-2HH		1	1 unit	1BS	0.900
	C50				8MF1560-2HH		1	1 unit	1BS	1.750
	C30	800	--		8MF1380-2HH		1	1 unit	1BS	0.600
	C40				8MF1480-2HH		1	1 unit	1BS	1.250
	C50				8MF1580-2HH		1	1 unit	1BS	2.350
	C30	900	--		8MF1390-2HH		1	1 unit	1BS	0.900
	C40				8MF1490-2HH		1	1 unit	1BS	1.400
	C50				8MF1590-2HH		1	1 unit	1BS	2.600
	C30	1000	--		8MF1310-2HH		1	1 unit	1BS	0.800
	C40				8MF1410-2HH		1	1 unit	1BS	1.650
	C50				8MF1510-2HH		1	1 unit	1BS	2.950
	C30	1200	--		8MF1320-2HH		1	1 unit	1BS	0.900
	C40				8MF1420-2HH		1	1 unit	1BS	1.900
	C50				8MF1520-2HH		1	1 unit	1BS	3.500
	Cable clamping rails (1 m) for cubicle depth									
 NSE0_01320	C30		400		8MF1304-2HH		1	1 unit	1BS	0.400
	C40				8MF1404-2HH		1	1 unit	1BS	0.750
	C50				8MF1504-2HH		1	1 unit	1BS	1.300
	C30		600		8MF1306-2HH		1	1 unit	1BS	0.550
	C40				8MF1406-2HH		1	1 unit	1BS	1.050
	C50				8MF1506-2HH		1	1 unit	1BS	1.900
	C30		800		8MF1308-2HH		1	1 unit	1BS	0.700
	C40				8MF1408-2HH		1	1 unit	1BS	1.400
	C50				8MF1508-2HH		1	1 unit	1BS	2.500
	C30		1000		8MF1301-2HH		1	1 unit	1BS	0.850
	C40				8MF1401-2HH		1	1 unit	1BS	0.750
	C50				8MF1501-2HH		1	1 unit	1BS	3.100

* You can order this quantity or a multiple thereof.

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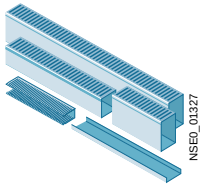
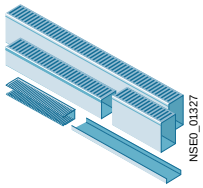
	Height	Width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm							kg
Cable ducts, plastic									
	**Standard**								
	37.5	25		8MF1120-2HL6		1	1 unit	1BS	0.300
	50	25		8MF1220-2HL6		1	1 unit	1BS	0.320
	50	37.5		8MF1240-2HL6		1	1 unit	1BS	0.330
	50	50		8MF1250-2HL6		1	1 unit	1BS	0.350
	75	50		8MF1350-2HL6		1	1 unit	1BS	0.450
	50	75		8MF1260-2HL6		1	1 unit	1BS	0.650
	75	75		8MF1360-2HL6		1	1 unit	1BS	0.500
	75	100		8MF1370-2HL6		1	1 unit	1BS	0.750
	75	125		8MF1380-2HL6		1	1 unit	1BS	0.900
	100	75		8MF1460-2HL6		1	1 unit	1BS	0.750
	**Halogen-free**								
	37.5	25		8MF1120-2HL7		1	1 unit	1BS	0.300
	50	25		8MF1220-2HL7		1	1 unit	1BS	0.320
	50	37.5		8MF1240-2HL7		1	1 unit	1BS	0.330
	50	50		8MF1250-2HL7		1	1 unit	1BS	0.350
	75	50		8MF1350-2HL7		1	1 unit	1BS	0.450
	50	75		8MF1260-2HL7		1	1 unit	1BS	0.650
	75	75		8MF1360-2HL7		1	1 unit	1BS	0.500
	75	100		8MF1370-2HL7		1	1 unit	1BS	0.750
	75	125		8MF1380-2HL7		1	1 unit	1BS	0.900
	100	75		8MF1460-2HL7		1	1 unit	1BS	0.900
Grounding									
	Rail 30 x 5								
	600	--		8MF1060-2HD1		1	1 unit	1BS	0.800
	800	--		8MF1080-2HD1		1	1 unit	1BS	1.100
	900	--		8MF1090-2HD1		1	1 unit	1BS	1.200
	1000	--		8MF1000-2HD1		1	1 unit	1BS	1.300
	1200	--		8MF1020-2HD1		1	1 unit	1BS	1.600
	Rail 30 x 10								
	600	--		8MF1060-2HD2		1	1 unit	1BS	1.600
	800	--		8MF1080-2HD2		1	1 unit	1BS	2.150
	900	--		8MF1090-2HD2		1	1 unit	1BS	2.400
	1000	--		8MF1000-2HD2		1	1 unit	1BS	2.670
	1200	--		8MF1020-2HD2		1	1 unit	1BS	3.200
	Grounding cable 6 mm^2 for door Included with all door variants; can be ordered individually as a spare part			8MF1010-2HD3		1	1 unit	1BS	0.100
	MTS grounding plates 8MF1			8MF1000-2HK		1	1 unit	1BS	0.150
	MTS ground terminal screws M12			8MF1000-2HB		1	1 unit	1BS	0.100

*** You can order this quantity or a multiple thereof.**

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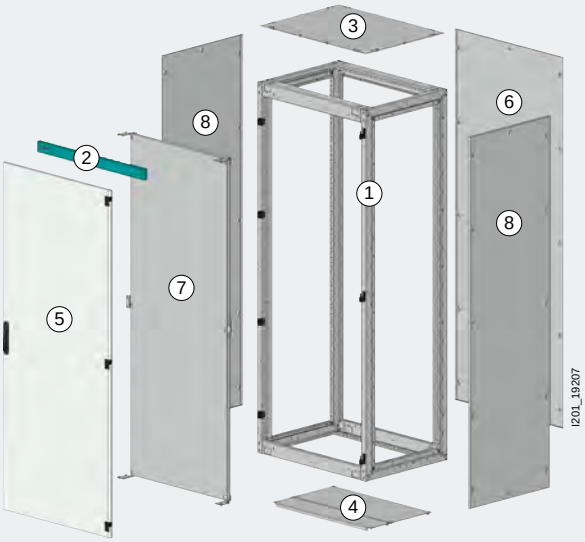
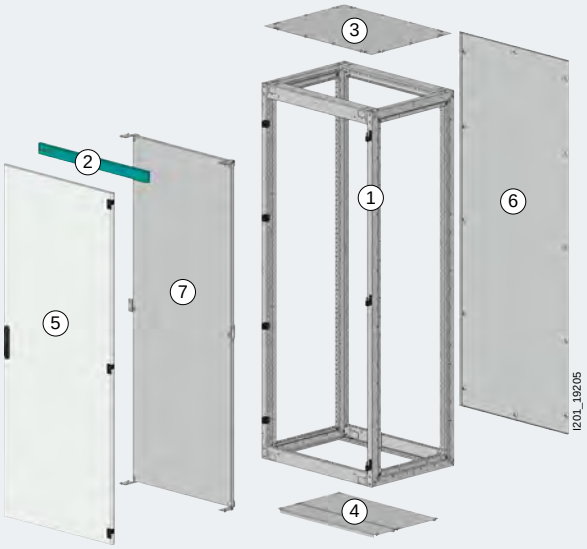
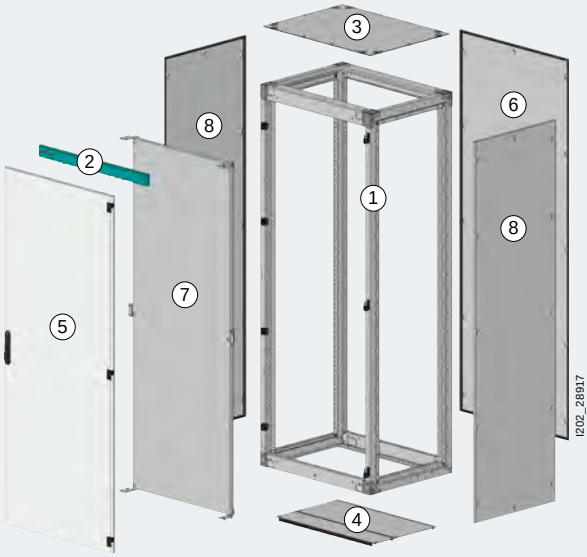
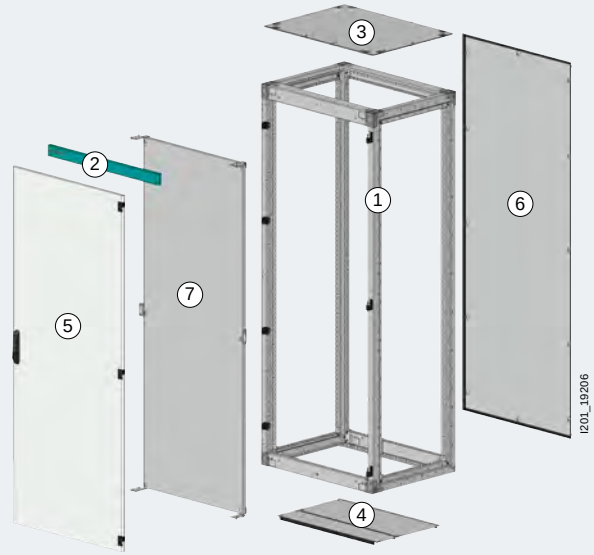
Overview

	Stand-alone installation (with side panels)	Suite installation (without side panels)
Basic cubicle, IP40	 ① Frame ② Trim strip ③ Roof plate, IP40 ④ Base, split IP30 ⑤ Door, IP55[1)] ⑥ Rear panel, IP40 ⑦ Smooth mounting plate ⑧ Side panels, IP40	 ① Frame ② Trim strip ③ Roof plate closed IP40 ④ Base, split IP30 ⑤ Door, IP55[1)] ⑥ Rear panel, IP40 ⑦ Smooth mounting plate
Basic cubicle, IP55	 ① Frame ② Trim strip ③ Roof plate, IP55 ④ Base, IP55 ⑤ Door, IP55[1)] ⑥ Rear panel, IP55 ⑦ Smooth mounting plate ⑧ Side panels, IP55	 ① Frame ② Trim strip ③ Roof plate, IP55 ④ Base, IP55 ⑤ Door, IP55[1)] ⑥ Rear panel, IP55 ⑦ Smooth mounting plate

[1)] From a width of 900 mm, the cubicles are designed with symmetrically split double doors.

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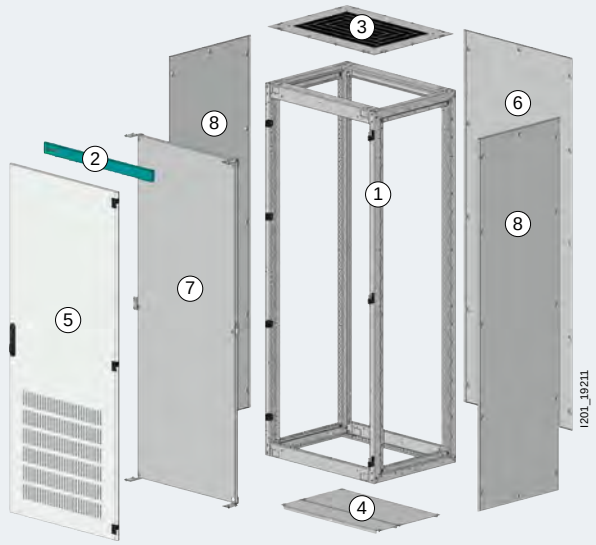
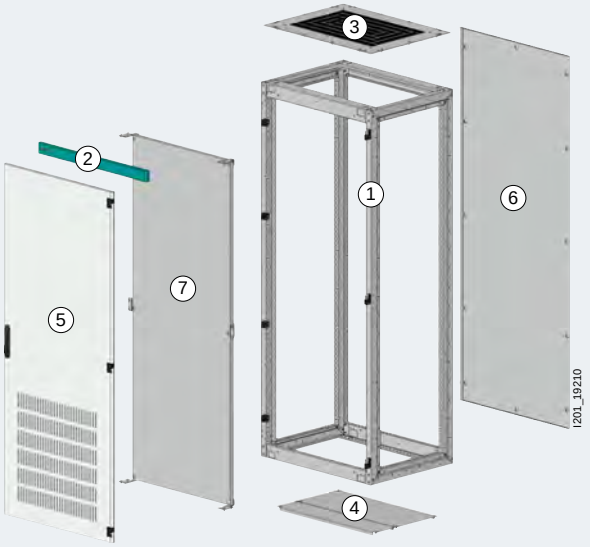
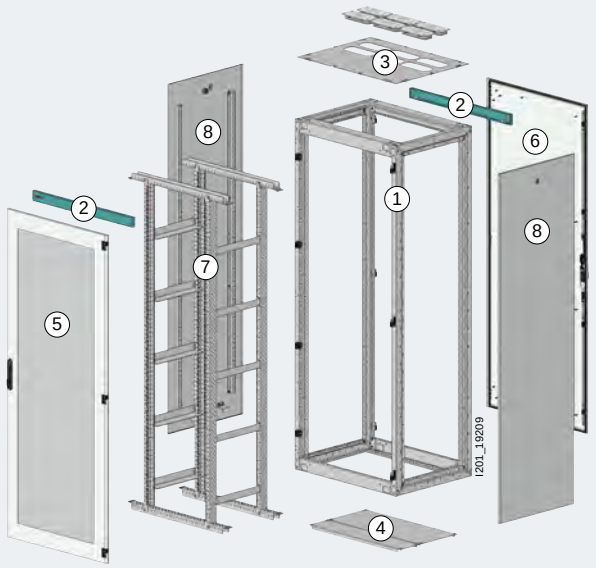
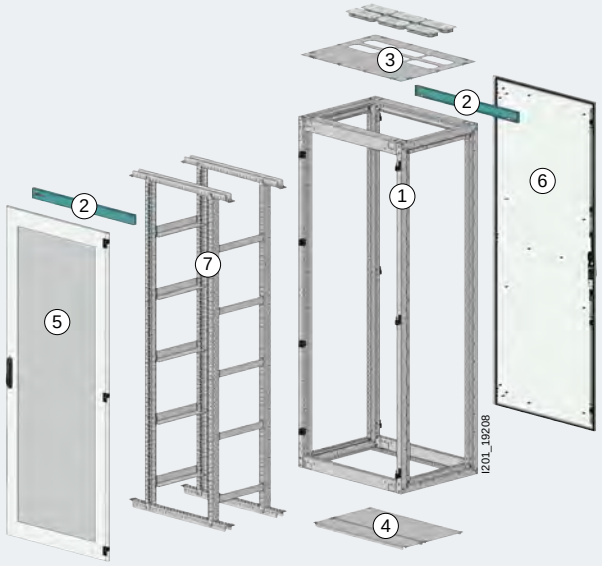
	Stand-alone installation (with side panels)	Suite installation (without side panels)
Ventilated cubicles, IP20	 ① Frame ② Trim strip ③ Roof with ventilation fins, IP40 ④ Base, split IP30 ⑤ Door with ventilation slits, IP20[1)] ⑥ Rear panel, IP40 ⑦ Smooth mounting plate ⑧ Side panels, IP40	 ① Frame ② Trim strip ③ Roof with ventilation fins, IP40 ④ Base, split IP30 ⑤ Door with ventilation slits, IP20[1)] ⑥ Rear panel, IP40 ⑦ Smooth mounting plate
Data cubicles, IP40	 ① Frame ② Trim strip ③ Roof plate with flange ④ Base, split IP30 ⑤ Door with safety glass insert, IP55[1)] ⑥ Door, IP55[1)] ⑦ 19" fixed-mounted ⑧ Side panels can be terminated with 19" rails	 ① Frame ② Trim strip ③ Roof plate with flange ④ Base, split IP30 ⑤ Door with safety glass insert, IP55[1)] ⑥ Door, IP55[1)] ⑦ 19" fixed-mounted

[1)] From a width of 900 mm, the cubicles are designed with symmetrically split double doors.

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General data

Application

Typical areas of application

- Power station control systems
- Converters
- Transport
- Cubicles in industry

Technical specifications

Degree of protection	Basic cubicle IP40	Basic cubicle IP55	Ventilated cubicle IP20	Data cubicle IP40
Standards	IEC 62208, IEC 61439-1			
Safety class	I			
Dimensions				
• Height mm	2000 / 2200			2000
• Width mm	600 / 800 / 900 / 1000 / 1200			600
• Depth mm	400 / 600 / 800 / 1000			

[1] **Tests in compliance with IEC 61439:**
- Corrosion resistance
- Heat stability
- Resistance to extraordinary heat and fire
- Raising
- Impact test
- Degree of protection of enclosures
- Continuity of PE conductor connection
- Proof of power loss dissipation capacity

	Material	Surface
Frame		
• Frame	2.5 mm sheet steel	Sendzimir-galvanized
• Base	1.5 mm sheet steel	Powder-coated, RAL 7035
• Trim strips	2.5 mm sheet steel	Powder-coated, petrol
Enclosure		
• Base	2.0 mm sheet steel	Sendzimir-galvanized
• Roof	1.5 mm sheet steel	Sendzimir-galvanized
• Side/rear panel	1.5 mm sheet steel	Powder-coated, RAL 7035
• Intermediate panel	2.5 mm sheet steel	Sendzimir-galvanized
• Door	1.5 mm sheet steel	Powder-coated, RAL 7035
Expansion		
• Rear mounting panel	2.5 mm sheet steel	Sendzimir-galvanized
• 19" versions	2.5 mm sheet steel	Powder-coated, RAL 7035
	--	Sendzimir-galvanized

Design

Parts list		Basic cubicle IP40		IP55		Ventilated cubicle IP20		Data cubicle IP40	
		☐	☐☐☐☐	☐	☐☐☐☐	☐	☐☐☐☐	☐	☐☐☐☐
Frame									
• Frame		✓	✓	✓	✓	✓	✓	✓	✓
• Trim strip with Siemens logo		✓	✓	✓	✓	✓	✓	✓	✓
Enclosure									
• Base	Closed, IP55	--	--	✓	✓	--	--	--	--
	Split, IP40	✓	✓	--	--	✓	✓	✓	✓
• Roof	Closed, IP40	✓	✓	--	--	--	--	--	--
	Closed, IP55	--	--	✓	✓	--	--	--	--
	With flange	--	--	--	--	--	--	✓	✓
	With ventilation fins	--	--	--	--	✓	✓	--	--
• Door	Closed, IP55	✓	✓	✓	✓	--	--	✓	✓
	Ventilated, IP20	--	--	--	--	✓	✓	--	--
	With glass insert, IP55	--	--	--	--	--	--	✓	✓
• Rear panel	Smooth, IP40	✓	✓	--	--	✓	✓	--	--
	Smooth, IP55	--	--	✓	✓	--	--	--	--
• Side panel	Smooth, IP40	✓	--	--	--	✓	--	✓	--
	Smooth, IP55	--	--	✓	--	--	--	--	--
Expansion									
• Rear smooth mounting panel		✓	✓	✓	✓	✓	✓	--	--
• 19" fixed-mounted		--	--	--	--	--	--	✓	✓

✓ Available or possible
-- Not available or not possible

☐ Stand-alone installation

☐☐☐☐ Suite installation

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Selection and ordering data

Height	Width	Depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
mm	mm	mm							kg
Stand-alone installation (with side panels)									
2000	600	400		8MF1064-3BS4		1	1 unit	1BS	120.770
		600		8MF1066-3BS4		1	1 unit	1BS	136.770
		800		8MF1068-3BS4		1	1 unit	1BS	153.170
		1000		8MF1060-3BS4		1	1 unit	1BS	169.070
	800	400		8MF1084-3BS4		1	1 unit	1BS	143.190
		600		8MF1086-3BS4		1	1 unit	1BS	160.290
		800		8MF1088-3BS4		1	1 unit	1BS	177.690
		1000		8MF1080-3BS4		1	1 unit	1BS	194.690
	900	400		8MF1094-3BS4		1	1 unit	1BS	157.560
		600		8MF1096-3BS4		1	1 unit	1BS	174.360
		800		8MF1098-3BS4		1	1 unit	1BS	193.560
		1000		8MF1090-3BS4		1	1 unit	1BS	211.260
	1000	400		8MF1004-3BS4		1	1 unit	1BS	166.320
		600		8MF1006-3BS4		1	1 unit	1BS	184.820
		800		8MF1008-3BS4		1	1 unit	1BS	204.220
		1000		8MF1000-3BS4		1	1 unit	1BS	223.320
	1200	400		8MF1024-3BS4		1	1 unit	1BS	188.940
		600		8MF1026-3BS4		1	1 unit	1BS	206.740
		800		8MF1028-3BS4		1	1 unit	1BS	225.540
		1000		8MF1020-3BS4		1	1 unit	1BS	243.940
2200	600	400		8MF1264-3BS4		1	1 unit	1BS	131.360
		600		8MF1266-3BS4		1	1 unit	1BS	147.360
		800		8MF1268-3BS4		1	1 unit	1BS	164.760
		1000		8MF1260-3BS4		1	1 unit	1BS	181.660
	800	400		8MF1284-3BS4		1	1 unit	1BS	155.480
		600		8MF1286-3BS4		1	1 unit	1BS	173.580
		800		8MF1288-3BS4		1	1 unit	1BS	190.980
		1000		8MF1280-3BS4		1	1 unit	1BS	208.980
	900	400		8MF1294-3BS4		1	1 unit	1BS	169.940
		600		8MF1296-3BS4		1	1 unit	1BS	188.740
		800		8MF1298-3BS4		1	1 unit	1BS	208.940
		1000		8MF1290-3BS4		1	1 unit	1BS	227.640
	1000	400		8MF1204-3BS4		1	1 unit	1BS	177.800
		600		8MF1206-3BS4		1	1 unit	1BS	196.300
		800		8MF1208-3BS4		1	1 unit	1BS	216.700
		1000		8MF1200-3BS4		1	1 unit	1BS	236.800
	1200	400		8MF1224-3BS4		1	1 unit	1BS	205.120
		600		8MF1226-3BS4		1	1 unit	1BS	222.920
		800		8MF1228-3BS4		1	1 unit	1BS	242.720
		1000		8MF1220-3BS4		1	1 unit	1BS	262.120

* You can order this quantity or a multiple thereof.

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Basic cubicles, IP40

Height	Width	Depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
mm	mm	mm							kg
Suite installation (without side panels)									
2000	600	400		8MF1064-3BR4		1	1 unit	1BS	100.770
		600		8MF1066-3BR4		1	1 unit	1BS	106.970
		800		8MF1068-3BR4		1	1 unit	1BS	113.370
		1000		8MF1060-3BR4		1	1 unit	1BS	119.270
	800	400		8MF1084-3BR4		1	1 unit	1BS	123.190
		600		8MF1086-3BR4		1	1 unit	1BS	130.490
		800		8MF1088-3BR4		1	1 unit	1BS	137.890
		1000		8MF1080-3BR4		1	1 unit	1BS	144.890
	900	400		8MF1094-3BR4		1	1 unit	1BS	137.560
		600		8MF1096-3BR4		1	1 unit	1BS	144.560
		800		8MF1098-3BR4		1	1 unit	1BS	153.760
		1000		8MF1090-3BR4		1	1 unit	1BS	161.460
	1000	400		8MF1004-3BR4		1	1 unit	1BS	146.320
		600		8MF1006-3BR4		1	1 unit	1BS	155.020
		800		8MF1008-3BR4		1	1 unit	1BS	164.420
		1000		8MF1000-3BR4		1	1 unit	1BS	173.520
	1200	400		8MF1024-3BR4		1	1 unit	1BS	168.940
		600		8MF1026-3BR4		1	1 unit	1BS	176.940
		800		8MF1028-3BR4		1	1 unit	1BS	185.740
		1000		8MF1020-3BR4		1	1 unit	1BS	194.140
2200	600	400		8MF1264-3BR4		1	1 unit	1BS	109.360
		600		8MF1266-3BR4		1	1 unit	1BS	114.560
		800		8MF1268-3BR4		1	1 unit	1BS	120.960
		1000		8MF1260-3BR4		1	1 unit	1BS	126.860
	800	400		8MF1284-3BR4		1	1 unit	1BS	133.480
		600		8MF1286-3BR4		1	1 unit	1BS	140.780
		800		8MF1288-3BR4		1	1 unit	1BS	147.180
		1000		8MF1280-3BR4		1	1 unit	1BS	154.180
	900	400		8MF1294-3BR4		1	1 unit	1BS	147.940
		600		8MF1296-3BR4		1	1 unit	1BS	155.940
		800		8MF1298-3BR4		1	1 unit	1BS	165.140
		1000		8MF1290-3BR4		1	1 unit	1BS	172.840
	1000	400		8MF1204-3BR4		1	1 unit	1BS	155.800
		600		8MF1206-3BR4		1	1 unit	1BS	163.500
		800		8MF1208-3BR4		1	1 unit	1BS	172.900
		1000		8MF1200-3BR4		1	1 unit	1BS	182.000
	1200	400		8MF1224-3BR4		1	1 unit	1BS	183.120
		600		8MF1226-3BR4		1	1 unit	1BS	190.120
		800		8MF1228-3BR4		1	1 unit	1BS	198.920
		1000		8MF1220-3BR4		1	1 unit	1BS	207.320

* You can order this quantity or a multiple thereof.

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Selection and ordering data

Height	Width	Depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
mm	mm	mm							kg
Stand-alone installation (with side panels)									
2000	600	400		8MF1064-3BS5		1	1 unit	1BS	120.870
		600		8MF1066-3BS5		1	1 unit	1BS	136.870
		800		8MF1068-3BS5		1	1 unit	1BS	153.270
		1000		8MF1060-3BS5		1	1 unit	1BS	169.170
	800	400		8MF1084-3BS5		1	1 unit	1BS	143.290
		600		8MF1086-3BS5		1	1 unit	1BS	160.390
		800		8MF1088-3BS5		1	1 unit	1BS	177.790
		1000		8MF1080-3BS5		1	1 unit	1BS	194.790
	900	400		8MF1094-3BS5		1	1 unit	1BS	157.660
		600		8MF1096-3BS5		1	1 unit	1BS	174.460
		800		8MF1098-3BS5		1	1 unit	1BS	193.660
		1000		8MF1090-3BS5		1	1 unit	1BS	211.360
	1000	400		8MF1004-3BS5		1	1 unit	1BS	166.420
		600		8MF1006-3BS5		1	1 unit	1BS	184.920
		800		8MF1008-3BS5		1	1 unit	1BS	204.320
		1000		8MF1000-3BS5		1	1 unit	1BS	223.420
	1200	400		8MF1024-3BS5		1	1 unit	1BS	189.040
		600		8MF1026-3BS5		1	1 unit	1BS	206.840
		800		8MF1028-3BS5		1	1 unit	1BS	225.640
		1000		8MF1020-3BS5		1	1 unit	1BS	244.040
2200	600	400		8MF1264-3BS5		1	1 unit	1BS	131.460
		600		8MF1266-3BS5		1	1 unit	1BS	147.460
		800		8MF1268-3BS5		1	1 unit	1BS	164.860
		1000		8MF1260-3BS5		1	1 unit	1BS	181.760
	800	400		8MF1284-3BS5		1	1 unit	1BS	155.580
		600		8MF1286-3BS5		1	1 unit	1BS	173.680
		800		8MF1288-3BS5		1	1 unit	1BS	191.080
		1000		8MF1280-3BS5		1	1 unit	1BS	209.080
	900	400		8MF1294-3BS5		1	1 unit	1BS	170.040
		600		8MF1296-3BS5		1	1 unit	1BS	188.840
		800		8MF1298-3BS5		1	1 unit	1BS	209.040
		1000		8MF1290-3BS5		1	1 unit	1BS	227.740
	1000	400		8MF1204-3BS5		1	1 unit	1BS	177.900
		600		8MF1206-3BS5		1	1 unit	1BS	196.400
		800		8MF1208-3BS5		1	1 unit	1BS	216.800
		1000		8MF1200-3BS5		1	1 unit	1BS	236.900
	1200	400		8MF1224-3BS5		1	1 unit	1BS	205.220
		600		8MF1226-3BS5		1	1 unit	1BS	223.020
		800		8MF1228-3BS5		1	1 unit	1BS	242.820
		1000		8MF1220-3BS5		1	1 unit	1BS	262.220

* You can order this quantity or a multiple thereof.

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Basic cubicles, IP55

Height	Width	Depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
mm	mm	mm							kg
Suite installation (without side panels)									
2000	600	400		8MF1064-3BR5		1	1 unit	1BS	100.870
		600		8MF1066-3BR5		1	1 unit	1BS	107.070
		800		8MF1068-3BR5		1	1 unit	1BS	113.470
		1000		8MF1060-3BR5		1	1 unit	1BS	119.370
	800	400		8MF1084-3BR5		1	1 unit	1BS	123.290
		600		8MF1086-3BR5		1	1 unit	1BS	130.590
		800		8MF1088-3BR5		1	1 unit	1BS	137.990
		1000		8MF1080-3BR5		1	1 unit	1BS	144.990
	900	400		8MF1094-3BR5		1	1 unit	1BS	137.660
		600		8MF1096-3BR5		1	1 unit	1BS	144.660
		800		8MF1098-3BR5		1	1 unit	1BS	153.860
		1000		8MF1090-3BR5		1	1 unit	1BS	161.560
	1000	400		8MF1004-3BR5		1	1 unit	1BS	146.420
		600		8MF1006-3BR5		1	1 unit	1BS	155.120
		800		8MF1008-3BR5		1	1 unit	1BS	164.520
		1000		8MF1000-3BR5		1	1 unit	1BS	173.620
	1200	400		8MF1024-3BR5		1	1 unit	1BS	169.040
		600		8MF1026-3BR5		1	1 unit	1BS	177.040
		800		8MF1028-3BR5		1	1 unit	1BS	185.840
		1000		8MF1020-3BR5		1	1 unit	1BS	194.240
2200	600	400		8MF1264-3BR5		1	1 unit	1BS	109.460
		600		8MF1266-3BR5		1	1 unit	1BS	114.660
		800		8MF1268-3BR5		1	1 unit	1BS	121.060
		1000		8MF1260-3BR5		1	1 unit	1BS	126.960
	800	400		8MF1284-3BR5		1	1 unit	1BS	133.580
		600		8MF1286-3BR5		1	1 unit	1BS	140.880
		800		8MF1288-3BR5		1	1 unit	1BS	147.280
		1000		8MF1280-3BR5		1	1 unit	1BS	154.280
	900	400		8MF1294-3BR5		1	1 unit	1BS	148.040
		600		8MF1296-3BR5		1	1 unit	1BS	156.040
		800		8MF1298-3BR5		1	1 unit	1BS	165.240
		1000		8MF1290-3BR5		1	1 unit	1BS	172.940
	1000	400		8MF1204-3BR5		1	1 unit	1BS	155.900
		600		8MF1206-3BR5		1	1 unit	1BS	163.600
		800		8MF1208-3BR5		1	1 unit	1BS	173.000
		1000		8MF1200-3BR5		1	1 unit	1BS	182.100
	1200	400		8MF1224-3BR5		1	1 unit	1BS	183.220
		600		8MF1226-3BR5		1	1 unit	1BS	190.220
		800		8MF1228-3BR5		1	1 unit	1BS	199.020
		1000		8MF1220-3BR5		1	1 unit	1BS	207.420

* You can order this quantity or a multiple thereof.

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Selection and ordering data

Height	Width	Depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
mm	mm	mm							kg
Stand-alone installation (with side panels)									
2000	600	400		8MF1064-3VS4		1	1 unit	1BS	134.770
		600		8MF1066-3VS4		1	1 unit	1BS	150.770
		800		8MF1068-3VS4		1	1 unit	1BS	167.170
		1000		8MF1060-3VS4		1	1 unit	1BS	169.070
	800	400		8MF1084-3VS4		1	1 unit	1BS	143.190
		600		8MF1086-3VS4		1	1 unit	1BS	160.290
		800		8MF1088-3VS4		1	1 unit	1BS	177.690
		1000		8MF1080-3VS4		1	1 unit	1BS	194.690
	900	400		8MF1094-3VS4		1	1 unit	1BS	157.560
		600		8MF1096-3VS4		1	1 unit	1BS	174.360
		800		8MF1098-3VS4		1	1 unit	1BS	193.560
		1000		8MF1090-3VS4		1	1 unit	1BS	211.260
	1000	400		8MF1004-3VS4		1	1 unit	1BS	166.320
		600		8MF1006-3VS4		1	1 unit	1BS	184.820
		800		8MF1008-3VS4		1	1 unit	1BS	204.220
		1000		8MF1000-3VS4		1	1 unit	1BS	223.320
	1200	400		8MF1024-3VS4		1	1 unit	1BS	188.940
		600		8MF1026-3VS4		1	1 unit	1BS	206.740
		800		8MF1028-3VS4		1	1 unit	1BS	225.540
		1000		8MF1020-3VS4		1	1 unit	1BS	243.940
2200	600	400		8MF1264-3VS4		1	1 unit	1BS	131.360
		600		8MF1266-3VS4		1	1 unit	1BS	147.360
		800		8MF1268-3VS4		1	1 unit	1BS	164.760
		1000		8MF1260-3VS4		1	1 unit	1BS	181.660
	800	400		8MF1284-3VS4		1	1 unit	1BS	155.480
		600		8MF1286-3VS4		1	1 unit	1BS	173.580
		800		8MF1288-3VS4		1	1 unit	1BS	190.980
		1000		8MF1280-3VS4		1	1 unit	1BS	208.980
	900	400		8MF1294-3VS4		1	1 unit	1BS	169.940
		600		8MF1296-3VS4		1	1 unit	1BS	188.740
		800		8MF1298-3VS4		1	1 unit	1BS	208.940
		1000		8MF1290-3VS4		1	1 unit	1BS	227.640
	1000	400		8MF1204-3VS4		1	1 unit	1BS	177.800
		600		8MF1206-3VS4		1	1 unit	1BS	196.300
		800		8MF1208-3VS4		1	1 unit	1BS	216.700
		1000		8MF1200-3VS4		1	1 unit	1BS	236.800
	1200	400		8MF1224-3VS4		1	1 unit	1BS	205.120
		600		8MF1226-3VS4		1	1 unit	1BS	222.920
		800		8MF1228-3VS4		1	1 unit	1BS	242.720
		1000		8MF1220-3VS4		1	1 unit	1BS	262.120

* You can order this quantity or a multiple thereof.

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Ventilated cubicles, IP20

Suite installation (without side panels)

Height	Width	Depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
mm	mm	mm							kg
2000	600	400		8MF1064-3VR4		1	1 unit	1BS	100.770
		600		8MF1066-3VR4		1	1 unit	1BS	106.970
		800		8MF1068-3VR4		1	1 unit	1BS	113.370
		1000		8MF1060-3VR4		1	1 unit	1BS	119.270
	800	400		8MF1084-3VR4		1	1 unit	1BS	123.190
		600		8MF1086-3VR4		1	1 unit	1BS	130.490
		800		8MF1088-3VR4		1	1 unit	1BS	137.890
		1000		8MF1080-3VR4		1	1 unit	1BS	144.890
	900	400		8MF1094-3VR4		1	1 unit	1BS	137.560
		600		8MF1096-3VR4		1	1 unit	1BS	144.560
		800		8MF1098-3VR4		1	1 unit	1BS	153.760
		1000		8MF1090-3VR4		1	1 unit	1BS	161.460
	1000	400		8MF1004-3VR4		1	1 unit	1BS	146.320
		600		8MF1006-3VR4		1	1 unit	1BS	155.020
		800		8MF1008-3VR4		1	1 unit	1BS	164.420
		1000		8MF1000-3VR4		1	1 unit	1BS	173.520
	1200	400		8MF1024-3VR4		1	1 unit	1BS	168.940
		600		8MF1026-3VR4		1	1 unit	1BS	176.940
		800		8MF1028-3VR4		1	1 unit	1BS	185.740
		1000		8MF1020-3VR4		1	1 unit	1BS	194.140
2200	600	400		8MF1264-3VR4		1	1 unit	1BS	109.360
		600		8MF1266-3VR4		1	1 unit	1BS	114.560
		800		8MF1268-3VR4		1	1 unit	1BS	120.960
		1000		8MF1260-3VR4		1	1 unit	1BS	126.860
	800	400		8MF1284-3VR4		1	1 unit	1BS	133.480
		600		8MF1286-3VR4		1	1 unit	1BS	140.780
		800		8MF1288-3VR4		1	1 unit	1BS	147.180
		1000		8MF1280-3VR4		1	1 unit	1BS	154.180
	900	400		8MF1294-3VR4		1	1 unit	1BS	147.940
		600		8MF1296-3VR4		1	1 unit	1BS	155.940
		800		8MF1298-3VR4		1	1 unit	1BS	165.140
		1000		8MF1290-3VR4		1	1 unit	1BS	172.840
	1000	400		8MF1204-3VR4		1	1 unit	1BS	155.800
		600		8MF1206-3VR4		1	1 unit	1BS	163.500
		800		8MF1208-3VR4		1	1 unit	1BS	172.900
		1000		8MF1200-3VR4		1	1 unit	1BS	182.000
	1200	400		8MF1224-3VR4		1	1 unit	1BS	183.120
		600		8MF1226-3VR4		1	1 unit	1BS	190.120
		800		8MF1228-3VR4		1	1 unit	1BS	198.920
		1000		8MF1220-3VR4		1	1 unit	1BS	207.320

* You can order this quantity or a multiple thereof.

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Selection and ordering data

	Height	Width	Depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm	mm							kg
Stand-alone installation (with side panels)										
	2000	600	800		**8MF1068-3DS4**		1	1 unit	1BS	171.000
		800	600		**8MF1086-3DS4**		1	1 unit	1BS	173.000
			800		**8MF1088-3DS4**		1	1 unit	1BS	195.000
			1000		**8MF1080-3DS4**		1	1 unit	1BS	217.000
Suite installation (without side panels)										
	2200	600	800		**8MF1068-3DR4**		1	1 unit	1BS	140.000
		800	600		**8MF1086-3DR4**		1	1 unit	1BS	143.000
			800		**8MF1088-3DR4**		1	1 unit	1BS	156.000
			1000		**8MF1080-3DR4**		1	1 unit	1BS	168.000

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* You can order this quantity or a multiple thereof.

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More information

The same accessories can be used for the complete cubicles as for the individually configurable cubicles.

Specifically, these are:

- Frame accessories, see page 16/13
- Enclosure accessories, see page 16/27
- Rails, see page 16/34
- 19" fixed-mounted, see page 16/35
- Expansion accessories, see page 16/37

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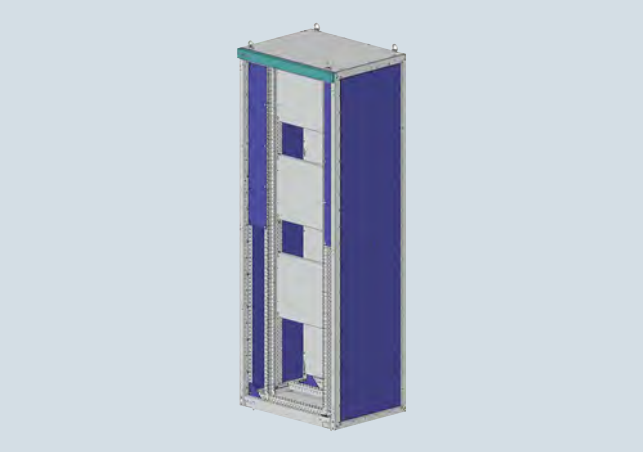
Overview



Complete earthquake-reinforced cubicle

Earthquake-reinforced cubicles can also be ordered as complete preconfigured cubicles.

Elements for boosting stability are already permanently installed in them.

For further information on earthquake preparation and testing, see page 16/8.

Earthquake-reinforced cubicles are available in the following sizes:

- 2200 mm high, 600 mm wide, 600 mm deep
- 2200 mm high, 800 mm wide, 600 mm deep

Further sizes and expansion variants are available on request.

Selection and ordering data

	Height	Width	Depth	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm	mm							kg
Complete earthquake-prepared cubicles										
	With stability-boosting elements									
	2200	600	600		**8MF1266-3ES5**		1	1 unit	1BS	200.000
	2200	800	600		**8MF1286-3ES5**		1	1 unit	1BS	265.000

*** You can order this quantity or a multiple thereof.**

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Compact/ slimline lights

Overview

Slimline light with motion detector

Cubicle lighting

The cubicle light is specifically suitable for operation in switchgear and controlgear cubicles.

In the case of lights with a SCHUKO socket outlet, the outlet is incorporated with an On/Off switch or motion detector in the plastic enclosure.

The flat slimline light with motion detector or On/Off switch is ideal for operation in cubicles and enclosures with a high density of built-in electrical/electronic components.

All lamps are fitted with environmentally friendly energy-saving lamps.

Rating of energy-saving lamps	Rating of conventional incandescent lamps
9 W	60 W
11 W	75 W
20 W	100 W

Spare lamp: Osram SPD1411-2B (100 W)

Socket outlets

Socket outlets are mounted on 35 mm support rails and connected without screws by way of three clamping terminals (for stranded and solid wires 0.5 ... 2.5 mm^2).

The maximum operational voltage is 250 V. The enclosure is light-gray UL94 V-Q plastic.

The slimline light is also available with country-specific socket outlets.

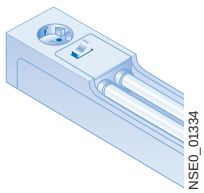
Plug-on mounts

If a cubicle light is provided with a plug-on mount, it remains immune to vibration and can be removed at any later time without tools.

If fitted between two plug-on mounts, the cubicle light is fixed statically to the cubicle frame. The cubicle light can only be fitted to the cubicle frame by using plug-on mounts.

Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Cubicle lighting								
	Compact lights (355 x 65 x 70 mm)							
	Without cover							
	• 230 V, 50 Hz, 11 W (Germany)		8MF4900		1	1 unit	1DS	1.040
	• 120 V, 60 Hz, 9 W (Germany)		8MF4901		1	1 unit	1DS	1.039
	• 240 V, 50 Hz, 11 W		8MF4900-1A		1	1 unit	1DS	1.052
	With cover							
	• 230 V, 50 Hz, 11 W		8MF4904		1	1 unit	1DS	1.077
	With 3 m cable							
	• 230 V, 50 Hz, 11 W		8MF4900-1B		1	1 unit	1DS	1.387
	With 3 m cable (orange-colored)							
	• 230 V, 50 Hz, 11 W		8MF4900-1BB		1	1 unit	1DS	1.365
	Spare parts for compact lights							
	• Spare lights 230V		8MR2023-0KL25		1	5 units	1DS	0.043
	• Spare lights 120V		8MR2012-0KL25		1	5 units	1DS	0.040
	• Covers		8MF4908		1	10 units	1DS	0.039
	Slimline lights (345 x 91 x 40 mm)							
	230 V, 50/60 Hz, 11 W **With pushbutton (On/Off)**							
	• With socket outlet D, without magnet		8MF5900-1A		1	1 unit	1DS	0.466
	• With socket outlet D, with magnet (approx. 50 N)		8MF5900		1	1 unit	1DS	0.673
	• With socket outlet D, with magnet (approx. 30 N)		8MF5900-1C		1	1 unit	1DS	0.536
	• Without socket outlet, without magnet		8MF5900-2A		1	1 unit	1DS	0.433
	• Without socket outlet D, with magnet (approx. 50 N)		8MF5900-1B		1	1 unit	1DS	0.641
	• Without socket outlet D, with magnet (approx. 30 N)		8MF5900-2B		1	1 unit	1DS	0.500



8MF4900

8MF5900-1A

* You can order this quantity or a multiple thereof.

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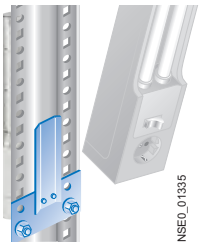
	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
8MF5910-1A	**230 V, 50/60 Hz, 11 W With motion detector**							
	• With socket outlet D, without magnet		**8MF5910-1A**		1	1 unit	1DS	0.400
	• With socket outlet D, with magnet (approx. 50 N)		**8MF5910**		1	1 unit	1DS	0.689
	• With socket outlet D, with magnet (approx. 30 N)		**8MF5910-1C**		1	1 unit	1DS	0.500
	• Without socket outlet, without magnet		**8MF5910-2A**		1	1 unit	1DS	0.456
	• Without socket outlet D, with magnet (approx. 50 N)		**8MF5910-1B**		1	1 unit	1DS	0.600
	• Without socket outlet D, with magnet (approx. 30 N)		**8MF5910-2B**		1	1 unit	1DS	0.522
	24 ... 48 V DC, 11 W, With pushbutton (On/Off)							
	• Without socket outlet, without magnet		**8MF5900-3A**		1	1 unit	1DS	0.481
	• Without socket outlet, with magnet (approx. 30 N)		**8MF5900-3B**		1	1 unit	1DS	0.562
	24 ... 48 V DC, 11 W, With motion detector							
	• Without socket outlet, without magnet		**8MF5910-3A**		1	1 unit	1DS	0.500
	• Without socket outlet, with magnet (approx. 30 N)		**8MF5910-3B**		1	1 unit	1DS	0.500
Socket outlets								
	Socket outlets with fuse							
	• VDE		**8MF9300**		1	3 units	1EA	0.167
	• CEBEC		**8MF9301**		1	3 units	1DS	0.142
	Socket outlets without fuse							
	• VDE		**8MF9305**		1	1 unit	1DS	0.134
Plug-on mounts								
 8MF4903	**Plug-on mount**							
	• For fitting the compact lights		**8MF4903**		1	3 units	1DS	0.100
Position switches								
	Position switch for mounting as door contact							
	• 1 NO + 1 NC		**8MF1000-2VL**		1	1 unit	1BS	0.200
	• 1 NO + 2 NC		**8MF1000-2VR**		1	1 unit	1BS	0.200

More information

For more information, see Catalog LV 50 "SIVACON System Cubicles, System Lighting and System Air-Conditioning"

or in the Industry Mall under: "Low-Voltage Systems" --> "SIVACON Switchboards and Busbar Trunking Systems" > "System Cubicles, System Lighting and System Air-Conditioning" > "SIVACON 8MF/8MR System Lighting".

* You can order this quantity or a multiple thereof.

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LED lights

Overview

LED light with On/Off switch and magnetic fixing

The LED lights with On/Off switch are particularly suitable for operation in cubicles and enclosures with a high density of built-in electrical/electronic components.

Thanks to the use of LED technology, these lights have a very long useful life.

By means of magnetic fixing, they can be fastened anywhere in steel cubicles without installation effort.

A version with screw fixing is available as before.

Connection is made using a socket on the lamp (switch side). Another lamp can be connected using a connector (non-switch side). Up to 10 lights can be connected in series in this way.

Characteristics

		Technical specifications
Power consumption, max.	W	5 Light output corresponds to that of a 75 W incandescent lamp
Endurance		
• At 20 °C	h	60000
Connection		
• General		2-pin plug-in connection with lock
• AC version		Max. 2.5 A/240 V AC, color: White
• DC version		Max. 2.5 A/60 V DC, color: Blue
Dimensions		
Length	mm	351
Light diameter	mm	32
Mounting width		
• Light with magnetic fixing	mm	34
• Light with screw fixing	mm	52
Permissible ambient temperature		
• Operation	°C	-30 ... +60
• Storage	°C	-40 ... +85
Degree of protection		IP20
Safety class		II (protective insulation)

Note:

Delivery does not include plugs, sockets and cables for electrical connection. These must be ordered separately. See Accessories on next page.

Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
LED lights with pushbutton (On/Off)								
	Magnetic fixing							
8MR2200-1A	• 100 ... 240 V AC, 50 Hz/60 Hz		**8MR2200-1A**		1	1 unit	1DS	0.190
8MR2201-1A	• 24 ... 48 V DC		**8MR2201-1A**		1	1 unit	1DS	0.183
	Screw fixing							
8MR2200-1B	• 100 ... 240 V AC, 50 Hz/60 Hz		**8MR2200-1B**		1	1 unit	1DS	0.182
	• 24 ... 48 V DC		**8MR2201-1B**		1	1 unit	1DS	0.184

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Accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Individual plugs or sockets								
8MR2210-1A	**AC socket for input side, white** For connection of an LED light (switch side)		**8MR2210-1A**		1	10 units	1DS	0.010
	AC plug for output side, white For looping through to another LED light		**8MR2210-2A**		1	10 units	1DS	0.010
	DC socket for input side, blue For connection of an LED light (switch side)		**8MR2210-3A**		1	10 units	1DS	0.013
	DC plug for output side, blue For looping through to another LED light		**8MR2210-4A**		1	10 units	1DS	0.013
	Note: Plugs and sockets are also separately available for self-assembling cables that deviate from standard lengths.							
Cables								
8MR2210-1B	**Connecting cable with socket and open end, each 2 m long** For connection of a lamp (switch side)							
	• AC connecting cable 2 x 1.5 mm^2 with socket, VDE		**8MR2210-1B**		1	5 units	1DS	0.197
	• AC connecting cable AWG 16 with socket, UL		**8MR2210-2B**		1	5 units	1DS	0.225
	• DC connecting cable 2 x 1.5 mm^2 with socket, VDE		**8MR2210-3B**		1	5 units	1DS	0.195
	• DC connecting cable AWG 16 with socket, UL		**8MR2210-4B**		1	5 units	1DS	0.219
8MR2210-1C	**Extension cable for cascading, each 1 m long, with socket and plug** • AC light plastic-sheathed cable 2 x 1.5 mm^2 with socket and plug, VDE		**8MR2210-1C**		1	5 units	1DS	0.117
	• AC light plastic-sheathed cable AWG 16 with socket and plug, UL		**8MR2210-2C**		1	5 units	1DS	0.105
8MR2210-3C	• DC light plastic-sheathed cable 2 x 1.5 mm^2 with socket and plug, VDE		**8MR2210-3C**		1	5 units	1DS	0.105
	• DC light plastic-sheathed cable AWG 16 with socket and plug, UL		**8MR2210-4C**		1	5 units	1DS	0.105

More information

For more information, see Catalog LV 50 "SIVACON System Cubicles, System Lighting and System Air-Conditioning"

or in the Industry Mall under:
"Low-Voltage Systems" --> "SIVACON Switchboards and Busbar Trunking Systems" > "System Cubicles, System Lighting and System Air-Conditioning" > "SIVACON 8MF/8MR System Lighting".

* You can order this quantity or a multiple thereof.

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Overview

	Control supply voltage or voltage for switching capacity			
	24/48 V DC	115 V AC	230 V AC	400/440 V AC
8MR system air-conditioning				
Filter fans				
Standard filter fans, IP54 or IP55				
• With or without additional EMC protection	❍	✓	✓	--
• Cooling capacity 8 W/K ... 282 W/K	❍	✓	✓	--
• Air rate 25 m^3/h ... 845 m^3/h	❍	✓	✓	--
• Size 92 × 92 mm to 292 × 292 mm	❍	✓	✓	--
• Color RAL 7035 or RAL 7032	❍	✓	✓	--
Roof filter fans, IP44				
• Cooling capacity 113 W/K ... 242 W/K	--	✓	✓	--
• Air rate 350 m^3/h ... 690 m^3/h	--	✓	✓	--
• Size 430 × 430 mm to 470 × 470 mm	--	✓	✓	--
• Color RAL 7035 or RAL 7032	--	✓	✓	--
Air conditioners/cooling devices				
For door and side mounting (recessed)				
• 380 ... 5800 W	--	--	✓	✓
For roof mounting				
• 410 ... 3850 W	--	--	✓	✓
Heat exchangers				
Standard				
• Air/air (at ΔT = 20 K)	--	✓	✓	--
For side and door mounting				
• 700 ... 1900 W	--	✓	✓	--
Heater units optionally without or with thermostat				
• 10 W ... 150 W	✓	✓	✓	--
Fan heaters optionally without or with thermostat				
• 100 W ... 1200 W	✓	✓	✓	--
• Setting ranges 0 ... +60 °C, +32 ... +140 °F	✓	✓	✓	--
Thermostats, hygrostats, hygrotherms, switching modules				
Thermostats, optionally NC, NO, CO contacts				
• Setting ranges -10... +80 °C	--	✓	✓	--
• Switching capacities up to 16 A	✓	✓	✓	--
Hygrostats, changeover contacts	✓	✓	✓	--
• 40 ... 95 % relative air humidity	✓	✓	--	--
Hygrotherms, optionally NC, NO, CO contacts				
• Setting ranges 0 ... 60 °C, +32 ... +140 °F	--	✓	✓	--
• 50 ... 90% relative air humidity	--	✓	✓	--
• Switching capacities 6 (1) A ... 8 (1.6) A	✓	✓	✓	--
• Switching modules 16 A	✓	--	--	--

✓ Available or possible
-- Not available or not possible
❍ On request
The figures in brackets indicate inductive switching capacities.

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Benefits

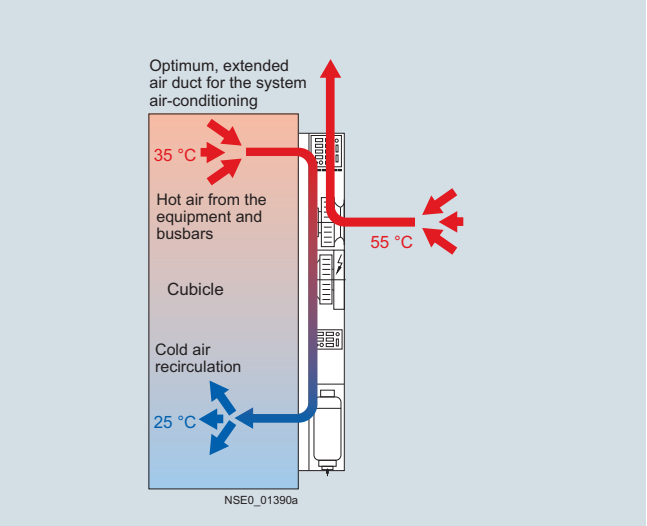
Installing air-conditioning equipment in SIVACON sicube 8MF system cubicles ensures high fault tolerance for switchboard and controlgear assemblies and consequently a high level of availability of machines and plants.

Application

In control cubicles, depending on the ambient conditions (e.g. heat, cold, air humidity etc.), there may be a tendency to overheat or for mold to form. In such cases the cubicles should be air-conditioned. The following air-conditioning equipment is available for this purpose:

- Filter fans
- Air conditioners/cooling devices
- Heat exchangers, air/air
- Heaters/thermostats

When selecting individual air-conditioning components, the ambient temperature, the power losses of the installed devices, the maximum permissible device temperature and the heat dissipation capacity of the cubicle used are the factors to be considered. In addition, it is necessary to take into account the required degree of protection.



System air-conditioning – optimum air guidance

More information

For further information, see the Industry Mall under: "Low-Voltage Systems" --> "SIVACON Switchboards and Busbar Trunking Systems" > "System Cubicles, System Lighting and System Air-Conditioning" > "SIVACON 8MR System Air-Conditioning".

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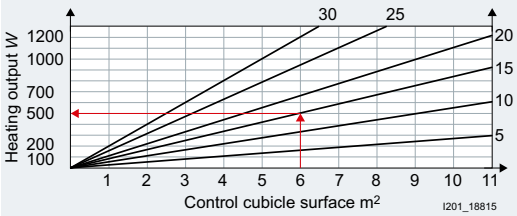
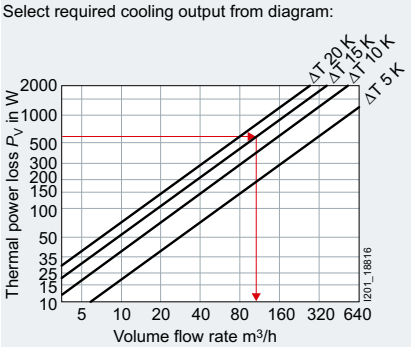
Introduction

Configuring guide

	Calculation	Graphic representation or determination
Step 1: Dimensions Determine the cubicle's height, width and depth		
Step 2: Installation type Determine the cubicle's installation type in compliance with VDE 0660 T500	Legend for formulas below: *A* Cubicle area in m^2 *W* Width in m *H* Height in m *D* Depth in m	The diagrams below illustrate the installation types in the top view
• Single enclosure, free-standing on all sides	A = 1.8 x H x (W + D) + 1.4 x W x D	
• Single enclosure for wall mounting	A = 1.4 x W x (H + D) + 1.8 x D x H	
• Start and end enclosures, free-standing	A = 1.4 x D x (H + W) + 1.8 x W x H	
• Start and end enclosure for wall mounting	A = 1.4 x H x (W + D) + 1.4 x W x D	
• Middle enclosure, free-standing	A = 1.8 x W x H + 1.4 x W x D + D x H	
• Middle enclosure for wall mounting	A = 1.4 x W x (H + D) + D x H	
• Middle enclosure for wall mounting, with covered roof surfaces	A = 1.4 x W x H + 0.7 x W x D + D x H	
	Example: Cubicle, free-standing on all sides, 2000 mm high, 800 mm wide, 600 mm deep. A = 1.8 m x 2.0 m x (0.8 m+ 0.6 m) + 1.4 m x 0.8 m x 0.6 m = 5.712 m^2 Accordingly, the cubicle has an area of 5.712 m^2.	
Step 3: Cubicle material Determine the cubicle's material its coefficient of heat transmission k in W/m^2K	Varnished sheet steel: k = 5.5 W/m^2K Stainless sheet steel: k = 4.5 W/m^2K Aluminum: k = 12 W/m^2K Aluminum, double-walled: k = 4.5 W/m^2K Polyester: k = 3.5 W/m^2K	
Step 4: Temperature difference Determine the required difference between interior and exterior temperature	$\Delta T = T_i - T_u$ Legend for formula: ΔT Temperature difference in K (Kelvin) T_i Interior temperature in °C T_u Exterior temperature in °C	
Step 5A: Heating output If heating is required, determine the required heating output either with the adjacent formula or from the diagram on the extreme right Note: If power loss P_V (intrinsic heating) is constant, it must be deducted from the calculated heating output	$P_H = A \times k \times \Delta T$ Legend for formula: P_H Required heating output in W A Cubicle area in m^2 k Coefficient of heat transmission in W/m^2K ΔT Temperature difference in K Example: Cubicle area A= 5.712 m^2, coefficient of heat transmission k = 5.5 W/m^2K, temperature difference = 15 K P_H = 5.712 m^2 x 5.5 W/m^2K x 15 K = 471.24 W A heater with 500 W heating output is required. When installed outdoors, the calculated heating output must be doubled.	Select required heating output from diagram: 
Step 5B: Cooling capacity If cooling is required, determine the necessary cooling capacity either according to the adjacent formula or from the diagram on the extreme right Note on the air constant f: The altitude at the point of use (above mean sea level) determines the air constant f. Decreasing barometric pressure or air density with rising altitude is taken into consideration via the air constant. f (0...100 m) = 3.1 m^3K/Wh f (100 ... 250 m) = 3.2 m^3K/Wh, f (250 ... 500 m) = 3.3 m^3K/Wh, f (500 ... 750 m) = 3.4 m^3K/Wh f (750 ... 1 000 m) = 3.5 m^3K/Wh	$V = f \times P_V/\Delta T$ Legend for formula: V Required volumetric flow in m^3/h f Air constant in m^3K/Wh (see bottom left) P_V Power loss in W ΔT Temperature difference in K Example: Installed power loss = 600 W, temperature difference = 15 K, installation altitude = 400 m above mean sea level V = 3.3m^3 K/Wh x 600 W/15 K = 132 m^3/h A fan with 160 m^3/h air capacity is required.	Select required cooling output from diagram: 

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Overview

Filter fans are the most cost-effective method – after heat dissipation through the surface of a control cubicle and/or ventilation openings in the enclosure parts of the control cubicles – for dissipating heat from control cubicles.

However, this can only achieve a control cubicle temperature which lies above the ambient temperature.

Filter fans with EC technology

The new energy-efficient drive concept is based on state-of-the-art EC technology with outstanding motor efficiency. When compared directly with AC fans of the same size, energy consumption is up to 77 % lower. The external dimensions remain unchanged, making it possible to replace existing AC fans with EC technology at a later date.

Standard filter fans optionally in EMC version

When filter fans are used for air-conditioning, the cubicle must have openings which allow electromagnetic radiation to pass in and out unobstructed. Filter fans in EMC version offer additional protection when higher requirements are imposed on electromagnetic compatibility.

Filter fan versions

The following filter fans are available on request:

- Standard filter fan IP54, color RAL 7035/7032
- Standard filter fan IP55, color RAL 7035/7032
- Standard filter fan EMC, color RAL 7035/7032, IP54
- Standard filter fan EMC, color RAL 7035/7032, IP55

Selection and ordering data

Filter fans

	Degree of protection	Size	Air current, free-blowing at 50 Hz	Cutout	Voltage	Input rating at 50 Hz	Color RAL	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
			m^3/h	mm	V	W								kg
	Filter fans with EC technology NEW 50/60 Hz													
 8MR6411-5LE25	IP54	2	62	125 × 125	115 AC	4.4	7035		8MR6411-5LE25		1	1 unit	1DS	0.800
					230 AC	4.4	7035		8MR6423-5LE25		1	1 unit	1DS	0.800
		3	120	177 × 177	115 AC	4.4	7035		8MR6411-5LE30		1	1 unit	1DS	1.030
					230 AC	4.4	7035		8MR6423-5LE30		1	1 unit	1DS	1.030
	Filter fans 50/60 Hz except 8MR6402-2LV41													
 8MR6411-5LV10	IP54	1	25	92 × 92	115 AC	12	7035		8MR6411-5LV10		1	1 unit	1DS	0.330
					230 AC	12	7032		8MR6423-2LV10		1	1 unit	1DS	0.519
					230 AC	12	7035		8MR6423-5LV10		1	1 unit	1DS	0.507
		2	63	125 × 125	115 AC	20	7035		8MR6411-5LV25		1	1 unit	1DS	0.800
					230 AC	20	7032		8MR6423-2LV25		1	1 unit	1DS	0.800
					230 AC	20	7035		8MR6423-5LV25		1	1 unit	1DS	0.800
		3	115	177 × 177	115 AC	20	7035		8MR6411-5LV30		1	1 unit	1DS	1.030
					230 AC	20	7035		8MR6423-5LV30		1	1 unit	1DS	1.027
		4	160	223 × 223	115 AC	18	7035		8MR6411-5LV45		1	1 unit	1DS	1.373
					230 AC	18	7032		8MR6423-2LV45		1	1 unit	1DS	1.362
					230 AC	18	7035		8MR6423-5LV45		1	1 unit	1DS	1.375
			250	223 × 223	24 DC	16	7032		8MR6402-2LV41		1	1 unit	1DS	1.676
					115 AC	43	7035		8MR6411-5LV41		1	1 unit	1DS	1.823
					230 AC	45	7032		8MR6423-2LV41		1	1 unit	1DS	1.840
					230 AC	45	7035		8MR6423-5LV41		1	1 unit	1DS	1.840
		6	580	292 × 292	115 AC	64	7035		8MR6411-5LV60		1	1 unit	1DS	3.400
					230 AC	64	7032		8MR6423-2LV60		1	1 unit	1DS	3.436
					230 AC	64	7035		8MR6423-5LV60		1	1 unit	1DS	3.400
			930	292 × 292	115 AC	115	7035		8MR6411-5LV80		1	1 unit	1DS	4.600
					230 AC	135	7035		8MR6423-5LV80		1	1 unit	1DS	4.600
 8MR6511-5LV10	IP55	2	58	125 × 125	115 AC	20	7035		8MR6511-5LV25		1	1 unit	1DS	0.814
					230 AC	20	7035		8MR6523-5LV25		1	1 unit	1DS	0.800
		3	105	177 × 177	115 AC	20	7035		8MR6511-5LV30		1	1 unit	1DS	0.875
					230 AC	20	7035		8MR6523-5LV30		1	1 unit	1DS	1.093
		4	147	223 × 223	115 AC	18	7035		8MR6511-5LV45		1	1 unit	1DS	1.448
					230 AC	18	7035		8MR6523-5LV45		1	1 unit	1DS	1.444
			230	223 × 223	115 AC	43	7035		8MR6511-5LV41		1	1 unit	1DS	1.840
					230 AC	45	7035		8MR6423-5LV41		1	1 unit	1DS	1.840
		6	531	292 × 292	115 AC	64	7035		8MR6511-5LV60		1	1 unit	1DS	1.840
					230 AC	64	7035		8MR6523-5LV60		1	1 unit	1DS	3.557
			850	292 × 292	115 AC	115	7035		8MR6511-5LV80		1	1 unit	1DS	4.600
					230 AC	135	7035		8MR6523-5LV80		1	1 unit	1DS	4.766

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* You can order this quantity or a multiple thereof.

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Filter fans

	Degree of protection	Size	Air current, free-blowing at 50 Hz	Cutout	Voltage	Input rating at 50 Hz	Color RAL	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
			m^3/h	mm	V	W								kg
8MR6411-6LV30	**EMC filter fans IP54**													
	IP54	3	115	177 × 177	115 AC	20	7035		**8MR6411-6LV30**		1	1 unit	1DS	1.030
					230 AC	20	7035		**8MR6423-6LV30**		1	1 unit	1DS	1.087
		4	160	223 × 223	115 AC	18	7035		**8MR6411-6LV45**		1	1 unit	1DS	1.474
					230 AC	18	7035		**8MR6423-6LV45**		1	1 unit	1DS	1.400
			250	223 × 223	115 AC	43	7035		**8MR6411-6LV41**		1	1 unit	1DS	1.840
					230 AC	45	7035		**8MR6423-6LV41**		1	1 unit	1DS	1.897
8MR6511-6LV30	**EMC filter fans IP55**													
	IP55	3	105	177 × 177	115 AC	20	7035		**8MR6511-6LV30**		1	1 unit	1DS	1.030
					230 AC	20	7035		**8MR6523-6LV30**		1	1 unit	1DS	1.131
		4	147	223 × 223	115 AC	18	7035		**8MR6511-6LV45**		1	1 unit	1DS	1.400
					230 AC	18	7035		**8MR6523-6LV45**		1	1 unit	1DS	1.400
			230	223 × 223	115 AC	43	7035		**8MR6511-6LV41**		1	1 unit	1DS	1.840
					230 AC	45	7035		**8MR6523-6LV41**		1	1 unit	1DS	2.007

Outlet filters

	Size	Dimensions Cutout	External dimensions W × H	Mounting depth	Cover grille height	Color RAL	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	mm	mm	mm								kg
8MR6400-5GV67	**Outlet filters IP54**												
	1	92 × 92	105 × 105	12	4.5	7032		**8MR6400-2GV10**		1	1 unit	1DS	0.067
						7035		**8MR6400-5GV10**		1	1 unit	1DS	0.066
	2	125 × 125	148 × 148	23	5.5	7032		**8MR6400-2GV25**		1	1 unit	1DS	0.170
						7035		**8MR6400-5GV25**		1	1 unit	1DS	0.168
	3	177 × 177	204 × 204	26	6	7035		**8MR6400-5GV30**		1	1 unit	1DS	0.323
	4	223 × 223	250 × 250	32	6	7032		**8MR6400-2GV45**		1	1 unit	1DS	0.500
						7035		**8MR6400-5GV45**		1	1 unit	1DS	0.500
	6	292 × 292	323 × 323	33	6.5	7032		**8MR6400-2GV67**		1	1 unit	1DS	0.800
						7035		**8MR6400-5GV67**		1	1 unit	1DS	0.825
8MR6500-5GV67	**Outlet filters IP55**												
	2	125 × 125	148 × 148	23	5.5	7035		**8MR6500-5GV25**		1	1 unit	1DS	0.194
	3	177 × 177	204 × 204	26	6	7035		**8MR6500-5GV30**		1	1 unit	1DS	0.363
	4	223 × 223	250 × 250	32	6	7035		**8MR6500-5GV45**		1	1 unit	1DS	0.572
	6	292 × 292	323 × 323	33	6.5	7035		**8MR6500-5GV67**		1	1 unit	1DS	0.949
8MR6400-6GV30	**EMC outlet filters IP54**												
	3	177 × 177	204 × 204	26	6	7035		**8MR6400-6GV30**		1	1 unit	1DS	0.392
	4	223 × 223	250 × 250	32	6	7035		**8MR6400-6GV45**		1	1 unit	1DS	0.583
	EMC outlet filters IP55												
	3	177 × 177	204 × 204	26	6	7035		**8MR6500-6GV30**		1	1 unit	1DS	0.350
	4	223 × 223	250 × 250	32	6	7035		**8MR6500-6GV45**		1	1 unit	1DS	0.500

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Filter mats

	Size	Dimensions W × H	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm							kg
8MR6000-0AM10	**Filter mats for filter fans or outlet filters for IP54**								
	1	89 × 89		**8MR6000-0AM10**		1	5 units	1DS	0.050
	2	118 × 118		**8MR6000-0AM25**		1	5 units	1DS	0.004
	3	171 × 171		**8MR6000-0AM30**		1	5 units	1DS	0.032
	4	216 × 216		**8MR6000-0AM45**		1	5 units	1DS	0.011
	6	283 × 283		**8MR6000-0AM67**		1	5 units	1DS	0.020

Roof filter fans

	Air current, free-blowing at 50 Hz	Dimensions Cutout	External dimensions W × H × D	Voltage	Input rating	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	m^3/h	mm	mm	V	W							kg
8MR6323-5DL40	**Roof filter fans IP44 for 50/60 Hz, color RAL 7035**											
	405	345 × 265	420 × 340 × 108	115	40/45		**8MR6311-5DL40**		1	1 unit	1DS	7.520
				230	40/45		**8MR6323-5DL40**		1	1 unit	1DS	7.527
	690	345 × 265	420 × 340 × 108	115	100/130		**8MR6311-5DL42**		1	1 unit	1DS	7.920
				230	100/130		**8MR6323-5DL42**		1	1 unit	1DS	7.992
8MR6000-5DE40	**Roof outlet filters IP44, color RAL 7035**											
	Without fan	345 × 265	420 × 340 × 83	--	--		**8MR6000-5DE40**		1	1 unit	1DS	4.480

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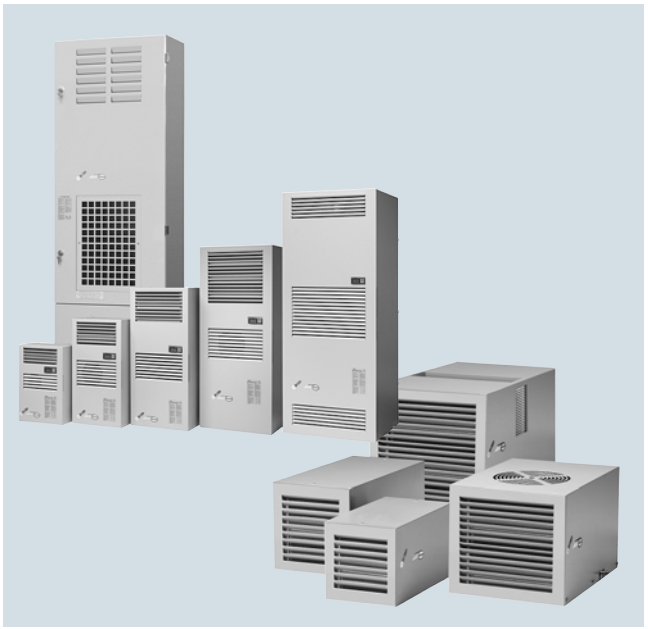
Overview



8MR6 cooling devices:
Door or side mounting top left, roof mounting bottom right

Where ambient temperatures are higher than the permissible device temperatures, air conditioners must be used.
All units operate with CFC-free refrigerants. Air conditioners dehumidify the air inside the control cubicle.

Cooling devices for door or side mounting and roof mounting

Two separate air circuits ensure that no ambient air enters the control cubicle. High-performance radial fans provide for good air circulation in the control cubicle.

Intelligent standard electronics with maximum customer benefits:

- Simple temperature control with an integrated thermostat
- Test mode
- Temperature limits
- Start-up delay
- Door contact function
- Alarm contact
- Local diagnostics
- UL-approved
- CE-approved

Versions

Air conditioners/cooling devices are available in the following versions:

- For side and door mounting
- For roof mounting

Selection and ordering data

Cooling devices for door or side mounting, degree of protection inside IP54/outside IP34, color RAL 7035

8MR6423-5SK20

Cooling capacity	Rated power	Dimensions W × H × D	Air capacity internal/ external	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
W	W	mm	m^3/h							kg
Cooling devices for 230 V, 50/60 Hz[1]										
380	280	285 × 460 × 180	280/280		**8MR6423-5EG04**		1	1 unit	1DS	19.000
640	400	360 × 606 × 212	330/570		**8MR6423-5EG06**		1	1 unit	1DS	27.000
820	440	348 × 783 × 215	330/570		**8MR6423-5EG08**		1	1 unit	1DS	30.000
1050[2]	570	348 × 783 × 215	570/860		**8MR6423-5SK10**		1	1 unit	1DS	42.000
1550[2]	880	400 × 950 × 233	570/1050		**8MR6423-5SK15**		1	1 unit	1DS	42.000
2050[2]	1080	400 × 1265 × 236	860/1050		**8MR6423-5SK20**		1	1 unit	1DS	64.000
Cooling devices for 400 V, 50/60 Hz[1]										
2900	1220	500 × 1270 × 336	860/1450		**8MR6440-5EG30**		1	1 unit	1DS	86.000
1780	1780	500 × 1270 × 336	1450/1450		**8MR6440-5EG40**		1	1 unit	1DS	88.000
5800	2340	600 × 2000 × 380	1450/2900		**8MR6440-5EG60**		1	1 unit	1DS	156.000

[1] Surface mounting and full integration possible.

[2] Partial integration possible.

Cooling devices for roof mounting, degree of protection inside IP54/outside IP34, color RAL 7035

Cooling capacity	Rated power	Dimensions W × H × D	Air capacity internal/ external	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
W	W	mm	m^3/h							kg
Cooling devices for 230 V, 50/60 Hz										
410	270	259 × 264 × 486	235/330		**8MR6423-5DE04**		1	1 unit	1DS	21.500
820	510	340 × 340 × 600	330/570		**8MR6423-5DE08**		1	1 unit	1DS	37.700
1150	550	401 × 415 × 567	570/1010		**8MR6423-5DE12**		1	1 unit	1DS	46.000
1550	810	401 × 415 × 567	860/1820		**8MR6423-5DE15**		1	1 unit	1DS	43.000
2050	1190	401 × 415 × 567	1050/1820		**8MR6423-5DE20**		1	1 unit	1DS	56.000
Cooling devices for 400 V, 50/60 Hz										
2900	1210	492 × 496 × 797	860/3410		**8MR6440-5DE30**		1	1 unit	1DS	88.000
3850	1630	492 × 496 × 797	1450/3410		**8MR6440-5DE40**		1	1 unit	1DS	90.000

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Overview

Heat exchanger 80 W/K

Air/air principle

Heat exchangers designed on the air/air principle function with two completely separate air circuits: an internal and an external circuit. One fan draws in cool external air. A second fan then directs the warmed air inside the cubicle past a large-area finned partition element, which passes the heat to the external circuit.

Note:

The devices can be surface mounted and fully integrated.

Selection and ordering data

Air/air heat exchangers, degree of protection IP54, color RAL 7035

	Thermal power	Rated power	Dimensions W × H × D	Air capacity internal/ external	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	W/K	W	mm	m^3/h							kg
	Heat exchangers for 230 V, 50/60 Hz										
8MR6423-5ML80	36	140	316 × 771 × 93	570/570		**8MR6423-5ML36**		1	1 unit	1DS	15.200
	80	240	317 × 1260 × 108	1050/1050		**8MR6423-5ML80**		1	1 unit	1DS	25.000

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Heater units

Overview

Small semiconductor heater unit, 8MR2131-0A

Control cubicle heater units are used for preventing malfunctions due to condensation water and corrosion and for controlling the temperature inside the control cubicle (observance of a minimum temperature).

The plastic enclosure is designed such that the surface temperatures on the touchable side areas are kept very low.

The heater units are designed for uninterrupted duty.

All units are also available in UL-approved versions and for special voltages.

Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Heater units								
8MR2130-1A	**Heater units, UL-approved, with PTC thermistor** 120 ... 240 V AC/DC							
	• 15W		8MR2130-1A		1	2 units	1DS	0.251
	• 30 W		8MR2130-3A		1	2 units	1DS	0.254
	• 45 W		8MR2130-4A		1	1 unit	1DS	0.258
	• 60 W		8MR2130-6A		1	1 unit	1DS	0.450
	• 75 W		8MR2130-7A		1	1 unit	1DS	0.453
	• 100 W		8MR2130-0A		1	1 unit	1DS	0.458
	• 150 W		8MR2130-5A		1	1 unit	1DS	0.673
8MR2131-4A	**Semiconductor heater units without thermostat, degree of protection IP20, UL-approved, compact design** 120 ... 240 V AC/DC							
	• 50 W		8MR2131-4A		1	1 unit	1DS	0.290
	• 100 W		8MR2131-0A		1	1 unit	1DS	0.350
	• 150 W		8MR2131-5A		1	1 unit	1DS	0.488
8MR2132-1A	**Semiconductor heater units with thermostat, degree of protection IP20, compact design** 120 ... 240 V AC/DC							
	• 50 W, 15 °C		8MR2132-1A		1	1 unit	1DS	0.329
	• 50 W, 25 °C		8MR2132-1AB		1	1 unit	1DS	0.300
	• 100 W, 15 °C		8MR2132-0A		1	1 unit	1DS	0.362
	• 100 W, 25 °C		8MR2132-0AB		1	1 unit	1DS	0.310
	• 150 W, 15 °C		8MR2132-5A		1	1 unit	1DS	0.497
	• 150 W, 25 °C		8MR2132-5AB		1	1 unit	1DS	0.498
8MR2110-3BA	**Small semiconductor heater units** 12 ... 30 V AC/DC							
	• 30 W		8MR2110-3BA		1	1 unit	1DS	0.161
	Screw fixing for small semiconductor heater unit		8MR2110-1BB		1	1 unit	1DS	0.014
	Semiconductor heater units 12 ... 30 V AC/DC							
	• 15 W		8MR2130-1BA		1	1 unit	1DS	0.253
	• 30 W		8MR2130-3BA		1	1 unit	1DS	0.256
	• 45 W		8MR2130-4BA		1	1 unit	1DS	0.252

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Overview

Fan heaters with integrated thermostat or hygrostat

Where higher heating outputs (from 150 W) are required, fan heaters are used.

The integrated fans provide for better air circulation and hereby achieve a more uniform air temperature distribution in the control cubicle.

All units are also available in UL-approved versions and for special voltages.

Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Fan heaters								
8MR2140-0A	**Fan heaters in standard version** UL-approved							
	• Without fan							
	- 230 V AC, 100 W		**8MR2140-0A**		1	1 unit	1DS	0.400
	- 230 V AC, 150 W		**8MR2140-1A**		1	1 unit	1DS	0.400
	- 230 V AC, 200 W		**8MR2140-2A**		1	1 unit	1DS	0.500
	- 230 V AC, 300 W		**8MR2140-3A**		1	1 unit	1DS	0.554
	- 230 V AC, 400 W		**8MR2140-4A**		1	1 unit	1DS	0.500
8MR2140-0B	• With fan							
	- 230 V AC, 100 W		**8MR2140-0B**		1	1 unit	1DS	0.550
	- 230 V AC, 150 W		**8MR2140-1B**		1	1 unit	1DS	0.552
	- 230 V AC, 200 W		**8MR2140-2B**		1	1 unit	1DS	0.900
	- 230 V AC, 300 W		**8MR2140-3B**		1	1 unit	1DS	0.900
	- 230 V AC, 400 W		**8MR2140-4B**		1	1 unit	1DS	0.900
8MR2122-4A	**Compact fan heaters**							
	• With fan, UL-certified							
	- 230 V AC, 250 W		**8MR2122-4A**		1	1 unit	1DS	1.226
	- 230 V AC, 400 W		**8MR2122-8A**		1	1 unit	1DS	1.486
	- 120 V AC, 250 W		**8MR2122-4B**		1	1 unit	1DS	1.100
	- 120 V AC, 400 W		**8MR2122-8B**		1	1 unit	1DS	1.400
	• With fan							
	- 24 V DC, 250 W		**8MR2122-4AB**		1	1 unit	1DS	1.100
	- 48 V DC, 250 W		**8MR2122-4AC**		1	1 unit	1DS	1.100
	- 48 V DC, 400 W		**8MR2122-8AA**		1	1 unit	1DS	1.370

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Fan heaters

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
8MR2150-0A	**Fan heaters with integrated thermostat or hygrostat** 230 V AC, 950 W							
	• Fan heaters, UL-approved, for floor mounting							
	- Temperature range 0 ... +60 °C		8MR2150-0A		1	1 unit	1DS	1.400
	- 65 % relative air humidity		8MR2150-0BA		1	1 unit	1DS	1.400
8MR2150-0C	• Fan heaters, UL-approved, for wall mounting							
	- Temperature range 0 ... +60 °C		8MR2150-0C		1	1 unit	1DS	1.597
	- 65 % relative air humidity		8MR2150-0CA		1	1 unit	1DS	1.594
Semiconductor fan heaters								
8MR2150-5AA	**Fan heaters** UL-approved							
	• With clip fixing for 35 mm standard mounting rail							
	- 230 V AC, 150 W		8MR2150-2C		1	1 unit	1DS	0.362
	- 230 V AC, 250 W		8MR2150-5A		1	1 unit	1DS	0.622
	- 230 V AC, 350 W		8MR2140-3C		1	1 unit	1DS	1.100
	- 230 V AC, 400 W		8MR2150-4A		1	1 unit	1DS	0.633
	- 230 V AC, 550 W		8MR2140-5C		1	1 unit	1DS	1.100
	- 120 V AC, 250 W		8MR2150-5AA		1	1 unit	1DS	0.526
	- 120 V AC, 350 W		8MR2140-3D		1	1 unit	1DS	1.100
	- 120 V AC, 400 W		8MR2150-4AA		1	1 unit	1DS	0.536
	- 120 V AC, 550 W		8MR2140-5D		1	1 unit	1DS	1.100
8MR2150-5B	• With screw fixing							
	- 230 V AC, 150 W		8MR2150-2D		1	1 unit	1DS	0.300
	- 230 V AC, 250 W		8MR2150-5B		1	1 unit	1DS	0.530
	- 230 V AC, 400 W		8MR2150-4B		1	1 unit	1DS	0.630
	- 120 V AC, 250 W		8MR2150-5AB		1	1 unit	1DS	0.530
	- 120 V AC, 400 W		8MR2150-4AB		1	1 unit	1DS	0.540
8MR2151-3A (illustration similar)	**PTC fan heaters for wall mounting** UL-approved, 1200 W, clip fixing for 35 mm standard mounting rail or screw fixing (M6)							
	• 230 V AC, with thermostat, 0 ... +60 °C		8MR2150-3A		1	1 unit	1DS	1.527
	• 230 V AC, without thermostat		8MR2150-3B		1	1 unit	1DS	1.250
	• 120 V AC, with thermostat +32 ... +140 °F		8MR2151-3A		1	1 unit	1DS	1.550
	• 120 V AC, without thermostat		8MR2151-3B		1	1 unit	1DS	1.245
8MR2151-2A (illustration similar)	**PTC fan heaters for floor mounting** UL-approved, 1200 W, screw fixing (M5)							
	• 230 V AC, with thermostat, 0 ... +60 °C		8MR2150-2A		1	1 unit	1DS	13.965
	• 230 V AC, without thermostat		8MR2150-2B		1	1 unit	1DS	1.369
	• 120 V AC, with thermostat +32 ... +140 °F		8MR2151-2A		1	1 unit	1DS	1.309
	• 120 V AC, without thermostat		8MR2151-2B		1	1 unit	1DS	1.284

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Overview

Tamper-proof thermostat, NC contact

Thermostats

Thermostats (as NC, NO or CO contacts) are used to regulate cooling devices, filter fans and heat exchangers, as well as to trigger signals in case of excessive temperatures.

Hygrostats

Hygrostats are used to regulate heaters/fan heaters so that the temperature increase raises the dew point from a critical humidity of 65 % in cubicles and enclosures with built-in electrical and electronic components. This prevents condensation on structural parts and electronic components.

Hygrotherms

Hygrotherms monitor both temperature and relative humidity in cubicles and enclosures with built-in electrical/electronic components and switch on a heater or fan upon reaching the selected values (temperature or relative humidity). This prevents condensation on structural parts and electronic components.

Switching modules

Switching modules are electronic relays for the switching of high-power DC devices.

Thermostats, hygrostats or hygrotherms can be connected to operate the switching modules.

Note:

The switching capacity values quoted in brackets refer to inductive loads.

Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Thermostats								
	Small thermostats UL-approved, max. switching capacity 250 V AC, 10 (2 A)							
	• NC contacts							
8MR2170-2BA	- Temperature range 0 ... +60 °C		**8MR2170-2BA**		1	5 units	1DS	0.055
	- Temperature range -10 ... +50 °C		**8MR2170-1CA**		1	5 units	1DS	0.055
	- Temperature range +20 ... +80 °C		**8MR2170-1DA**		1	5 units	1DS	0.055
	• NO contacts							
	- Temperature range 0 ... +60 °C		**8MR2170-2BB**		1	5 units	1DS	0.056
	- Temperature range -10 ... +50 °C		**8MR2170-1CB**		1	5 units	1DS	0.055
8MR2170-2BB	- Temperature range +20 ... +80 °C		**8MR2170-1DB**		1	5 units	1DS	0.068
	Tamper-proof thermostats UL-approved, max. switching capacity 250 V AC, 5 (1.6 A)							
	• NC contacts							
8MR2171-1BA	- Temperature range 15 °C / 59 °F (5 °C / 41 °F)		**8MR2171-1BA**		1	5 units	1DS	0.035
	- Temperature range 25 °C / 77 °F (15 °C / 59 °F)		**8MR2171-2BA**		1	5 units	1DS	0.023
	• NO contacts							
	- Temperature range 50 °C / 122 °F (40 °C / 104 °F)		**8MR2171-1BB**		1	5 units	1DS	0.034
	- Temperature range 60 °C / 140 °F (50 °C / 122 °F)		**8MR2171-2BB**		1	5 units	1DS	0.023
8MR2171-1BA	- Temperature range 35 °C / 95 °F (25 °C / 77 °F)		**8MR2171-3BB**		1	5 units	1DS	0.029

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Thermostats, hygrostats, hygrotherms, switching modules

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
8MR2171-1A	**Mechanical thermostats**							
	UL-approved							
	• Changeover contact +5 ... +60 °C, max. switching capacity 250 V AC, 10 (4 A)		8MR2170-1A		1	2 units	1DS	0.075
	• Changeover contact -20 ... +30 °C, max. switching capacity 250 V AC, 10 (4 A)		8MR2170-1B		1	1 unit	1DS	0.074
8MR2170-1GA	**Electronic thermostats**							
	• Changeover contact -20 ... +60 °C, max. switching capacity 230 V AC, 8 (1.6 A)		8MR2170-1GA		1	1 unit	1DS	0.079
	• Changeover contact -4 ... +140 °F, max. switching capacity 120 V AC, 8 (1.6 A)		8MR2170-1GB		1	1 unit	1DS	0.079
	• Changeover contact (inverted) -20 ... +60 °C, max. switching capacity 230 V AC, 8 (1.6 A)		8MR2170-1GC		1	1 unit	1DS	0.079
	• CO contact, 0 ... +60 °C, max. switching capacity 24 V DC, 16 A		8MR2170-2A		1	1 unit	1DS	0.076
8MR2170-1EA	**Twin thermostats**							
	• NO and NO contacts, 0 ... +60 °C, max. switching capacity 250 V AC, 10 (2 A)		8MR2170-1EA		1	1 unit	1DS	0.105
	• NC and NO contacts, 0 ... +60 °C, max. switching capacity 250 V AC, 10 (2 A)		8MR2170-1E		1	2 units	1DS	0.130
8MR2172-1A	**Twin thermostats (tamper-proof)**							
	• NC contact, 15 °C/59 °F (5 °C/41 °F) and NO contact, 50 °C/122 °F (40 °C/104 °F) max. switching capacity 250 V AC, 5 (1.6) A		8MR2172-1A		1	3 units	1DS	0.053
	• NC contact, 25 °C/77 °F (15 °C/ 59 °F) and NO contact, 60 °C/140 °F (50 °C/122 °F) max. switching capacity 250 V AC, 5 (1.6) A or 30 W DC		8MR2172-2A		1	3 units	1DS	0.040
	• NO contact, 50 °C/122 °F (40 °C/104 °F) and NO contact, 60 °C/140 °F (50 °C/122 °F) max. switching capacity 250 V AC, 5 (1.6) A		8MR2172-1AB		1	3 units	1DS	0.040
Hygrostats								
	Hygrostats are used to regulate heaters/fan heaters so that the temperature increase raises the dew point							
	Mechanical hygrostats • UL-approved CO contact, 230 V AC, 35 ... 95 % relative air humidity Max. switching capacity 250 V AC, 5 (0.2) A or 20 W AC Min. switching capacity 20 V AC/DC, 100 mA		8MR2170-1C		1	1 unit	1DS	0.065
	Electronic hygrostats							
8MR2170-1AF	• 230 V AC 40 ... 90 % relative air humidity Max. switching capacity 240 V AC, 8 (1.6) A		8MR2170-1AF		1	1 unit	1DS	0.080
	• 120 V AC 40 ... 90 % relative air humidity Max. switching capacity 120 V AC, 8 (1.6) A		8MR2170-2AF		1	1 unit	1DS	0.081
8MR2170-1BF	• 230 V AC 65 % relative air humidity Max. switching capacity 240 V AC, 8 (1.6) A		8MR2170-1BF		1	1 unit	1DS	0.075
	• 120 V AC 65 % relative air humidity Max. switching capacity 120 V AC, 8 (1.6) A		8MR2170-2BF		1	1 unit	1DS	0.700

* You can order this quantity or a multiple thereof.

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	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Hygrotherms								
8MR2170-4F	**Electronic hygrotherms** UL-approved, 50 ... 90 % relative air humidity, for simultaneously monitoring both temperature and relative humidity in cubicles and enclosures with electronic components, CO contacts							
	• 100 ... 240 V AC, +32 to +140 °F, max. switching capacity of NC contacts: 120 V AC, 6 (1) A, Max. switching capacity of NO contacts: 120 V AC, 8 (1.6) A		**8MR2170-4F**		1	1 unit	1DS	0.020
	• 100 ... 240 V AC, 0 ... +60 °C, max. switching capacity of NC contacts: 100 ... 240 V AC, 6 (1) A, Max. switching capacity of NO contacts: 100 ... 240 V AC, 8 (1.6) A		**8MR2170-4E**		1	1 unit	1DS	0.114
Switching modules								
8MR2180-1A	**Switching modules** Electronic relay for switching high-power DC devices from thermostats, hygrostats or hygrotherms							
	• 24 V DC, 16 A		**8MR2180-1A**		1	1 unit	1DS	0.085
	• 48 V DC, 16 A		**8MR2180-1B**		1	1 unit	1DS	0.085

More information

For further information, see the Industry Mall under: "Low-Voltage Systems" --> "SIVACON Switchboards and Busbar Trunking Systems" > "System Cubicles, System Lighting and System Air-Conditioning" > "SIVACON 8MR System Air-Conditioning".

* You can order this quantity or a multiple thereof.

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Notes

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17.1/1 **ALPHA SIMBOX small distribution boards**

17.2/1 **ALPHA 160 distribution boards**

17.3/1 **ALPHA 400 distribution boards**

17.4/1 **ALPHA 630 distribution boards**

17.5/1 **ALPHA 1250 distribution boards**

17.6/1 **ALPHA 3200 power distribution boards**

NEW

Direct reference to the products in the Industry Mall from the selection and ordering data tables:

Article No.
www.siemens.com/product?Article No.
3VA2025-5HL36-0AA0

Paper catalog:
To get more product information enter the Web address plus Article No.

PDF catalog:
Get more product information with just a mouse click.

For further technical product information:

Siemens Industry Online Support:
www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
Download
FAQ
Manual
Product note
Software archive
Technical data

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Notes

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17.1/2 **Introduction**

SIMBOX XL
small distribution boards

Flush-mounting and hollow-wall distribution boards
17.1/4 Introduction
17.1/6 Versions

Flush-mounting and hollow-wall distribution boards / multimedia distribution boards
17.1/7 Introduction
17.1/8 Project supply: Flush-mounting and hollow-wall distribution boards
17.1/10 Multimedia distribution boards NEW

IP30 surface-mounting distribution boards
17.1/11 Introduction
17.1/13 Surface-mounting distribution boards
17.1/14 Accessories

SIMBOX WP
small distribution boards

IP65 surface-mounting distribution boards
17.1/15 Introduction
17.1/16 Surface-mounting distribution boards
17.1/17 Accessories
17.1/18 Dimensional drawings

NEW

Direct reference to the products in the Industry Mall from the selection and ordering data tables:

Article No.
www.siemens.com/product?Article No.
3VA2025-5HL36-0AA0

Paper catalog:
To get more product information enter the Web address plus Article No.

PDF catalog:
Get more product information with just a mouse click.

For further technical product information:

Siemens Industry Online Support:
www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
Download
FAQ
Manual
Product note
Software archive
Technical data

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Introduction

Overview

		Devices	Page	Surface-mounting distribution boards	Flush-mounting distribution boards	Rated current	Cubicle depth	Safety class	
						A	mm	1	2
	Small distribution boards	SIMBOX XL small distribution boards:							
		• Flush-mounting and hollow-wall distribution boards	17.1/6	--	✔	63	88[1]	--	✔
		• IP30 surface-mounting distribution boards	17.1/11	✔	--	63	99	--	✔
		SIMBOX WP small distribution boards:							
		• IP65 surface-mounting distribution boards	17.1/15	✔	--	63	100/140/160	--	✔
	ALPHA 160 DIN technology distribution boards	Cubicle, partially equipped	17.2/6	✔	✔	160	140	--	✔
		Unequipped distribution board	17.2/8	✔	✔	160	140	--	✔
	ALPHA 400 DIN technology distribution boards	Unequipped distribution board, as flat pack	17.3/9	✔	--	400	210	✔	✔
		Unequipped distribution board	17.3/10	✔	✔	400	210	✔	✔
	ALPHA 630 DIN technology distribution boards	Unequipped distribution board, as flat pack	17.4/7	✔	--	630	210	✔	✔
		Unequipped distribution board	17.4/7	✔	--	630	210/250/320	✔	✔
		Unequipped distribution board, with open side panels	17.4/8	✔	--	630	250/320	✔	--
	ALPHA 1250 DIN technology distribution boards	Unequipped distribution board	17.5/7	✔	--	1250	400	✔	--

[1] Mounting depth

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Degree of protection	VDE	EN	DIN	IEC
IP30	DIN VDE 0603	--	DIN 43871	IEC 61439-1/-3
IP65	DIN VDE 0603-1, VDE 0660-600-1/-3	EN 61439-1/-3	DIN 43871	IEC 61439-1/-3
IP31 / IP43 / IP44	VDE 0660-600-1/-3	EN 61439-1/-3	--	IEC 61439-1/-3
IP43	VDE 0660-600-1/-2/-3	EN 61439-1/-2/-3	--	IEC 61439-1/-2/-3
IP31 / IP43 / IP55				
IP43	VDE 0660-600-1/-2	EN 61439-1/-2	--	IEC 61439-1/-2
IP43 / IP55				
IP55				
IP55	VDE 0660-600-1/-2	EN 61439-1/-2	--	Type verification according to IEC 61439-1/-2

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Introduction

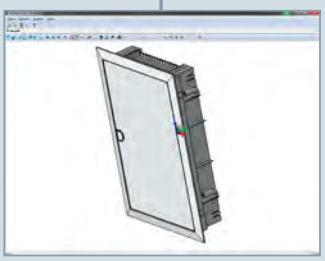
Overview

The new generation of Siemens small distribution boards is designed for maximum utilization of space, even in extremely confined conditions.

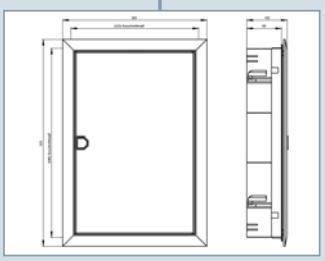
Raised front covers, enlarged terminal compartments and integrated cable routing aids enable easy wiring. With a compact mounting depth of just 88 mm these distribution boards fit in the narrowest of hollow walls.

To round off the package there is a comprehensive offering of accessories which are compatible with the surface-mounting distribution board (terminals, covering strips, door locks).

Image database:
www.siemens.com/lowvoltage/picturedb
keyword "SIMBOX XL"



CAD data



Dimensional drawings

Product photos

Benefits

- Ample wiring space
- Raised front cover
- Sealable front cover
- Integrated water-level
- Marking aid on the wall-recessed box
- Small mounting depth of just 88 mm
- Each tier can be expanded by 2 MW
- Hollow-wall distribution board also suitable for flush-mounting

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Application

Small distribution boards are suitable as sub-distribution boards or floor panel boards for all applications in electrical building installations. Thanks to their compact mounting depth, they can be installed close to the respective load center in residential and non-residential buildings, as well as in schools, commercial buildings and shops.

Design

- Available in sizes with 1-4 tiers
- Door and frame are made of elegant metal components
- Small mounting depth of just 88 mm is ideal for hollow-wall installations
- Strain relief possibilities are provided at the top and bottom of the distribution board
- Knockouts enable cable entry from all four sides of the distribution board
- Integrated cable routing aids in the wall-recessed box
- Space-saving slots for RCCB terminals are available in addition to terminal strips

Technical specifications

Rated current in A	Up to 63
Rated voltage in V AC	400
Degree of protection	IP30
Safety class	2 (total insulation)
Color	Pure white RAL 9010
Mounting rail spacing in mm	125
Standards	EN 61439-1/3 DIN VDE 0603-1 DIN 43871
Mounting depth in mm	88
Impact strength	IK 05

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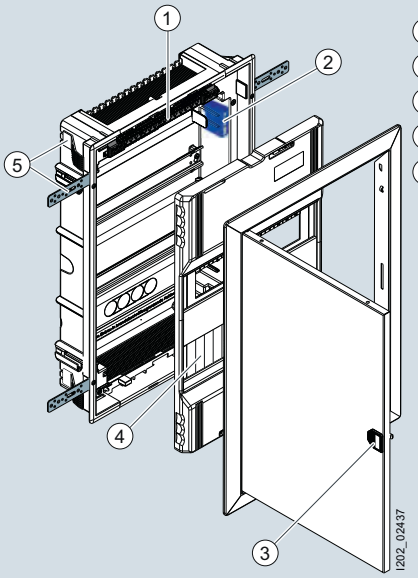
Versions

Overview

Features
- Color: Pure white RAL 9010
- Each tier can be expanded by 2 MW to a maximum of 14 MW
- Small mounting depth of 88 mm
- All distribution boards are pre-configured with terminal strips featuring user-friendly plug-in terminals

Mounting
- Distribution boards of size 2 and larger are pre-configured for the installation of two RCCB circuits
- Upgrading of the distribution boards with space-saving RCCB terminals is also possible
- Hollow-wall distribution boards can also be used as flush-mounting distribution boards



1 Terminals strips
2 RCCB terminal
3 Door locking kit
4 Blanking strip
5 Mounting aids for flush-mounting

This illustration does not show the scope of delivery

Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
								kg
8GB5012-1KM	**Flush-mounting distribution boards** • Pre-equipped with terminal strips							
	Type / Recess dimensions L × W × D in mm / Tiers × MW / Equipping options Terminal strips Number × type							
	1-tier / 393 × 359 × 88 / 1 × 12 / 1 × 8GB5016-5KM --		8GB5012-1KM		1	1 unit	1BO	2.375
	2-tier / 518 × 359 × 88 / 2 × 12 / 1 × 8GB5016-5KM 1 × 8GB5005-5KM		8GB5024-1KM		1	1 unit	1BO	3.403
	3-tier / 643 × 359 × 88 / 3 × 12 / 1 × 8GB5017-5KM 1 × 8GB5021-5KM		8GB5036-1KM		1	1 unit	1BO	4.103
	4-tier / 768 × 359 × 88 / 4 × 12 / 1 × 8GB5017-5KM 1 × 8GB5021-5KM		8GB5048-1KM		1	1 unit	1BO	5.016
8GB5024-4KM	**Hollow-wall distribution boards** Including accessories for hollow-wall mounting • Pre-equipped with terminal strips • Accessories for hollow-wall mounting included • 850 °C lamp wire resistance							
	Type / Cutout dimensions L × W × D in mm / Tiers × MW / Equipping options Terminal strips Number × type							
	1-tier / 355 × 323 × 88 / 1 × 12 / 1 × 8GB5016-5KM --		8GB5012-4KM		1	1 unit	1BO	2.640
	2-tier / 480 × 323 × 88 / 2 × 12 / 1 × 8GB5016-5KM 1 × 8GB5005-5KM		8GB5024-4KM		1	1 unit	1BO	3.426
	3-tier / 605 × 323 × 88 / 3 × 12 / 1 × 8GB5017-5KM 1 × 8GB5021-5KM		8GB5036-4KM		1	1 unit	1BO	4.245
	4-tier / 730 × 323 × 88 / 4 × 12 / 1 × 8GB5017-5KM 1 × 8GB5021-5KM		8GB5048-4KM		1	1 unit	1BO	4.968

* You can order this quantity or a multiple thereof.

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Overview

Features of flush-mounting and hollow-wall distribution boards

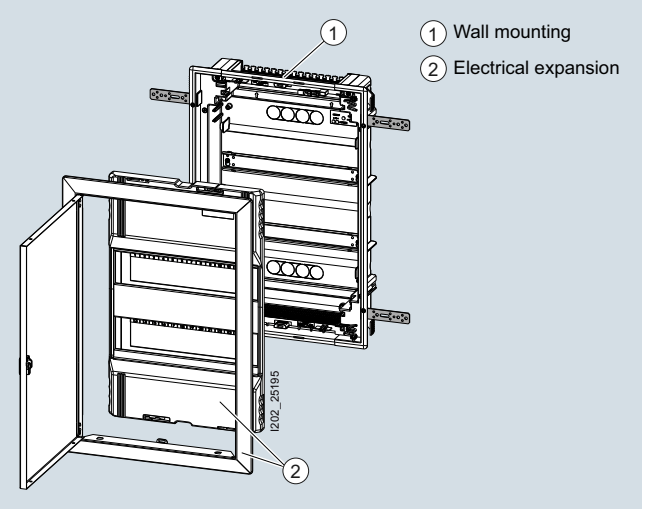
- Color: Pure white RAL 9010
- Each tier can be expanded by 2 MW to a maximum of 14 MW
- Small mounting depth of 88 mm
- Upgrading of the distribution boards with space-saving RCCB terminals is also possible

Project supply: Distribution boards are supplied in two design versions

① Wall-recessed box (wall mounting):
- Flush mounting version with cover
- Hollow-wall box with mounting set

② Expansion package (electrical expansion)
- Flush mounting cover including standard mounting rail and door kit
- Hollow wall cover including standard mounting rail and door kit

Order individually according to project progress, starting with the enclosure bases and then the device protection covers and the door kit.

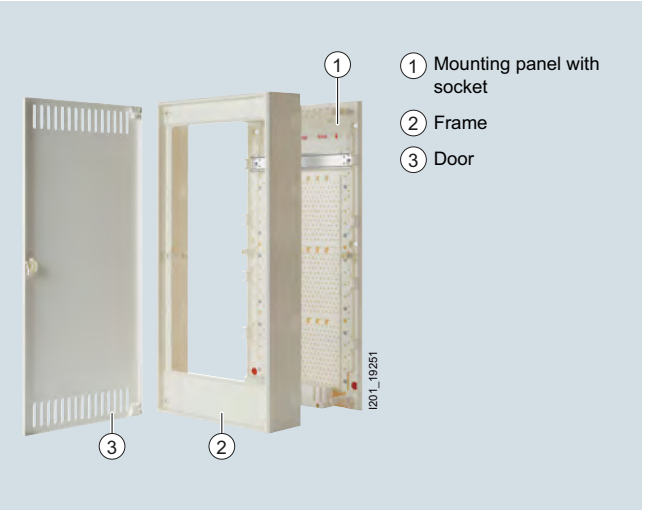


Features of the multimedia distribution boards:

- Specially designed for multimedia applications such as a telephone and router
- Featuring a special mounting panel, on which all hardware components can be fastened flexibly and in a floating manner
- Compliant with
  - EN 61439-1 / VDE 0660-600-1
  - EN 61439-3 / VDE 0660-600-3
- Available for surface, flush and hollow-wall mounting

Note:

The multimedia distribution board is only permissible for installation of safety class II devices.



Technical specifications

Rated current in A	Up to 63
Rated voltage in V AC	400
Degree of protection	IP30
Safety class	2 (total insulation)
Color	Pure white RAL 9010
Mounting rail spacing in mm	125
Standards	IEC 61439-1/-3 DIN VDE 0603-1 DIN 43871
Mounting depth in mm	88
Impact strength	IK 05

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Project supply: Flush-mounting and hollow-wall distribution boards

Selection and ordering data

8GB5212-1KM01

Flush-mounting distribution boards

Type/MW	Recess dimensions L × W × D in mm	Versions	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
1-tier/ 1 × 12	393 × 359 × 88	① Wall-recessed box		8GB5212-1KM01		1	12 units	1BO	0.762
		② Expansion package[1)]		8GB5212-3KM01		1	12 units	1BO	1.628
2-tier/ 2 × 12	518 × 359 × 88	① Wall-recessed box		8GB5224-1KM01		1	12 units	1BO	1.046
		② Expansion package[1)]		8GB5224-3KM01		1	12 units	1BO	2.184
3-tier/ 3 × 12	643 × 359 × 88	① Wall-recessed box		8GB5236-1KM01		1	24 units	1BO	1.284
		② Expansion package[1)]		8GB5236-3KM01		1	12 units	1BO	2.595
4-tier/ 4 × 12	768 × 359 × 88	① Wall-recessed box		8GB5248-1KM01		1	24 units	1BO	1.560
		② Expansion package[1)]		8GB5248-3KM01		1	12 units	1BO	3.058

Note

Prices apply to each unit. One package contains 12 units.

8GB5212-2KM01

Hollow-wall distribution boards
Including accessories for hollow-wall mounting
- Accessories for hollow-wall mounting included
- 850 °C lamp wire resistance

Type/MW	Recess dimensions L × W × D in mm	Versions	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
1-tier/ 1 × 12	355 × 323 × 88	① Wall-recessed box		8GB5212-2KM01		1	12 units	1BO	0.839
		② Expansion package[1)]		8GB5212-4KM01		1	12 units	1BO	1.663
2-tier/ 2 × 12	480 × 323 × 88	① Wall-recessed box		8GB5224-2KM01		1	12 units	1BO	0.001
		② Expansion package[1)]		8GB5224-4KM01		1	12 units	1BO	2.080
3-tier/ 3 × 12	605 × 323 × 88	① Wall-recessed box		8GB5236-2KM01		1	24 units	1BO	1.331
		② Expansion package[1)]		8GB5236-4KM01		1	12 units	1BO	2.608
4-tier/ 4 × 12	730 × 323 × 88	① Wall-recessed box		8GB5248-2KM01		1	24 units	1BO	1.597
		② Expansion package[1)]		8GB5248-4KM01		1	12 units	1BO	3.079

Note

Prices apply to each unit. One package contains 12 units.

[1)] Consisting of standard mounting rail, door and frame.

* You can order this quantity or a multiple thereof.

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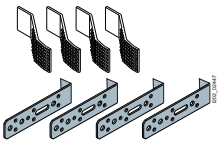
Accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
8GB5016-5KM	① **Terminal strips with plug-in terminals** Number of slots per distribution board: •1 to 2-tier: 2 units •3 to 4-tier: 3 units							
	Type: N/PE — Potential 1: N = 3×25 + 14×4 mm² — Potential 2: PE = 3×25 + 14×14 mm²		**8GB5016-5KM**		1	1 unit	1BO	0.116
	Type: N/N — Potential 1: N_1 = 3×25 + 14×4 mm² — Potential 2: N_2 = 3×25 + 14×14 mm²		**8GB5017-5KM**		1	1 unit	1BO	0.116
	Type: N — Potential 1: N = 6×25 + 28×4 mm²		**8GB5020-5KM**		1	1 unit	1BO	0.115
	Type: PE — Potential 1: PE = 6×16 + 28×4 mm²		**8GB5021-5KM**		1	1 unit	1BO	0.116
8GB5015-5KM	① **Terminal strips with screw terminals** Number of slots per distribution board: •1 to 2-tier: 2 units •3 to 4-tier: 3 units							
	Type: N/PE — Potential 1: N = 3×16 + 14×10 mm² — Potential 2: PE = 3×16 + 14×10 mm²		**8GB5008-5KM**		1	1 unit	1BO	0.126
	Type: N/N — Potential 1: N_1 = 3×16 + 14×10 mm² — Potential 2: N_2 = 3×16 + 14×10 mm²		**8GB5015-5KM**		1	1 unit	1BO	0.130
	Type: N — Potential 1: N = 6×16 + 28×10 mm²		**8GB5010-5KM**		1	1 unit	1BO	0.128
	Type: PU — Potential 1: PE = 6×16 + 28×10 mm²		**8GB5011-5KM**		1	1 unit	1BO	0.129
8GB5005-5KM	② **RCCB terminals** For distributing the neutral conductor to two RCCBs N = 3×16 + 2×10 mm²		**8GB5005-5KM**		1	1 unit	1BO	0.022
8GB5006-5KM	③ **Door locking kits** •For snapping into door handle •With two keys		**8GB5006-5KM**		1	1 unit	1BO	0.022
8GB4683	④ **Blanking strips** •12 MW wide •Color: White •With increased flame protection up to 850°C, hence suitable for hollow-wall distribution boards		**8GB4683**		1	10 units	1BO	0.027
 8GB5013-5KM	⑤ **Mounting aid for flush mounting** •Comprising four wall anchors and locking aids •Can also be used in hollow-wall distribution boards		**8GB5013-5KM**		1	1 set	1BO	0.106

* You can order this quantity or a multiple thereof.

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Multimedia distribution boards NEW

Selection and ordering data

8GB5036-3KM00

SIMBOX XL multimedia distribution boards
Included in delivery:
- Mounting plate made of plastic
- Socket outlets
- Door and frame

Type	Cutout dimensions L × W × D in mm	Versions	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
3-tier	605 × 323 × 88	Surface mounting		**8GB5036-3KM00**		1	1 unit	1BO	3.040
		Hollow wall/ flush mounting		**8GB5036-3KM01**		1	1 unit	1BO	3.060
4-tier	730 × 323 × 88	Surface mounting		**8GB5048-3KM00**		1	1 unit	1BO	3.960
		Hollow wall/ flush mounting		**8GB5048-3KM01**		1	1 unit	1BO	4.840

Accessories

Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Connecting lugs The connecting lug serves to install several distribution boards in a row, vertically or horizontally.		**8GB5025-5KM**		1	2 units	1BO	0.012

* You can order this quantity or a multiple thereof.

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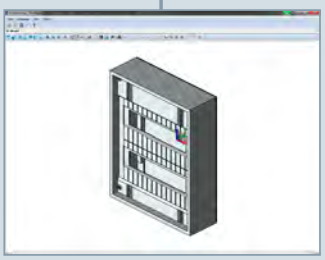
Overview

The new generation of Siemens small distribution boards is designed for maximum utilization of space, even in extremely confined conditions.

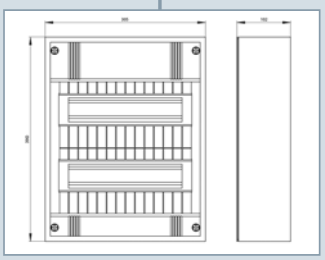
The SIMBOX XL offers ample wiring space.

To round off the package there is a comprehensive offering of accessories which are compatible with the flush-mounting/ hollow-wall distribution board (terminals, covering strips, door locks).

Image database:
www.siemens.com/lowvoltage/picturedb
keyword "SIMBOX XL"



CAD data



Dimensional drawings

Product photos

Benefits

- Knockouts enable cable entry from all four sides and the rear of the distribution board
- A comprehensive range of plastic doors is available in addition to robust sheet-steel doors
- Each tier can be expanded by 2 MW
- The accessories pack can also be used for flush-mounting and hollow-wall distribution boards

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Introduction

Application

Small distribution boards are suitable as sub-distribution boards or floor panel boards for all applications in electrical building installations.

Thanks to their small dimensions, they can be installed close to the respective load center in residential and non-residential buildings, as well as in schools, commercial buildings and shops.

Design

- Available in sizes with 1-4 tiers
- Strain relief possibilities are provided at the top and bottom of the distribution board
- Knockouts enable cable entry from all four sides of the distribution board
- Space-saving slots for RCCB terminals are available in addition to terminal strips
- When the gray transparent plastic doors are used, indicator lights are also visible when the door is closed
- Raised mounting rails permit user-friendly cable bushing

Technical specifications

Rated current in A	Up to 63
Rated voltage in V AC	400
Degree of protection	IP30
Safety class	2 (total insulation)
Color	Pure white RAL 9010
Mounting rail spacing in mm	125
Standards	IEC 61439 DIN VDE 0603-1 DIN 43871

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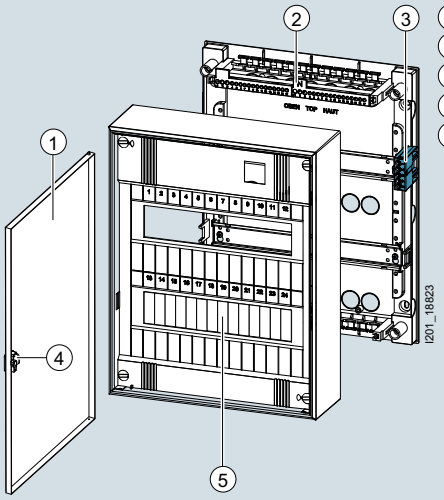
Overview

Features

- Color: Pure white RAL 9010
- Each tier can be expanded by 2 MW to a maximum of 14 MW
- All distribution boards are pre-configured with terminal strips featuring service-proven screw terminals
- Comprehensive range of doors

Mounting

- Distribution boards of size 2 and larger are pre-configured for the installation of two RCCB circuits
- Upgrading of the distribution boards with RCCB terminals ③ is also possible



① Door
② Terminal strips
③ RCCB terminal
④ Door locking kit
⑤ Blanking strips

This illustration does not show the scope of delivery

Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
								kg
	Surface-mounting distribution boards without door							
	Type / External dimensions L × W × D in mm / Tiers × MW / Equipping options Terminal strips Number × type							
8GB5012-0KM	1-tier / 250 × 305 × 99 / 1 × 12 / 1 × 8GB5008-5KM --		8GB5012-0KM		1	1 unit	1BO	1.129
	2-tier / 375 × 305 × 99 / 2 × 12 / 1 × 8GB5008-5KM 1 × 8GB5005-5KM		8GB5024-0KM		1	1 unit	1BO	1.495
	3-tier / 515 × 305 × 99 / 3 × 12 / 1 × 8GB5015-5KM 1 × 8GB5011-5KM		8GB5036-0KM		1	1 unit	1BO	1.979
	4-tier / 640 × 305 × 99 / 4 × 12 / 1 × 8GB5015-5KM 1 × 8GB5011-5KM		8GB5048-0KM		1	1 unit	1BO	2.449
8GB5001-5KM	① **Doors** • Metal door, white							
	1-tier		8GB5001-5KM		1	1 unit	1BO	0.510
	2-tier		8GB5002-5KM		1	1 unit	1BO	0.766
	3-tier		8GB5003-5KM		1	1 unit	1BO	1.064
	4-tier		8GB5004-5KM		1	1 unit	1BO	1.555
8GB5001-5KM01	• Plastic door, white							
	1-tier		8GB5001-5KM01		1	1 unit	1BO	0.265
	2-tier		8GB5002-5KM01		1	1 unit	1BO	0.367
	3-tier		8GB5003-5KM01		1	1 unit	1BO	0.588
	4-tier		8GB5004-5KM01		1	1 unit	1BO	0.695
8GB5001-5KM02	• Plastic door, transparent gray							
	1-tier		8GB5001-5KM02		1	1 unit	1BO	0.252
	2-tier		8GB5002-5KM02		1	1 unit	1BO	0.350
	3-tier		8GB5003-5KM02		1	1 unit	1BO	0.532
	4-tier		8GB5004-5KM02		1	1 unit	1BO	0.685

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1

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Selection and ordering data

	Version			DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
8GB5016-5KM	② **Terminal strips with plug-in terminals** Number of slots per distribution board: • 1 to 2-tier: 2 units • 3 to 4-tier: 3 units									
	Type	Potential 1	Potential 2							
	N/PE	N = 3×25 + 14×4 mm²	PE = 3×25 + 14×14 mm²		8GB5016-5KM		1	1 unit	1BO	0.116
	N/N	N_1 = 3×25 + 14×4 mm²	N_2 = 3×25 + 14×14 mm²		8GB5017-5KM		1	1 unit	1BO	0.116
	N	N = 6×25 + 28×4 mm²			8GB5020-5KM		1	1 unit	1BO	0.115
	PU	PE = 6×16 + 28×4 mm²			8GB5021-5KM		1	1 unit	1BO	0.116
8GB5015-5KM	② **Terminal strips with screw terminals** Number of slots per distribution board: • 1 to 2-tier: 2 units • 3 to 4-tier: 3 units									
	Type	Potential 1	Potential 2							
	N/PE	N = 3×16 + 14×10 mm²	PE = 3×16 + 14×10 mm²		8GB5008-5KM		1	1 unit	1BO	0.126
	N/N	N_1 = 3×16 + 14×10 mm²	N_2 = 3×16 + 14×10 mm²		8GB5015-5KM		1	1 unit	1BO	0.130
	N	N = 6×16 + 28×10 mm²			8GB5010-5KM		1	1 unit	1BO	0.128
	PU	PE = 6×16 + 28×10 mm²			8GB5011-5KM		1	1 unit	1BO	0.129
8GB5005-5KM	③ **RCCB terminals** For distributing the neutral conductor to two RCCBs N = 3×16 + 2×10 mm²				8GB5005-5KM		1	1 unit	1BO	0.022
8GB5006-5KM	④ **Door locking kits** • For snapping into door handle • With two keys				8GB5006-5KM		1	1 unit	1BO	0.022
8GB4683	⑤ **Blanking strips** • 12 MW wide • Color: White • With increased flame protection up to 850°C, hence suitable for hollow-wall distribution boards				8GB4683		1	10 units	1BO	0.027

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Benefits

- Plan and configure quickly, simply and conveniently with the SIMARIS ConFiguration Basic software
- The wiring space behind the standard mounting rail is 15 mm and 48 mm, ensuring fast and easy wiring
- The door can be hinged on the right or left without tools
- Door opening angle of 180°
- The withdrawable device rack ensures easy and fast assembly. The generous wiring space and clearly arranged modular design reduce assembly times by approx. 20 %
- All plastic materials used can be recycled

Application

Due to the high degree of protection IP65, these small distribution boards can withstand harsh ambient conditions in both indoor and outdoor areas. Their resistance to dust and splashing water makes them ideal for use in a range of different application areas, such as car washes, farms, joiners' workshops, etc.

Special applications

Due to their large temperature operating range (-25 °C to +60 °C), UV radiation resistance and resistance to dust and splashing water, this small distribution board range is especially suitable for harsh ambient conditions.

Technical specifications

Rated current in A	Up to 63
Rated voltage in V AC	400
Rated insulation voltage acc. to IEC/EN 62208 (test values from IEC 61439-1) in AC / DC V	1000
Degree of protection	IP65
Safety class	2 (total insulation)
Color	Light gray RAL 7035
Temperature range	-20 °C to + 60 °C)
Impact strength	IK07
Mounting rail spacing	150 mm
Standard mounting rail	35 × 7.5 mm (EN 60715)
Device mounting depth	70 mm
Standards	EN 60439-3, IEC 60439-3

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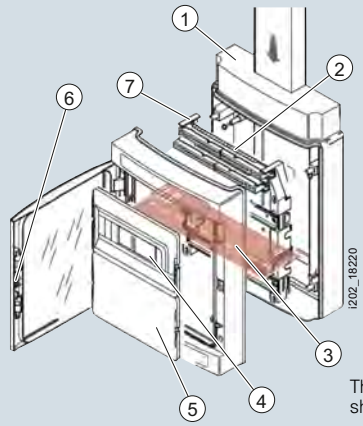
Surface-mounting distribution boards

Overview

Characteristics
- In accordance with IEC 60439-3 and EN 61439-1/3
- Degree of protection IP65
- Can be used in outdoor areas (-20 °C to +60 °C)
- Safety class 2 (total insulation)
- UV-resistant
- Transparent doors
- Color: Light gray RAL 7035

Mounting instructions
- N/PE terminal strips must be ordered separately
- 1 blanking strip is provided for each tier
- For device mounting depth up to 70 mm



1 Cover
2 Terminal strips
3 Partition
4 Cover
5 Cover, uninsulated
6 Door locking kit
7 Device rack

This illustration does not show the scope of delivery

Selection and ordering data

	Version				DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Surface-mounting distribution boards										
	Type	External dimensions H × W × D in mm	Tiers × MW	(2) Slots N/PE terminal strips[1] No. × Type							
8GB1371-2	• 1-tier	210 × 143 × 100 210 × 215 × 100 260 × 298 × 140 285 × 410 × 140	1 × 4 1 × 8 1 × 12 1 × 18	-- 1 × 8GB2052-0 1 × 8GB2052-1 1 × 8GB2052-2		**8GB1371-0** **8GB1371-1** **8GB1371-2** **8GB1371-3**		1 1 1 1	1 unit 1 unit 1 unit 1 unit	1BO 1BO 1BO 1BO	0.531 0.702 1.514 2.112
8GB1372-2	• 2-tier	420 × 298 × 140 463 × 410 × 140	2 × 12 2 × 18	2 × 8GB2052-1 2 × 8GB2052-2		**8GB1372-2** **8GB1372-3**		1 1	1 unit 1 unit	1BO 1BO	2.352 3.746
8GB1373-3	• 3-tier	655 × 410 × 140	3 × 18	2 × 8GB2052-2		**8GB1373-3**		1	1 unit	1BO	5.000
8GB1374-3	• 4-tier	878 × 410 × 160	4 × 18	4 × 8GB2052-2		**8GB1374-3**		1	1 unit	1BO	8.080

[1] Not included in delivery of the device.

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Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
8GB2051-0	① **Covers** • For connection of conduit and cable duct entries • Convenient snap-on mounting on the distribution board							
	MW							
	• 12		8GB2051-0		1	20 units	1BO	0.131
	• 18		8GB2051-1		1	20 units	1BO	0.214
8GB2052-0	② **N/PE terminal strips** For snapping onto device rack							
	MW / N / ⏚							
	• 8 — 1 × 25 mm² + 7 × 10 mm² — 1 × 25 mm² + 7 × 10 mm²		8GB2052-0		1	10 units	1BO	0.170
	• 12 — 3 × 25 mm² + 10 × 10 mm² — 3 × 25 mm² + 10 × 10 mm²		8GB2052-1		1	10 units	1BO	0.270
	• 18 — 5 × 25 mm² + 14× 10 mm² — 5 × 25 mm² + 14 × 10 mm²		8GB2052-2		1	10 units	1BO	0.420
8GB2053-0	③ **Inner partitions** Horizontal							
	MW							
	• 12		8GB2053-0		1	10 units	1BO	0.062
	• 18		8GB2053-1		1	10 units	1BO	0.104
	⑤ **Front covers**							
	MW							
	• 12		8GB2054-0		1	20 units	1BO	0.090
	• 18		8GB2054-1		1	20 units	1BO	0.213
8GB2055-0	⑥ **Safety cylinder locks** • With key • Made of metal		8GB2055-0		1	10 units	1BO	0.060
8GB4671	**Blanking strips** • 12 MW wide • Color: Gray • Knockouts enable easy cutting to required length • With increased flame protection up to 850°C		8GB4671		1	10 units	1BO	0.027

* You can order this quantity or a multiple thereof.

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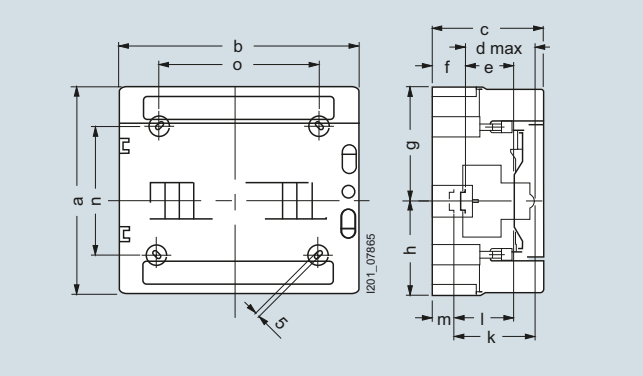
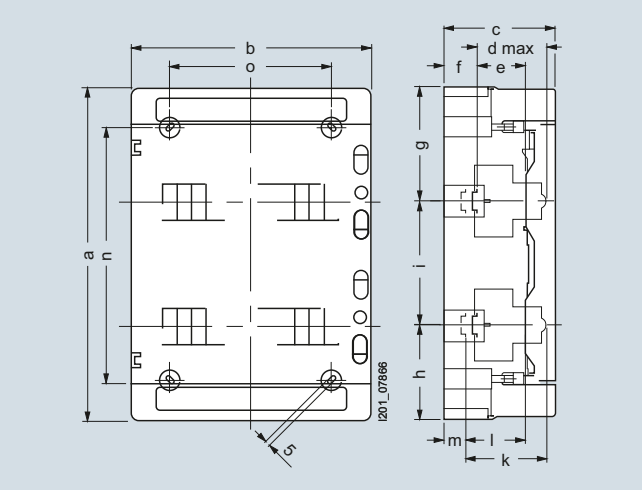
Dimensional drawings

Dimensional drawings



1-tier 8GB1371-0, 8GB1371-1, 8GB1371-2, 8GB1371-3



2-tier 8GB1372-2, 8GB1372-3
(3 and 4-tier versions not shown)

MW	Type	Dimensions													
		a	b	c	d_{max}	e	f	g	h	i	k	l	m	n	o
1 × 4	8GB1371-0	210	148	100	75	48	15	105	105	--	--	--	--	156	87
1 × 8	8GB1371-1	210	215	100	75	48	15	105	105	--	--	--	--	110	115
1 × 12	8GB1371-2	260	298	140	75	48	48	117.5	142.5	--	102	75	21	161	200
1 × 18	8GB1371-3	285	410	140	75	48	48	117.5	142.5	--	102	75	21	185	310
2 × 12	8GB1372-2	420	298	140	75	48	48	147.5	122.5	150	102	75	21	320	200
2 × 18	8GB1372-3	463	410	140	75	48	48	155.5	131.5	150	102	75	21	210	293
3 × 18	8GB1373-3	655	410	140	75	48	48	162.5	142.5	175	102	75	21	363	319
4 × 18	8GB1374-3	878	410	160	75	48	48	175	155.5	175	102	75	21	394	319

a = Distribution board height
b = Distribution board width
c = Distribution board depth
g = Device mounting depth
h = Wiring space behind the standard mounting rail

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17.2/2 **Introduction**

17.2/6 **8GK1 surface and flush-mounting distribution boards**

Quick-assembly kits for unequipped distribution boards

17.2/7 8GK4 quick-assembly kits for modular installation devices

Assembly kits for unequipped distribution boards

17.2/8 Longitudinal stays

17.2/8 Assembly kits for modular installation devices

17.2/9 8GK4 assembly kits

17.2/10 **Mounting of fuse switch disconnectors**

17.2/10 **Accessories**

17.2/13 **Special colors option**

NEW

Direct reference to the products in the Industry Mall from the selection and ordering data tables:

Article No.
www.siemens.com/product?Article No.
3VA2025-5HL36-0AA0

Paper catalog:
To get more product information enter the Web address plus Article No.

PDF catalog:
Get more product information with just a mouse click.

For further technical product information:

Siemens Industry Online Support:
www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
Download
FAQ
Manual
Product note
Software archive
Technical data

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Introduction

Overview

		Devices	Page	Surface-mounting distribution boards	Flush-mounting distribution boards	Rated current	Cubicle depth	Safety class	
						A	mm	1	2
	Small distribution boards	SIMBOX XL small distribution boards:							
		• Flush-mounting and hollow-wall distribution boards	17.1/6	--	✔	63	88[1]	--	✔
		• IP30 surface-mounting distribution boards	17.1/11	✔	--	63	99	--	✔
		SIMBOX WP small distribution boards:							
		• IP65 surface-mounting distribution boards	17.1/15	✔	--	63	100/140/160	--	✔
	ALPHA 160 DIN technology distribution boards	Cubicle, partially equipped	17.2/6	✔	✔	160	140	--	✔
		Unequipped distribution board	17.2/8	✔	✔	160	140	--	✔
	ALPHA 400 DIN technology distribution boards	Unequipped distribution board, as flat pack	17.3/9	✔	--	400	210	✔	✔
		Unequipped distribution board	17.3/10	✔	✔	400	210	✔	✔
	ALPHA 630 DIN technology distribution boards	Unequipped distribution board, as flat pack	17.4/7	✔	--	630	210	✔	✔
		Unequipped distribution board	17.4/7	✔	--	630	210/250/320	✔	✔
		Unequipped distribution board, with open side panels	17.4/8	✔	--	630	250/320	✔	--
	ALPHA 1250 DIN technology distribution boards	Unequipped distribution board	17.5/7	✔	--	1250	400	✔	--

[1] Mounting depth

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Degree of protection	VDE	EN	DIN	IEC
IP30	DIN VDE 0603	--	DIN 43871	IEC 61439-1/-3
IP65	DIN VDE 0603-1, VDE 0660-600-1/-3	EN 61439-1/-3	DIN 43871	IEC 61439-1/-3
IP31 / IP43 / IP44	VDE 0660-600-1/-3	EN 61439-1/-3	--	IEC 61439-1/-3
IP43	VDE 0660-600-1/-2/-3	EN 61439-1/-2/-3	--	IEC 61439-1/-2/-3
IP31 / IP43 / IP55				
IP43	VDE 0660-600-1/-2	EN 61439-1/-2	--	IEC 61439-1/-2
IP43 / IP55				
IP55				
IP55	VDE 0660-600-1/-2	EN 61439-1/-2	--	Type verification according to IEC 61439-1/-2

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ALPHA 160 Distribution Boards

Introduction

System

The modular design of our Siemens distribution board system draws on our decades of experience.

This system has been tailored to meet individual requirements for distribution board installation.

The system comprises unequipped distribution boards, partially equipped distribution boards with cabinet-high quick-assembly kits, cabinet-high quick-assembly kits for modular installation devices for fast equipping and wiring, assembly kits for project-related and individual assembly, as well as an extensive range of accessories.

Enclosure

Material:
Electrogalvanized and powder-coated sheet steel.

Sheet thickness:
Body 0.75 mm, door 1 mm

Color:
RAL 9016 (traffic white).
Further RAL colors are available on request. For special colors, see page 17.2/13.

Quick-assembly kits and assembly kits

The assembly kits are made of sendzimir-galvanized sheet steel and are equipped with molded-plastic covers for a wide range of equipping options, e.g. with switching devices and modular installation devices.

The largest switching devices that can be installed in the ALPHA 160 DIN technology distribution boards are the 3NP4010 and 3NP4070 fuse switch disconnectors in sizes NH 000 and NH 00 with a rated current of up to 160 A.

Benefits

- Plan and configure quickly, simply and conveniently with the SIMARIS ConFiguration Basic software
- Easy planning thanks to modular design
- Ample wiring space behind the standard mounting rail
- Comprehensive range of cabinet-high and frequently used quick-assembly kits and standard assembly kits for individual and project-related assembly
- Easy assembly thanks to keyhole-fastened components and modules with quick-acting locks
- Fast mounting times thanks to quick-assembly kits
- System concept according to DIN, EN and VDE standards
- Solid sheet-steel enclosure
- Degree of protection:
  - Surface mounting, IP43/IP44 with additional sealing of the rotary handle
  - Flush mounting: IP31 with door and integrated masking frame
- Safety class 2 (total insulation)
- High-quality surface finish: Distribution boards made of electrogalvanized and powder-coated sheet steel, system components made of sendzimir-galvanized sheet steel, galvanized and transparently chromated small components and screws
- Doors can be hinged on the right or left
- Door opening angle of 170°
- Replaceable locking systems (accessories)
- Front cover with sealable 90° quick-acting locks
- Environmentally-friendly and recyclable plastics

Application

ALPHA 160 DIN technology distribution boards are used for all applications for which a small distribution board does not provide sufficient equipping or wiring space, e.g. in residential, administrative, non-residential, commercial and industrial buildings.

Its ultra flat design (depth 140 mm) is an extremely useful addition to the Siemens distribution board product range.

The distribution board and its components are of modular design.

With just a few standard components, it is possible to achieve a wide range of project-related mounting and equipping options.

The ALPHA 160 DIN technology distribution board range comprises wall-mounted distribution boards with up to 7 modular installation devices, each with 12 MW per mounting width (250 mm). The standard mounting rail tier spacing is 125 mm or 150 mm. A total of 4 cabinet mounting widths are available, each with an internal dimension of 250 mm.

The distribution boards can be supplied in safety class 2 (total insulation). The standard degree of protection for surface-mounting distribution boards is IP43 and IP31 for flush-mounting distribution boards. The rated current is 160 A.

The modular design of the board enables easy planning, configuration, calculation, ordering and mounting.

Cabinet-high quick-assembly kits or assembly kits that only require a one-size screwdriver for assembly are available for all mountable switching devices and modular installation devices.

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Technical specifications

Overvoltage category	III
Rated impulse withstand voltage U_{imp} in KV	6
Clearance and creepage distances	EN 60664-1
Rated insulation voltage U_i in V	690
Rated operational voltage U_e in V AC/DC	690
Rated voltage U_n (40 Hz ... 60 Hz AC) in V	690 for built-in devices
Rated current in A	Up to 160
Protective measures	Safety class 2 (total insulation)
Degree of protection acc. to EN 60529	Surface mounting: IP43 / IP44 with additional seal set with door Flush mounting: IP31 with door and integrated masking frame
Standard mounting rail tier spacing per standard mounting rail tier in mm	125/150
Modular width (MW)	18 mm, 12 MW + 1 mountable MW
Pollution degree	3
Ambient temperature in °C	35 (24-h mean value)
Relative air humidity in %	50 at 40 °C
Test specifications	EN 61439-1/-3 (VDE 0660-600-1/-3)
Enclosure	Sheet steel
Mounting dimensions	DIN 43870
Surface	Electrogalvanized and powder-coated
Color • Enclosure[1)] • Covers	 RAL 9016 (traffic white) RAL 7035 (light gray)
Lock	Rotary handle – can be replaced by other locking systems if required
Packing material	Shock-proof, environmentally-friendly

[1)] Further RAL colors are available on request.
For special colors, see page 17.2/13.

Cabinet dimensions

Surface-mounting distribution boards (external dimensions)		**Flush-mounting distribution boards with integrated masking frame (external dimensions)**	
Depth 140 mm		**Depth 140 mm**	
Height mm	**Width** mm	**Height** mm	**Width** mm
500	300 550	558	358 608
650	300 550	708	358 608
800	300 550	858	358 608
950	300 550	1008	358 608
1100	300 550	1158	358 608

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8GK1 surface and flush-mounting distribution boards

Overview

- Cabinet depth of 140 mm
- Safety class 2 (total insulation)
- Color RAL 9016 (traffic white)
- For special colors, see page 17.2/13
- Enclosure complete with door. Distribution boards with a width of 750/800 mm or more will be supplied with a double door. The integral rotary handle can be replaced with a different type of locking system, if preferred.
- Flanges: per panel width, one 2-component flange each at the top and bottom
- For distribution boards with built-in distribution board panels: Tier spacing of 125 mm with N/PE bar per panel width
- Flush-mounting distribution board with integrated masking frame

Note: Wall anchors are included in delivery with flush-mounting distribution boards.

Selection and ordering data

Internal/external dimensions Height mm	Width mm	Panel width	Tiers/ MW	DT	Surface-mounting distribution boards, IP43 Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	DT	Flush-mounting distribution boards, IP31 Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Unequipped distribution boards															
450/500	250/300		--		8GK1032-1KK11		1	1 unit	1BP		8GK1031-1KK11		1	1 unit	1BP
	500/550				8GK1032-1KK21		1	1 unit	1BP		8GK1031-1KK21		1	1 unit	1BP
	750/800				8GK1032-1KK31		1	1 unit	1BP		--				
600/650	250/300		--		8GK1032-2KK11		1	1 unit	1BP		8GK1031-2KK11		1	1 unit	1BP
	500/550				8GK1032-2KK21		1	1 unit	1BP		8GK1031-2KK21		1	1 unit	1BP
	750/800				8GK1032-2KK31		1	1 unit	1BP		--				
	1000/1050				8GK1032-2KK41		1	1 unit	1BP		--				
750/800	250/300		--		8GK1032-3KK11		1	1 unit	1BP		8GK1031-3KK11		1	1 unit	1BP
	500/550				8GK1032-3KK21		1	1 unit	1BP		8GK1031-3KK21		1	1 unit	1BP
	750/800				8GK1032-3KK31		1	1 unit	1BP		--				
	1000/1050				8GK1032-3KK41		1	1 unit	1BP		--				
900/950	250/300		--		8GK1032-4KK11		1	1 unit	1BP		8GK1031-4KK11		1	1 unit	1BP
	500/550				8GK1032-4KK21		1	1 unit	1BP		8GK1031-4KK21		1	1 unit	1BP
	750/800				8GK1032-4KK31		1	1 unit	1BP		--				
	1000/1050				8GK1032-4KK41		1	1 unit	1BP		--				
1050/1100	250/300		--		8GK1032-5KK11		1	1 unit	1BP		8GK1031-5KK11		1	1 unit	1BP
	500/550				8GK1032-5KK21		1	1 unit	1BP		8GK1031-5KK21		1	1 unit	1BP
	750/800				8GK1032-5KK31		1	1 unit	1BP		--				
	1000/1050				8GK1032-5KK41		1	1 unit	1BP		--				
Distribution boards with built-in distribution board panels															
450/500	250/300		3/36		8GK1052-1KK11		1	1 unit	1BP		--				
	500/550		6/72		8GK1052-1KK21		1	1 unit	1BP		--				
	750/800		9/108		8GK1052-1KK31		1	1 unit	1BP		--				
600/650	250/300		4/48		8GK1052-2KK11		1	1 unit	1BP		--				
	500/550		8/96		8GK1052-2KK21		1	1 unit	1BP		--				
	750/800		12/144		8GK1052-2KK31		1	1 unit	1BP		--				
	1000/1050		16/192		8GK1052-2KK41		1	1 unit	1BP		--				
750/800	250/300		5/60		8GK1052-3KK11		1	1 unit	1BP		--				
	500/550		10/120		8GK1052-3KK21		1	1 unit	1BP		--				
	750/800		15/180		8GK1052-3KK31		1	1 unit	1BP		--				
	1000/1050		20/240		8GK1052-3KK41		1	1 unit	1BP		--				
900/950	250/300		6/72		8GK1052-4KK11		1	1 unit	1BP		--				
	500/550		12/144		8GK1052-4KK21		1	1 unit	1BP		--				
	750/800		18/216		8GK1052-4KK31		1	1 unit	1BP		--				
	1000/1050		24/288		8GK1052-4KK41		1	1 unit	1BP		--				
1050/1100	250/300		7/84		8GK1052-5KK11		1	1 unit	1BP		--				
	500/550		14/168		8GK1052-5KK21		1	1 unit	1BP		--				
	750/800		21/252		8GK1052-5KK31		1	1 unit	1BP		--				
	1000/1050		28/336		8GK1052-5KK41		1	1 unit	1BP		--				

Quick-assembly kits and assembly kits: 17.2/7. Accessories: 17.2/10.

* You can order this quantity or a multiple thereof.

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Overview

Quick-assembly kits are pre-assembled cabinet-high system components for the most common applications. Such kits already include the longitudinal stays and can be simply snapped into the unequipped distribution boards of the respective mounting height, thanks to the time-saving quick-locking technology.

Selection and ordering data

	External dimensions		Tiers/ MW	DT	Quick-assembly kits, for modular installation devices									
					Tier spacing of 125 mm, with N/PE bar					**Tier spacing of 150 mm, without N/PE bar**				
	Height	Width			Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
	mm	mm												
8GK4051-3KK11	450	250	3/36		**8GK4001-3KK11**		1	1 unit	1BP	**8GK4051-3KK11**		1	1 unit	1BP
8GK4051-4KK11	600	250	4/48		**8GK4001-4KK11**		1	1 unit	1BP	**8GK4051-4KK11**		1	1 unit	1BP
8GK4051-5KK11	750	250	5/60		**8GK4001-5KK11**		1	1 unit	1BP	**8GK4051-5KK11**		1	1 unit	1BP
8GK4051-6KK11	900	250	6/72		**8GK4001-6KK11**		1	1 unit	1BP	**8GK4051-6KK11**		1	1 unit	1BP
8GK4051-7KK11	1050	250	7/84		**8GK4001-7KK11**		1	1 unit	1BP	**8GK4051-7KK11**		1	1 unit	1BP

The quick-assembly kits with a width of 250 mm are equipped with 7.5 mm standard mounting rails.

For accessories, see page 17.2/10.

*** You can order this quantity or a multiple thereof.**

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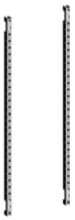
Longitudinal stays

Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
 8GK4851-3KK00	**Longitudinal stays** • To mount the assembly kits in unequipped distribution boards, 2 longitudinal stays are required for each assembly kit width • 1 set = 2 stays						
	Height in mm						
	• 450		**8GK4851-3KK00**		1	1 set	1BP
	• 600		**8GK4851-4KK00**		1	1 set	1BP
	• 750		**8GK4851-5KK00**		1	1 set	1BP
	• 900		**8GK4851-6KK00**		1	1 set	1BP
	• 1050		**8GK4851-7KK00**		1	1 set	1BP

Assembly kits for modular installation devices

Overview

- Assembly kits for individual and project-related assembly, comprising: Device racks, front cover including supports, screws and mounting accessories
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports

Note:
For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.2/8).

Selection and ordering data

	External dimensions Height	Width	Tiers/ MW	DT	Assembly kits, for modular installation devices **Tier spacing 125 mm** Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	DT	**Tier spacing 150 mm** Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
	mm	mm													
8GK4351-1KK21	150	250 500	1/12 1/24		-- --						**8GK4351-1KK11** **8GK4351-1KK21**		1 1	1 unit 1 unit	1BP 1BP
8GK4351-2KK21	300	250 500	2/24 2/48		**8GK4301-2KK11** **8GK4301-2KK21**		1 1	1 unit 1 unit	1BP 1BP		**8GK4351-2KK11** **8GK4351-2KK21**		1 1	1 unit 1 unit	1BP 1BP
8GK4351-3KK21	450	250 500	3/36 3/72		**8GK4301-3KK11** **8GK4301-3KK21**		1 1	1 unit 1 unit	1BP 1BP		**8GK4351-3KK11** **8GK4351-3KK21**		1 1	1 unit 1 unit	1BP 1BP
8GK4351-4KK21	600	250 500	4/48 4/96		**8GK4301-4KK11** **8GK4301-4KK21**		1 1	1 unit 1 unit	1BP 1BP		**8GK4351-4KK11** **8GK4351-4KK21**		1 1	1 unit 1 unit	1BP 1BP

The assembly kits with a width of 250 mm and 500 mm are equipped with 7.5 mm standard mounting rails.

For accessories, see page 17.2/10.

* You can order this quantity or a multiple thereof.

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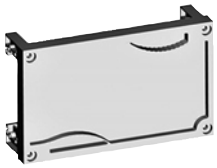
Selection and ordering data


8GK4401-1KK11

Assembly kits for horizontal terminal blocks
- Terminal blocks with graded insulation design
- Closed
- Assembly kits for individual and project-related assembly, comprising: Device racks, front cover including supports, screws and mounting accessories
- With a front cover (for unequipped panels is sealable as standard and the quick-acting locking connections facilitate fast and reliable fixation to the supports)

Height in mm (external dimensions)	Width in mm (external dimensions)	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
150	250		8GK4401-1KK11		1	1 unit	1BP
	500		8GK4401-1KK21		1	1 unit	1BP
300	250		8GK4401-2KK11		1	1 unit	1BP
	500		8GK4401-2KK21		1	1 unit	1BP

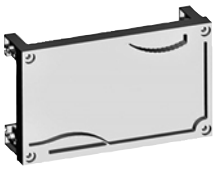
Note
- For assembly kits with a width of 500 mm it is recommended to install a vertical profile bar.
- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.2/8).

8GK4451-2KK11

Assembly kits with mounting plates
- Closed
- Assembly kits for individual and project-related assembly, comprising: Mounting plate, front cover including supports, screws and mounting accessories
- With a front cover (for unequipped panels is sealable as standard and the quick-acting locking connections facilitate fast and reliable fixation to the supports)

External dimensions (mm): Assembly kit		Mounting plate dimensions in mm		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Height	Width	Height	Width						
300	250	245	207.5		8GK4451-2KK11		1	1 unit	1BP
450		395			8GK4451-3KK11		1	1 unit	1BP
600		545			8GK4451-4KK11		1	1 unit	1BP

Note
For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.2/8).


8GK4501-1KK11

Assembly kits for unequipped panels
- Assembly kits for individual and project-related assembly, comprising: Front cover including supports, screws and mounting accessories
- With a front cover (for unequipped panels is sealable as standard and the quick-acting locking connections facilitate fast and reliable fixation to the supports)

Height in mm (external dimensions)	Width in mm (external dimensions)	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
150	250		8GK4501-1KK11		1	1 unit	1BP
	500		8GK4501-1KK21		1	1 unit	1BP
300	250		8GK4501-2KK11		1	1 unit	1BP
	500		8GK4501-2KK21		1	1 unit	1BP
450	250		8GK4501-3KK11		1	1 unit	1BP
	500		8GK4501-3KK21		1	1 unit	1BP
600	250		8GK4501-4KK11		1	1 unit	1BP
	500		8GK4501-4KK21		1	1 unit	1BP

Note
For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.2/8).

For accessories, see page 17.2/10 onwards.

* You can order this quantity or a multiple thereof.

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Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Unequipped distribution boards and partially equipped distribution boards							
8GK9912-0KK10	**Wall-mounting rails** • For all wall-mounted distribution boards • The distribution board can be quickly and precisely mounted by a single person						
	Length in mm						
	• 250		8GK9912-0KK10		1	1 unit	1BP
	• 500		8GK9912-0KK20		1	1 unit	1BP
	• 750		8GK9912-0KK30		1	1 unit	1BP
	• 1000		8GK9912-0KK40		1	1 unit	1BP
	• 1250		8GK9912-0KK50		1	1 unit	1BP
	Cabinet mounting lugs, flat						
	Versions						
	• For mounting and fixing the cabinet directly against the wall without spacing - 1 set = 4 lugs including screws		8GK9910-0KK36		1	5 sets	1BP
	• For linking two cabinets and for mounting and fixing directly against the wall without spacing - 8GK9910-0KK36 also required for the ends of a row of cabinets - 1 set = 2 lugs including screws		8GK9910-0KK37		1	1 set	1BP
	Hollow wall sets For fixing flush-mounting distribution boards in hollow walls		8GK9910-0KK28		1	1 set	1BP
	Locking systems						
8GK9560-0KK04	Versions						
	• Standard locking devices - Made of plastic - Color: Black - With rotary handle for wall-mounted distribution board, degree of protection IP43 - Cannot be retrofitted to other locking devices		8GK9560-0KK04		1	1 unit	1BP
	• Rotary handle locking devices for profile cylinders - For wall-mounted distribution boards with degree of protection IP43/IP55, with mounting option for a profile semicylinder (length 40 mm) - Suitable for E012 or Senat tumbler - Color: Black		8GK9560-0KK06		1	1 unit	1BP
	• Lockable rotary handles - Including E012 lock and two keys		8GK9560-0KK13		1	1 unit	1BP
	Accessories						
	Spare key for E012 lock		8GF9390-2		1	1 unit	1BP
	Profile semicylinders						
	Versions						
8GK9560-0KK07	• With E012 lock and two keys		8GK9560-0KK07		1	1 unit	1BP
8GK9560-0KK08	• With Senat tumbler and two keys		8GK9560-0KK08		1	1 unit	1BP
8GK9560-0KK10	• With 3-mm pin as double-bit lock		8GK9560-0KK10		1	1 unit	1BP

17
2

* You can order this quantity or a multiple thereof.

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Mounting of fuse switch disconnectors

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8GK9000-0KK02	**2-component flanges** • For fast and correct wiring • With 44 possible knockouts • Comprising 2 elastic components		8GK9000-0KK02		1	1 unit	1BP
8GD9084	**Siemens nameplates** • Made of aluminum • Self-adhesive • Color: Petrol		8GD9084		1	1 unit	1BP
8GK9560-0KK05	**Retrofit kits** • For standard locking device to IP44 degree of protection		8GK9560-0KK05		1	1 set	1BP
	Partitions • For the visual and spatial separation of different potentials • Plastic						
	Versions						
8GK9001-3KK01	• Vertical - Height 450 mm - Height 600 mm - Height 750 mm - Height 900 mm - Height 1050 mm		8GK9001-3KK01 8GK9001-4KK01 8GK9001-5KK01 8GK9001-6KK01 8GK9001-7KK01		1 1 1 1 1	1 unit 1 unit 1 unit 1 unit 1 unit	1BP 1BP 1BP 1BP 1BP
8GK9002-0KK10	• Horizontal - Width 250 mm		8GK9002-0KK10		1	1 unit	1BP
8GK9910-0KK11	**N/PE bars as plug-in terminals**						
	Versions						
	• Each with six screw terminals from 2.5 to 16 mm² and 21 plug-in connections from 1.5 to 4 mm² for mounting on longitudinal stays at a 30° inclination		8GK9910-0KK11		1	1 unit	1BP
	• With six screw terminals from 2.5 to 16 mm² and 21 plug-in connections from 1.5 to 4 mm², for PE bar and one N bar each with two screw terminals from 2.5 to 16 mm² and 10 plug-in connections from 1.5 to 4 mm², for mounting on longitudinal stays at a 30° inclination		8GK9910-0KK12		1	1 unit	1BP
8GS4034-1	**N terminals** ▶ • For snap-on mounting onto the standard mounting rail • For distributing the neutral conductor when using several RCBBs • 2 × screw terminal, conductor cross-section max. 16 mm² • 14 × plug-in terminal, conductor cross-section max. 4 mm²		8GS4034-1		1	1 unit	1BP
8GS4034-2	**PE terminals** ▶ • For snap-on mounting onto the standard mounting rail • 2 × screw terminal, conductor cross-section max. 16 mm² • 14 × plug-in terminal, conductor cross-section max. 4 mm²		8GS4034-2		1	1 unit	1BP
8GS4034-3	**N/PE terminals** ▶ • For snap-on mounting onto the standard mounting rail • For distributing the neutral conductor when using several RCBBs • 1 × screw terminal, conductor cross-section max. 16 mm² 1) • 7 × plug-in terminal, conductor cross-section max. 4 mm² 1)		8GS4034-3		1	1 unit	1BP
	Footnote						
	1) Per PE or N potential.						

* You can order this quantity or a multiple thereof.

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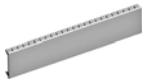
Mounting of fuse switch disconnectors

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8GS4034-4	**N/N terminal** • For snap-on mounting onto the standard mounting rail • For distributing the neutral conductor when using several RCBBs • 1 × screw terminal, conductor cross-section max. 16 mm^2 1) • 7 × plug-in terminal, conductor cross-section max. 4 mm^2 1) Footnote 1) Per PE or N potential.	►	8GS4034-4		1	1 unit	1BP
8GK9910-0KK20	**Supports for front covers** • Short version • Plastic • 1 set = 4 supports		8GK9910-0KK20		1	5 sets	1BP
 8GK9910-0KK00	**Blanking strips** Color RAL 7035 (light gray) Versions • For 12 MW (1 MW = 18 mm) • Length 1 m w/o pressure-relief joint, to cut to length		8GK9910-0KK00 8GK9910-0KK01		1 1	10 units 1 unit	1BP 1BP
8GK9910-0KK27	**ALPHA assembly tools** • For supports • Short and long version • With ergonomic handle for supports		8GK9910-0KK27		1	1 unit	1BP
8GK9910-0KK35	**Standard mounting rails, lowered** Width • 250 mm • 500 mm • 750 mm		8GK9910-0KK35 8GK9910-0KK40 8GK9910-0KK41		1 1 1	1 unit 1 set 1 set	1BP 1BP 1BP

* You can order this quantity or a multiple thereof.

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Special colors	Color designation	Option	ALPHA 160 Surcharge
	RAL 9016 traffic white semi-gloss smooth	**C10**	None
	RAL 7035 light gray semi-gloss smooth	**C11**	None
	RAL 7035 light gray semi-gloss textured	**C12**	✓
	RAL 7032 pebble gray semi-gloss textured	**C13**	✓
	RAL 7038 agate gray semi-gloss textured	**C14**	✓
	RAL 9010 pure white semi-gloss smooth	**C15**	✓
	SN 610 Siemens white semi-gloss textured	**C16**	✓
	SN 610 Siemens white silky gloss textured	**C17**	✓
	RAL 9002 gray white semi-gloss smooth	**C18**	✓
	RAL 9002 gray white semi-gloss smooth	**C19**	✓
	RAL 9003 signal white semi-gloss textured	**C20**	✓
	RAL 9001 cream semi-gloss smooth	**C21**	✓
	RAL 5017 traffic blue silky gloss textured	**C22**	✓
	RAL 5005 signal blue semi-gloss smooth	**C23**	✓
	RAL 5010 gentian blue semi-gloss smooth	**C24**	✓
	RAL 2000 yellow orange semi-gloss smooth	**C25**	✓
	RAL 6018 yellow green semi-gloss smooth	**C26**	✓
	RAL 1003 signal yellow semi-gloss smooth	**C27**	✓
	RAL 7033 cement gray semi-gloss textured	**C28**	✓
	RAL 9002 gray white silky gloss smooth	**C29**	✓
	RAL 9010 pure white semi-gloss textured	**C30**	✓
	RAL 3000 flame red silky gloss textured	**C31**	✓

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Notes

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17.3/2	**Introduction**
17.3/9	**Unequipped distribution boards (flat pack delivery)** 8GK1 surface-mounting distribution boards, IP43
17.3/10	**Unequipped distribution boards** 8GK1 surface-mounting distribution boards, IP43
17.3/11	8GK1 surface-mounting distribution boards, IP55
17.3/12	8GK1 flush-mounting distribution boards, IP31
17.3/13	**Quick-assembly kits for unequipped distribution boards** 8GK4 quick-assembly kits for modular installation devices
17.3/15	8GK4 quick-assembly kits for modular installation devices and terminal blocks
17.3/16	**Longitudinal stays**
17.3/17	**Assembly kits for unequipped distribution boards**
17.3/26	**Accessories**
17.3/32	**Special colors option**

NEW

Direct reference to the products in the Industry Mall from the selection and ordering data tables:

Article No.
www.siemens.com/product?Article No.
3VA2025-5HL36-0AA0

Paper catalog:
To get more product information enter the Web address plus Article No.

PDF catalog:
Get more product information with just a mouse click.

For further technical product information:

Siemens Industry Online Support:
www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
Download
FAQ
Manual
Product note
Software archive
Technical data

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Introduction

Overview

		Devices	Page	Surface-mounting distribution boards	Flush-mounting distribution boards	Rated current	Cubicle depth	Safety class	
						A	mm	1	2
	Small distribution boards	SIMBOX XL small distribution boards:							
		• Flush-mounting and hollow-wall distribution boards	17.1/6	--	✔	63	88[1]	--	✔
		• IP30 surface-mounting distribution boards	17.1/11	✔	--	63	99	--	✔
		SIMBOX WP small distribution boards:							
		• IP65 surface-mounting distribution boards	17.1/15	✔	--	63	100/140/160	--	✔
	ALPHA 160 DIN technology distribution boards	Cubicle, partially equipped	17.2/6	✔	✔	160	140	--	✔
		Unequipped distribution board	17.2/8	✔	✔	160	140	--	✔
	ALPHA 400 DIN technology distribution boards	Unequipped distribution board, as flat pack	17.3/9	✔	--	400	210	✔	✔
		Unequipped distribution board	17.3/10	✔	✔	400	210	✔	✔
	ALPHA 630 DIN technology distribution boards	Unequipped distribution board, as flat pack	17.4/7	✔	--	630	210	✔	✔
		Unequipped distribution board	17.4/7	✔	--	630	210/250/320	✔	✔
		Unequipped distribution board, with open side panels	17.4/8	✔	--	630	250/320	✔	--
	ALPHA 1250 DIN technology distribution boards	Unequipped distribution board	17.5/7	✔	--	1250	400	✔	--

[1] Mounting depth

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Degree of protection	VDE	EN	DIN	IEC
IP30	DIN VDE 0603	--	DIN 43871	IEC 61439-1/-3
IP65	DIN VDE 0603-1, VDE 0660-600-1/-3	EN 61439-1/-3	DIN 43871	IEC 61439-1/-3
IP31 / IP43 / IP44	VDE 0660-600-1/-3	EN 61439-1/-3	--	IEC 61439-1/-3
IP43	VDE 0660-600-1/-2/-3	EN 61439-1/-2/-3	--	IEC 61439-1/-2/-3
IP31 / IP43 / IP55				
IP43	VDE 0660-600-1/-2	EN 61439-1/-2	--	IEC 61439-1/-2
IP43 / IP55				
IP55				
IP55	VDE 0660-600-1/-2	EN 61439-1/-2	--	Type verification according to IEC 61439-1/-2

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Introduction

System

The modular design of our Siemens distribution board system draws on our decades of experience.

This system has been tailored to meet individual requirements for distribution board installation.

The system comprises unequipped distribution boards as flat pack for surface-mounting distribution boards (delivery in individual parts for self-assembly), unequipped distribution boards welded and riveted for surface-mounting and flush-mounting distribution boards, cabinet-height quick-assembly kits for ultra fast equipping and wiring, assembly kits for project-related and individual assembly – as well as an extensive range of accessories.

Enclosure

- Material: Electrogalvanized and powder-coated sheet steel
- Sheet thickness, degree of protection IP43: Body 0.75 mm, door 1 mm
- Sheet thickness, degree of protection IP55: Body 0.75 mm, door 1 mm
- Color: RAL 9016 (traffic white). Further RAL colors are available on request. For special colors, see page 17.3/32.

Quick-assembly kits and assembly kits

The assembly kits are made of sendzimir-galvanized sheet steel and are equipped with molded-plastic covers for a wide range of equipping options, e.g. with switching devices and modular installation devices.

The largest controls that can be installed in the ALPHA 400 DIN technology distribution boards are the Siemens controls up to a rated current of 400 A.

Cabinet dimensions

All dimensions in mm.

- Height (internal/external): 600/650, 750/800, 900/950, 1050/1100, 1200/1250, 1350/1400
- Width (internal/external dimensions): 250/300, 500/550, 750/800, 1000/1050, 1250/1300
- Depth (external dimension): 210
- Assembly kits in panel-size grid dimensions height × width: 150 × 250.

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Flat pack delivery

ALPHA distribution boards are also available as flat packs. This means that a distribution board is delivered in individual parts in a cardboard box.

The cardboard boxes contain the individual parts, brief mounting instructions and all mounting accessories.

Only a few manual steps are required to assemble the individual system components to create wall or floor-mounted distribution boards of degree of protection IP43.

The only tool required for such assembly is a one-size screwdriver.

This offers clear advantages and customer benefits: a considerable reduction in the delivery volume and storage space required.

It goes without saying that the distribution boards can also be delivered in a pre-assembled form.

Unequipped distribution board delivery option

In the unequipped distribution board delivery option, ALPHA distribution boards are delivered as welded and riveted complete enclosures.

Benefits

- Plan and configure quickly, simply and conveniently with the SIMARIS ConFiguration Basic software
- Delivery options:
  - Flat pack (assembly kit for self-assembly)
  - Unequipped distribution board, welded and riveted
  - The cabinet-high quick-assembly kits and the assembly kits can be mounted directly onto the platform (rear panel)
  - Additional mounting stays are required for mounting the assembly kits! 2 longitudinal stays per panel width must be ordered separately for the assembly kits.
- Easy planning thanks to modular design
- Ample wiring space behind the standard mounting rail
- Comprehensive range of cabinet-high and frequently used quick-assembly kits and standard assembly kits for individual and project-related assembly
- Easy assembly thanks to keyhole-fastened components and modules with quick-acting locks
- Fast mounting times thanks to quick-assembly kits
- System concept according to DIN, EN and VDE standards
- Solid sheet-steel enclosure
- Degree of protection: surface-mounting version: IP43 with door, IP55 with door; flush-mounting version: IP31 with door and integrated masking frame
- Safety class 1 (protective conductor connection) or safety class 2 (total insulation)
- High-quality surface finish: Distribution boards made of electrogalvanized and powder-coated sheet steel, system components made of sendzimir-galvanized sheet steel, galvanized and transparently chromated small components and screws
- Doors can be hinged on the right or left
- Door opening angle of 180°
- Replaceable locking systems (accessories)
- Front cover with sealable 90° quick-acting locks
- Environmentally-friendly and recyclable plastics

Application

The ALPHA 400 DIN technology distribution boards are used for all applications for which the ALPHA 160 DIN technology distribution boards do not provide sufficient equipping or wiring space, e.g. in residential, administrative, non-residential, commercial and industrial buildings.

With a mounting depth of 210 mm, it ideally supplements the distribution board system.

The distribution board and its components are of modular design.

With just a few standard components, it is possible to achieve a wide range of project-related mounting and equipping options.

The ALPHA 400 DIN technology distribution board range comprises wall-mounted distribution boards with up to 9 modular installation devices, each with 12 MW per mounting width (250 mm). The standard mounting rail tier spacing is 125 mm or 150 mm. A total of 5 cabinet mounting widths are available, each with an internal dimension of 250 mm.

The cabinets can be supplied in safety class 1 (protective conductor connection) or safety class 2 (total insulation). The standard degree of protection for surface-mounting distribution boards is IP43 and IP55. The standard degree of protection for flush-mounting distribution boards is IP31. The rated current is 400 A.

The modular design of the board enables easy planning, configuration, calculation, ordering and mounting.

Cabinet-high quick-assembly kits or assembly kits that only require a one-size screwdriver for assembly are available for all mountable switching devices and modular installation devices.

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Introduction

Design

Platform concept

A further innovation of the ALPHA distribution board product range is the "platform concept", which means that all supporting built-in components are mounted directly onto the platform (rear panel).

The covering parts (side plates, top plates, base plates and doors) are either assembled immediately or at a later point in time, irrespective of the assembly kits. The fact that the quick-assembly kits and assembly kits can be equipped and wired with modular installation devices is an additional advantage.

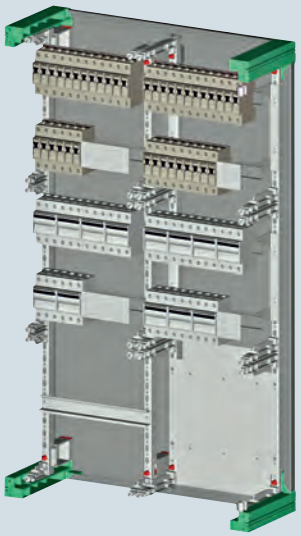
The completely wired assembly kits can then be placed on the platform and secured to the rear panel with a quick-acting lug. In addition, the quick-assembly kits or assembly kits can optionally be secured with a screw, which is included in delivery.

The enclosure covering parts such as top and base plate as well as side plates are then mounted.

The available wiring space can be optimally utilized as the rear panels of the modular installation devices can be manually accessed from all four sides.

Another advantage of the platform concept is that the covering parts will not be scratched or damaged when wiring the distribution board.

During the mounting phase, the platform can be optionally mounted with or without the covering parts and doors. The completely equipped and wired assembly kits or quick-assembly kits are then simply click-fastened onto the platform or in the pre-assembled unequipped distribution board.



The fully equipped and wired assembly kits or quick-assembly kits are fastened directly onto the platform (rear panel).

The front covers can now be mounted.

The covering parts such as top, base and side plates are then mounted.

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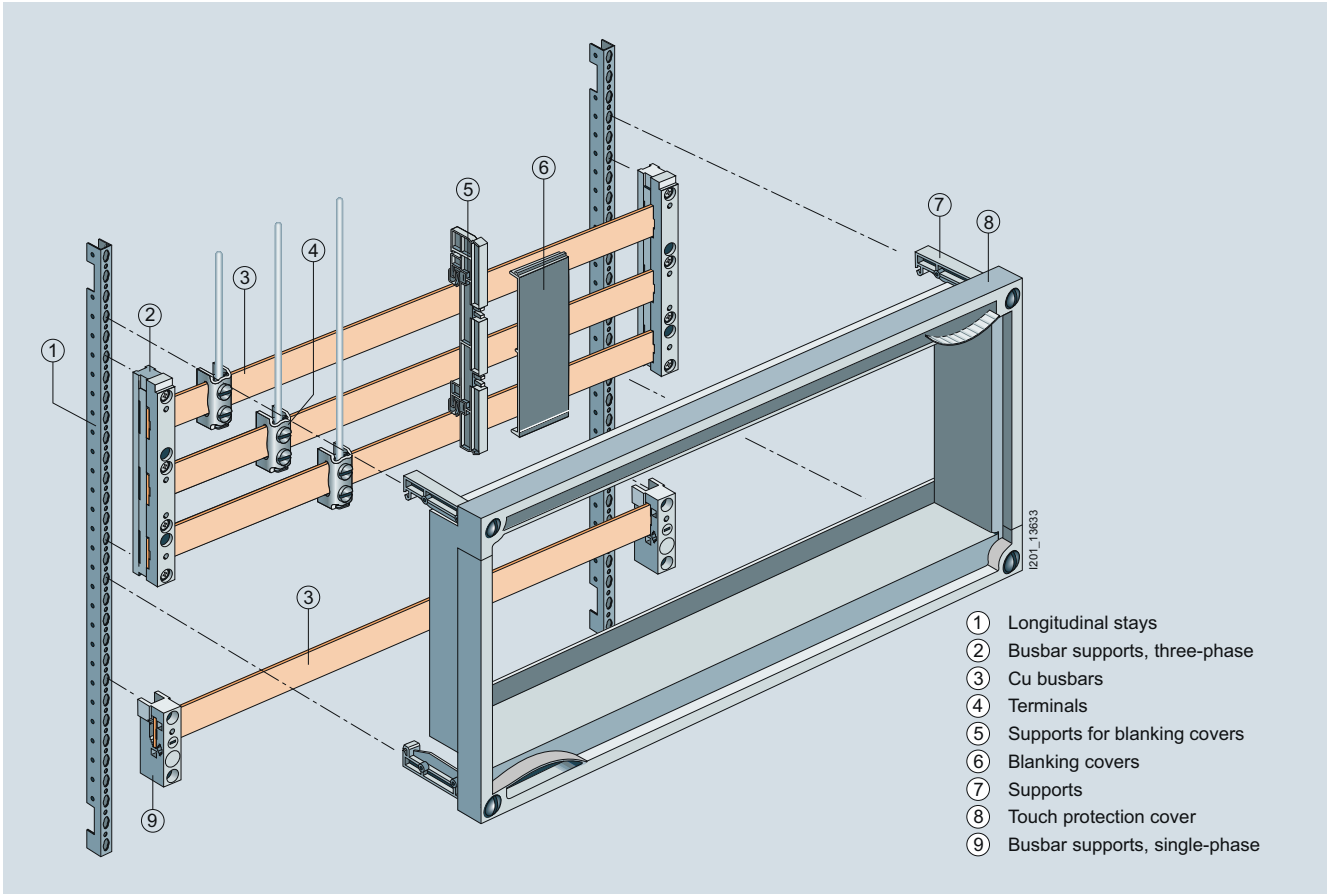
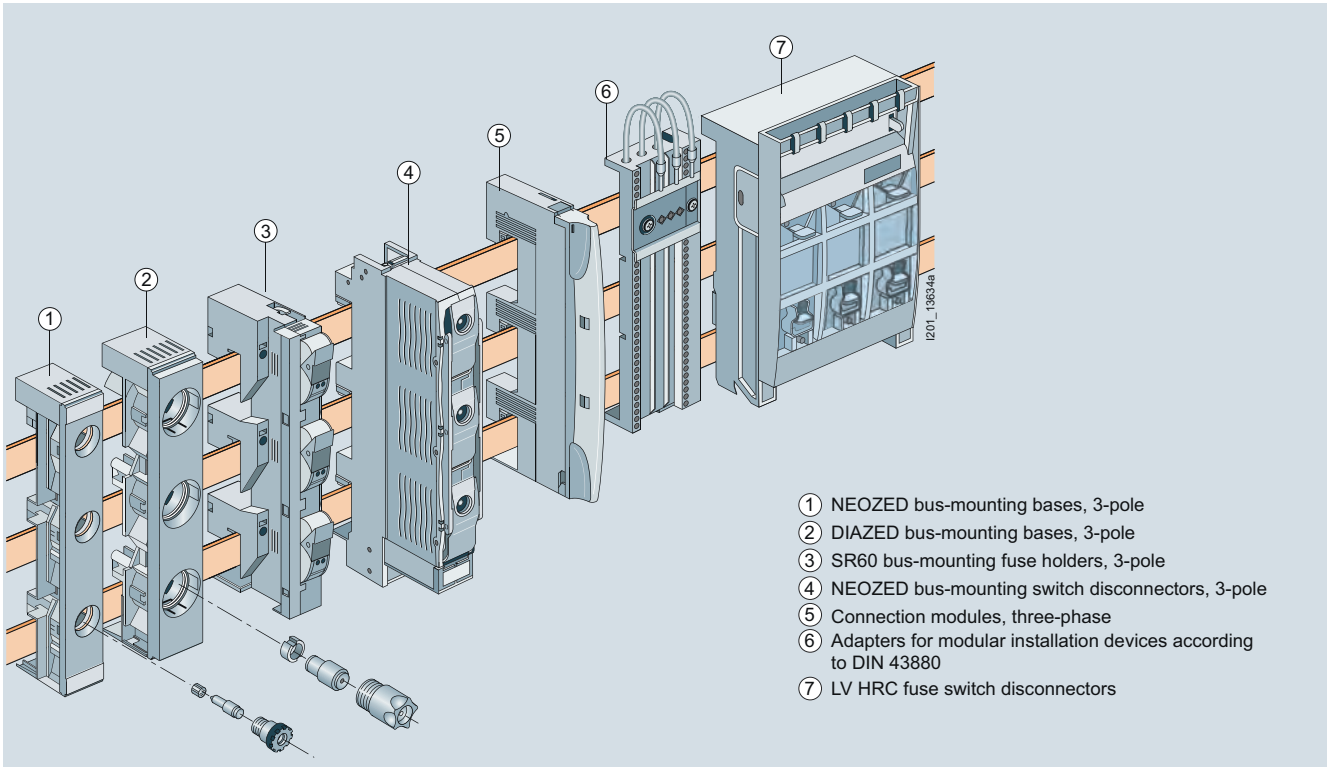


Distribution board components for the SR60 busbar system, 60 mm



Built-in components for the SR60 busbar system, 60 mm

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Technical specifications

Overvoltage category	III
Rated impulse withstand voltage U_{imp} in kV	6
Clearance and creepage distances	EN 60664-1
Rated insulation voltage U_i in V	690
Rated operational voltage U_e in V AC/DC	690
Rated voltage U_n (40 Hz ... 60 Hz AC) in V	690 for built-in devices
Rated current in A	Up to 400
Rated peak short-circuit current I_{pk} in kA	Up to 76 (3-pole)[2]
Rated short-time current I_{cw} in kA	34, conduction interval of 1 s
Protective measures	Safety class 1 (protective conductor connection) Safety class 2 (total insulation)
Number of conductors in the busbar run	4/5
Degree of protection acc. to EN 60529	Surface mounting: IP43 with door, IP55 with door Flush mounting: IP31 with door and integrated masking frame
Standard mounting rail tier spacing per standard mounting rail tier in mm	125/150
Modular width (MW)	18 mm, 12 MW + 1 mountable MW
Pollution degree	3
Ambient temperature in °C	35 (24-h mean value)
Relative air humidity in %	50 at 40 °C
Test specifications	EN 61439-1/-2/-3 (VDE 0660-600-1/-2/-3)
Enclosure	Sheet steel
Mounting dimensions	DIN 43870
Surface	Electrogalvanized and powder-coated
Color • Enclosure[1] • Covers	 RAL 9016 (traffic white) RAL 7035 (light gray)
Lock	Rotary handle – can be replaced by other locking systems if required
Packing material	Shock-proof, environmentally-friendly

[1] Further RAL colors are available on request.
For special colors, see page 17.3/32.

[2] Busbar support spacing: 250 mm, Cu busbars 30 mm × 10 mm.

Cabinet dimensions

Surface-mounting distribution boards (external dimensions)		Flush-mounting distribution boards with integrated masking frame (external dimensions)		Recess dimensions for flush-mounting distribution boards	
Depth 210 mm		**Depth 210 mm**		**Depth 215 mm**	
Height	**Width**	**Height**	**Width**	**Height**	**Width**
mm	mm	mm	mm	mm	mm
800	550 800	858	608 858	860	610 860
950	550 800	1008	608 858	1010	610 860
1250	550 800	1308	608 858	1310	610 860
1400	550 800	1458	608 858	1460	610 860

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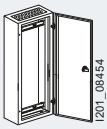
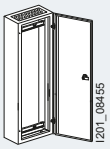
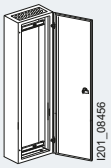
Overview

- Delivery options:
  - Flat pack (assembly kit for self-assembly)
  - Unequipped distribution board
  - The cabinet-high quick-assembly kits and the assembly kits can be mounted directly onto the platform (rear panel)
  - Additional mounting stays are required for mounting the assembly kits! 2 longitudinal stays per panel width must be ordered separately for the assembly kits.
- Cabinet depth of 210 mm
- Degree of protection IP43
- Safety class 1 (protective conductor connection) or safety class 2 (total insulation)
- Color RAL 9016 (traffic white)
- For special colors, see page 17.3/32
- Unassembled enclosure with unassembled enclosed door and rotary handle, which can be replaced by other locking systems. Distribution boards with a width of 750 mm/800 mm or more will be supplied with a double door
- Flanges: One 1-component flange at the bottom and one 2-component flange at the top per panel width

Selection and ordering data

Internal/external dimensions		Panel width	DT	Surface-mounting distribution boards, IP43										
				Safety class 1						Safety class 2				
Height	Width			Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
mm	mm													
600/650	250/300	□		8GK1102-2KK12		1	1 unit	1BP		8GK1112-2KK12		1	1 unit	1BP
	500/550	□□		8GK1102-2KK22		1	1 unit	1BP		8GK1112-2KK22		1	1 unit	1BP
	750/800	□□□		8GK1102-2KK32		1	1 unit	1BP		8GK1112-2KK32		1	1 unit	1BP
	1000/1050	□□□□		8GK1102-2KK42		1	1 unit	1BP		8GK1112-2KK42		1	1 unit	1BP
750/800	250/300	□		8GK1102-3KK12		1	1 unit	1BP		8GK1112-3KK12		1	1 unit	1BP
	500/550	□□		8GK1102-3KK22		1	1 unit	1BP		8GK1112-3KK22		1	1 unit	1BP
	750/800	□□□		8GK1102-3KK32		1	1 unit	1BP		8GK1112-3KK32		1	1 unit	1BP
	1000/1050	□□□□		8GK1102-3KK42		1	1 unit	1BP		8GK1112-3KK42		1	1 unit	1BP
900/950	250/300	□		8GK1102-4KK12		1	1 unit	1BP		8GK1112-4KK12		1	1 unit	1BP
	500/550	□□		8GK1102-4KK22		1	1 unit	1BP		8GK1112-4KK22		1	1 unit	1BP
	750/800	□□□		8GK1102-4KK32		1	1 unit	1BP		8GK1112-4KK32		1	1 unit	1BP
	1000/1050	□□□□		8GK1102-4KK42		1	1 unit	1BP		8GK1112-4KK42		1	1 unit	1BP
	1250/1300	□□□□□		8GK1102-4KK52		1	1 unit	1BP		8GK1112-4KK52		1	1 unit	1BP
1050/1100	250/300	□		8GK1102-5KK12		1	1 unit	1BP		8GK1112-5KK12		1	1 unit	1BP
	500/550	□□		8GK1102-5KK22		1	1 unit	1BP		8GK1112-5KK22		1	1 unit	1BP
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1200/1250	250/300	□		8GK1102-6KK12		1	1 unit	1BP		8GK1112-6KK12		1	1 unit	1BP
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	1250/1300	□□□□□		8GK1102-6KK52		1	1 unit	1BP		8GK1112-6KK52		1	1 unit	1BP
1350/1400	250/300	□		8GK1102-7KK12		1	1 unit	1BP		8GK1112-7KK12		1	1 unit	1BP
	500/550	□□		8GK1102-7KK22		1	1 unit	1BP		8GK1112-7KK22		1	1 unit	1BP
	750/800	□□□		8GK1102-7KK32		1	1 unit	1BP		8GK1112-7KK32		1	1 unit	1BP
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	1250/1300	□□□□□		8GK1102-7KK52		1	1 unit	1BP		8GK1112-7KK52		1	1 unit	1BP

For quick-assembly kits and assembly kits, see pages 17.3/13 to 17.3/25.

For accessories, see page 17.3/26.

*** You can order this quantity or a multiple thereof.**

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8GK1 surface-mounting distribution boards, IP43

Overview

- Cabinet depth of 210 mm
- Degree of protection IP43
- Safety class 1 (protective conductor connection) or safety class 2 (total insulation)
- Color RAL 9016 (traffic white)
- For special colors, see page 17.3/32
- Enclosure welded and riveted with door and rotary handle, which can be replaced by other locking systems. Distribution boards with a width of 750 mm/800 mm or more will be supplied with a double door
- Flanges: per panel width, one 2-component flange each at the top and bottom

Selection and ordering data

Internal/external dimensions		Panel width	DT	Surface-mounting distribution boards, IP43 NEW									
				Safety class 1						Safety class 2			
Height	Width			Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
mm	mm													
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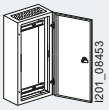
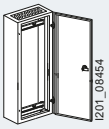
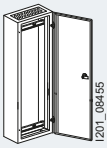
	500/550	□□		8GK1122-2KA22		1	1 unit	1BP		8GK1132-2KA22		1	1 unit	1BP
	750/800	□□□		8GK1122-2KA32		1	1 unit	1BP		8GK1132-2KA32		1	1 unit	1BP
	1000/1050	□□□□		8GK1122-2KA42		1	1 unit	1BP		8GK1132-2KA42		1	1 unit	1BP
750/800	250/300	□		8GK1122-3KA12		1	1 unit	1BP		8GK1132-3KA12		1	1 unit	1BP
	500/550	□□		8GK1122-3KA22		1	1 unit	1BP		8GK1132-3KA22		1	1 unit	1BP
	750/800	□□□		8GK1122-3KA32		1	1 unit	1BP		8GK1132-3KA32		1	1 unit	1BP
	1000/1050	□□□□		8GK1122-3KA42		1	1 unit	1BP		8GK1132-3KA42		1	1 unit	1BP
900/950	250/300	□		8GK1122-4KA12		1	1 unit	1BP		8GK1132-4KA12		1	1 unit	1BP
	500/550	□□		8GK1122-4KA22		1	1 unit	1BP		8GK1132-4KA22		1	1 unit	1BP
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	1000/1050	□□□□		8GK1122-4KA42		1	1 unit	1BP		8GK1132-4KA42		1	1 unit	1BP
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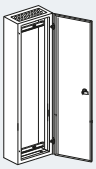	500/550	□□		8GK1122-5KA22		1	1 unit	1BP		8GK1132-5KA22		1	1 unit	1BP
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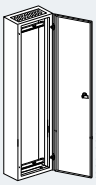	500/550	□□		8GK1122-6KA22		1	1 unit	1BP		8GK1132-6KA22		1	1 unit	1BP
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	1250/1300	□□□□□		8GK1122-6KA52		1	1 unit	1BP		8GK1132-6KA52		1	1 unit	1BP
1350/1400	250/300	□		8GK1122-7KA12		1	1 unit	1BP		8GK1132-7KA12		1	1 unit	1BP
	500/550	□□		8GK1122-7KA22		1	1 unit	1BP		8GK1132-7KA22		1	1 unit	1BP
	750/800	□□□		8GK1122-7KA32		1	1 unit	1BP		8GK1132-7KA32		1	1 unit	1BP
	1000/1050	□□□□		8GK1122-7KA42		1	1 unit	1BP		8GK1132-7KA42		1	1 unit	1BP
	1250/1300	□□□□□		8GK1122-7KA52		1	1 unit	1BP		8GK1132-7KA52		1	1 unit	1BP

For quick-assembly kits and assembly kits, see pages 17.3/13 to 17.3/25.

For accessories, see page 17.3/26.

* You can order this quantity or a multiple thereof.

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Overview

- Cabinet depth of 210 mm
- IP55 degree of protection
- Safety class 1 (protective conductor connection) or safety class 2 (total insulation)
- Color RAL 9016 (traffic white)
- For special colors, see page 17.3/32
- Enclosure welded and riveted with door and rotary handle, which can be replaced by other locking systems. Distribution boards with a width of 750 mm/800 mm or more will be supplied with a double door
- Flanges: per panel width, one 2-component flange each at the top and bottom

Selection and ordering data

Internal/external dimensions		Panel width	DT	Surface-mounting distribution boards, IP55									
				Safety class 1						Safety class 2			
Height	Width			Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
mm	mm													
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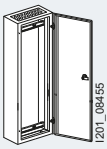	500/550	□□		8GK1123-4KA22		1	1 unit	1BP		8GK1133-4KA22		1	1 unit	1BP
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	1000/1050	□□□□		8GK1123-4KA42		1	1 unit	1BP		8GK1133-4KA42		1	1 unit	1BP
	1250/1300	□□□□□		8GK1123-4KA52		1	1 unit	1BP		8GK1133-4KA52		1	1 unit	1BP
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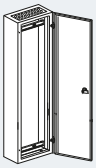	500/550	□□		8GK1123-5KA22		1	1 unit	1BP		8GK1133-5KA22		1	1 unit	1BP
	750/800	□□□		8GK1123-5KA32		1	1 unit	1BP		8GK1133-5KA32		1	1 unit	1BP
	1000/1050	□□□□		8GK1123-5KA42		1	1 unit	1BP		8GK1133-5KA42		1	1 unit	1BP
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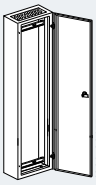	500/550	□□		8GK1123-6KA22		1	1 unit	1BP		8GK1133-6KA22		1	1 unit	1BP
	750/800	□□□		8GK1123-6KA32		1	1 unit	1BP		8GK1133-6KA32		1	1 unit	1BP
	1000/1050	□□□□		8GK1123-6KA42		1	1 unit	1BP		8GK1133-6KA42		1	1 unit	1BP
	1250/1300	□□□□□		8GK1123-6KA52		1	1 unit	1BP		8GK1133-6KA52		1	1 unit	1BP
1350/1400	250/300	□		8GK1123-7KA12		1	1 unit	1BP		8GK1133-7KA12		1	1 unit	1BP
	500/550	□□		8GK1123-7KA22		1	1 unit	1BP		8GK1133-7KA22		1	1 unit	1BP
	750/800	□□□		8GK1123-7KA32		1	1 unit	1BP		8GK1133-7KA32		1	1 unit	1BP
	1000/1050	□□□□		8GK1123-7KA42		1	1 unit	1BP		8GK1133-7KA42		1	1 unit	1BP
	1250/1300	□□□□□		8GK1123-7KA52		1	1 unit	1BP		8GK1133-7KA52		1	1 unit	1BP

For quick-assembly kits and assembly kits, see pages 17.3/13 to 17.3/25.

For accessories, see page 17.3/26.

* You can order this quantity or a multiple thereof.

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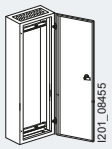
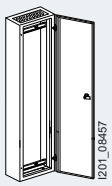
8GK1 flush-mounting distribution boards, IP31

Overview

- Cabinet depth of 210 mm
- Degree of protection: IP31 (flush-mounting design comes with an integrated masking frame)
- Safety class 1 (protective conductor connection) or safety class 2 (total insulation)
- Color RAL 9016 (traffic white)
- For special colors, see page 17.3/32
- Enclosure with door and rotary handle, which can be replaced by other locking systems. Distribution boards with a width of 750 mm/800 mm or more will be supplied with a double door
- Flanges:
  - Safety class 1 is delivered without flanges

Note: Wall anchors are included in delivery with flush-mounting distribution boards.

Selection and ordering data

Internal/external dimensions		Panel width	DT	Flush-mounting distribution boards, IP31			
Height	Width			Safety class 1			
				Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
mm	mm							
750/800	500/550	□□		8GK1121-3KK22		1	1 unit	1BP
	750/800	□□□		8GK1121-3KK32		1	1 unit	1BP
900/950	500/550	□□		8GK1121-4KK22		1	1 unit	1BP
	750/800	□□□		8GK1121-4KK32		1	1 unit	1BP
1200/1250	500/550	□□		8GK1121-6KK22		1	1 unit	1BP
	750/800	□□□		8GK1121-6KK32		1	1 unit	1BP
1350/1400	500/550	□□		8GK1121-7KK22		1	1 unit	1BP
	750/800	□□□		8GK1121-7KK32		1	1 unit	1BP

For quick-assembly kits and assembly kits, see pages 17.3/13 to 17.3/25.

For accessories, see page 17.3/26.

* You can order this quantity or a multiple thereof.

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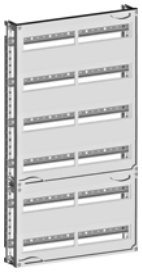
Overview

Quick-assembly kits are pre-assembled cabinet-high system components for the most common applications. Such kits already include the longitudinal stays and can be simply snapped into the unequipped distribution boards of the respective mounting height, thanks to the time-saving quick-locking technology.

Selection and ordering data

	External dimensions		Tiers/ MW	DT	Quick-assembly kits, for modular installation devices				DT	Tier spacing of 150 mm, without N/PE bar				
					Tier spacing of 125 mm, with N/PE bar		PU (UNIT, SET, M)	PS*/ P. unit	PG			PU (UNIT, SET, M)	PS*/ P. unit	PG
	Height	Width			Article No. www.siemens.com/product?Article No.	Price per PU				Article No. www.siemens.com/product?Article No.	Price per PU			
	mm	mm												
8GK4001-4KK22	600	250	4/48		**8GK4001-4KK11**		1	1 unit	1BP	**--**				
		500	8/96		**8GK4001-4KK22**		1	1 unit	1BP	**--**				
8GK4001-5KK22	750	250	5/60		**8GK4001-5KK11**		1	1 unit	1BP	**--**				
		500	10/120		**8GK4001-5KK22**		1	1 unit	1BP	**--**				
 8GK4001-6KK22	900	250	6/72		**8GK4001-6KK11**		1	1 unit	1BP	**8GK4051-6KK11**		1	1 unit	1BP
					8GK4003-6KK11 (with 2 N/PE bars)		1	1 unit	1BP	**--**				
		500	12/144		**8GK4001-6KK22**		1	1 unit	1BP	**8GK4101-6KK22**		1	1 unit	1BP

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8GK4 quick-assembly kits for modular installation devices

	External dimensions		Tiers/ MW	DT	Quick-assembly kits, for modular installation devices								
					Tier spacing of 125 mm, with N/PE bar	PU (UNIT, SET, M)	PS*/ P. unit	PG	DT	**Tier spacing of 150 mm, without N/PE bar**	PU (UNIT, SET, M)	PS*/ P. unit	PG
	Height mm	Width mm			Article No. www.siemens.com/product?Article No. Price per PU					Article No. www.siemens.com/product?Article No. Price per PU			
8GK4001-7KK11	1050	250	7/84		**8GK4001-7KK11**	1	1 unit	1BP		**8GK4051-7KK11**	1	1 unit	1BP
					8GK4003-7KK11 (with 2 N/PE bars)	1	1 unit	1BP		--			
		500	14/168		**8GK4001-7KK22**	1	1 unit	1BP		**8GK4101-7KK22**	1	1 unit	1BP
8GK4001-8KK12	1200	250	8/96		**8GK4001-8KK12**	1	1 unit	1BP		**8GK4101-8KK12**	1	1 unit	1BP
					8GK4003-8KK12 (with 2 N/PE bars)	1	1 unit	1BP		--			
		500	16/192		**8GK4001-8KK22**	1	1 unit	1BP		**8GK4101-8KK22**	1	1 unit	1BP
8GK4002-8KK12	1350	250	9/108		**8GK4002-8KK12**	1	1 unit	1BP		**8GK4102-8KK12**	1	1 unit	1BP
					8GK4003-8KK13 (with 2 N/PE bars)	1	1 unit	1BP		--			
		500	18/216		**8GK4002-8KK22**	1	1 unit	1BP		**8GK4102-8KK22**	1	1 unit	1BP

Note

- The quick-assembly kits with a width of 250 mm are equipped with 7.5 mm standard mounting rails.
- The quick-assembly kits with a width of 500 mm are equipped with 15 mm standard mounting rails.
- For accessories, see page 17.3/26.

* You can order this quantity or a multiple thereof.

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Selection and ordering data

	External dimensions		Tiers terminals/tiers REG/MW	DT	Quick-assembly kits, for modular installation devices			
					Tier spacing of 150 mm, without N/PE bar	PU (UNIT, SET, M)	PS*/ P. unit	PG
	Height	Width			Article No. www.siemens.com/product?Article No.	Price per PU		
	mm	mm						
8GK4100-6KK22	900	250	2/4/48		**8GK4100-6KK12**	1	1 unit	1BP
		500	4/8/96		**8GK4100-6KK22**	1	1 unit	1BP
		750	6/12/144		**8GK4100-6KK32**	1	1 unit	1BP
8GK4100-7KK22	1050	250	2/5/60		**8GK4100-7KK12**	1	1 unit	1BP
		500	4/10/120		**8GK4100-7KK22**	1	1 unit	1BP
		750	6/15/180		**8GK4100-7KK32**	1	1 unit	1BP
8GK4100-8KK22	1200	250	2/6/72		**8GK4100-8KK12**	1	1 unit	1BP
		500	4/12/144		**8GK4100-8KK22**	1	1 unit	1BP
		750	6/18/216		**8GK4100-8KK32**	1	1 unit	1BP
8GK4110-8KK22	1350	250	3/6/72		**8GK4110-8KK12**	1	1 unit	1BP
		500	6/12/144		**8GK4110-8KK22**	1	1 unit	1BP
		750	9/18/216		**8GK4110-8KK32**	1	1 unit	1BP

Note

- The quick-assembly kits with a width of 250 mm are equipped with 7.5 mm standard mounting rails.
- The quick-assembly kits with a width of 500 mm/750 mm are equipped with 15 mm standard mounting rails.
- For accessories, see page 17.3/26.

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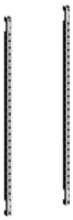
Longitudinal stays

Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
 8GK4851-4KK00	**Longitudinal stays** • To mount the assembly kits in unequipped distribution boards, 2 longitudinal stays are required for each assembly kit width • 1 set = 2 stays						
	Height in mm						
	600		**8GK4851-4KK00**		1	1 set	1BP
	750		**8GK4851-5KK00**		1	1 set	1BP
	900		**8GK4851-6KK00**		1	1 set	1BP
	1050		**8GK4851-7KK00**		1	1 set	1BP
	1200		**8GK4851-8KK00**		1	1 set	1BP
	1350		**8GK4852-8KK00**		1	1 set	1BP
8GK9910-0KK32	**Connecting kits for longitudinal stays** • Connecting plate for stays • 1 set = 4 units		**8GK9910-0KK32**		1	1 unit	1BP

* You can order this quantity or a multiple thereof.

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Selection and ordering data

8GK4351-1KK12

8GK4351-2KK12

8GK4351-3KK12

8GK4351-4KK12

Assembly kits, for modular installation devices

- Assembly kits for individual and project-related assembly, comprising: Device racks, front cover including supports, screws and mounting accessories
- Panel-size grid dimensions H × W (mm): 150 × 250
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports

Row center distance	External dimensions		Tiers/MW	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
	Height	Width							
mm	mm	mm							
125	150	250	1/12		--				
		500	1/24		--				
		750	1/36		--				
	300	250	2/24		8GK4301-2KK12		1	1 unit	1BP
		500	2/48		8GK4301-2KK22		1	1 unit	1BP
		750	2/72		--				
	450	250	3/36		8GK4301-3KK12		1	1 unit	1BP
		500	3/72		8GK4301-3KK22		1	1 unit	1BP
		750	3/108		--				
	600	250	4/48		8GK4301-4KK12		1	1 unit	1BP
		500	4/96		8GK4301-4KK22		1	1 unit	1BP
		750	4/144		--				
150	150	250	1/12		8GK4351-1KK12		1	1 unit	1BP
		500	1/24		8GK4351-1KK22		1	1 unit	1BP
		750	1/36		8GK4351-1KK32		1	1 unit	1BP
	300	250	2/24		8GK4351-2KK12		1	1 unit	1BP
		500	2/48		8GK4351-2KK22		1	1 unit	1BP
		750	2/72		8GK4351-2KK32		1	1 unit	1BP
	450	250	3/36		8GK4351-3KK12		1	1 unit	1BP
		500	3/72		8GK4351-3KK22		1	1 unit	1BP
		750	3/108		8GK4351-3KK32		1	1 unit	1BP
	600	250	4/48		8GK4351-4KK12		1	1 unit	1BP
		500	4/96		8GK4351-4KK22		1	1 unit	1BP
		750	4/144		8GK4351-4KK32		1	1 unit	1BP

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.3/16).
- For accessories, see page 17.3/26.
- The assembly kits with a width of 250 mm are equipped with 7.5 mm standard mounting rails.
- The assembly kits with a width of 500/750 mm are equipped with 15 mm standard mounting rails.

* You can order this quantity or a multiple thereof.

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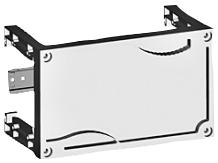
Assembly kits for unequipped distribution boards



8GK4401-1KK12

Assembly kits for horizontal terminal blocks
- Terminal blocks with graded insulation design
- With closed front cover
- Assembly kits for individual and project-related assembly, comprising: Device racks, front cover including supports, screws and mounting accessories
- Panel-size grid dimensions H × W (mm): 150 × 250
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports

External dimensions in mm

Height	Width	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
150	250	**8GK4401-1KK12**		1	1 unit	1BP
300	250	**8GK4401-2KK12**		1	1 unit	1BP
	500	**8GK4401-2KK22**		1	1 unit	1BP
	750	**8GK4401-2KK32**		1	1 unit	1BP
450	250	**8GK4401-3KK12**		1	1 unit	1BP
	500	**8GK4401-3KK22**		1	1 unit	1BP
	750	**8GK4401-3KK32**		1	1 unit	1BP

Note

For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.3/16).

8GK4402-2KK12

Assembly kits for vertical terminal blocks
- Terminal blocks with insulation design
- With closed front cover
- Assembly kits for individual and project-related assembly, comprising: Device racks, front cover including supports, screws and mounting accessories
- Panel-size grid dimensions H × W (mm): 150 × 250

External dimensions in mm

Height	Width	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
300	250	**8GK4402-2KK12**		1	1 unit	1BP
	500	**8GK4402-2KK22**		1	1 unit	1BP
	750	**8GK4402-2KK32**		1	1 unit	1BP
450	250	**8GK4402-3KK12**		1	1 unit	1BP
	500	**8GK4402-3KK22**		1	1 unit	1BP
	750	**8GK4402-3KK32**		1	1 unit	1BP
600	250	**8GK4402-4KK12**		1	1 unit	1BP
	500	**8GK4402-4KK22**		1	1 unit	1BP

Note

For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.3/16).

8GK4500-2KK20

Assembly kit front covers, for measuring devices, cutout dimensions 92 mm x 92 mm

Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8GK4500-2KK20		1	1 unit	1BP

Note

For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.3/16).

* You can order this quantity or a multiple thereof.

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Assembly kits for unequipped distribution boards

8GK4501-0KK12

Assembly kits for unequipped panels

- Gray
- Assembly kits for individual and project-related assembly, comprising: Front cover including supports, screws and mounting accessories
- Panel-size grid dimensions H × W (mm): 150 × 250
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports

External dimensions in mm		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Height	Width						
75	250		8GK4501-0KK12		1	1 unit	1BP
	500		8GK4501-0KK22		1	1 unit	1BP
150	250		8GK4501-1KK12		1	1 unit	1BP
	500		8GK4501-1KK22		1	1 unit	1BP
	750		8GK4501-1KK32		1	1 unit	1BP
300	250		8GK4501-2KK12		1	1 unit	1BP
	500		8GK4501-2KK22		1	1 unit	1BP
	750		8GK4501-2KK32		1	1 unit	1BP
450	250		8GK4501-3KK12		1	1 unit	1BP
	500		8GK4501-3KK22		1	1 unit	1BP
	750		8GK4501-3KK32		1	1 unit	1BP
600	250		8GK4501-4KK12		1	1 unit	1BP
	500		8GK4501-4KK22		1	1 unit	1BP
	750		8GK4501-4KK32		1	1 unit	1BP
750	250		8GK4501-5KK12		1	1 unit	1BP
	500		8GK4501-5KK22		1	1 unit	1BP
	750		8GK4501-5KK32		1	1 unit	1BP

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.3/16).
- For accessories, see page 17.3/26.

8GK4501-3KK23

Assembly kits for unequipped panels with deep-drawn cover, 40 mm

- Assembly kits for individual and project-related assembly, comprising: Front cover including supports, screws and mounting accessories
- Panel-size grid dimensions H × W (mm): 150 × 250
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports.

External dimensions in mm		DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Height	Width						
300	250		8GK4501-2KK13		1	1 unit	1BP
	500		8GK4501-2KK23		1	1 unit	1BP
	750		8GK4501-2KK33		1	1 unit	1BP
450	250		8GK4501-3KK13		1	1 unit	1BP
	500		8GK4501-3KK23		1	1 unit	1BP
	750		8GK4501-3KK33		1	1 unit	1BP

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.3/16).
- For accessories, see page 17.3/26.

*** You can order this quantity or a multiple thereof.**

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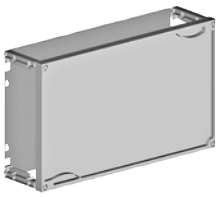
Assembly kits for unequipped distribution boards



8GK4451-2KK12

Assembly kits with mounting plates

- Assembly kits for individual and project-related assembly, comprising: Mounting plate, front cover including supports, mounting brackets (depth-adjustable), screws and mounting accessories
- With closed front cover
- Panel-size grid dimensions H × W (mm): 150 × 250
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports

External dimensions (mm): Assembly kit		Mounting plate dimensions in mm		Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Height	Width	Height	Width							
300	250	245	207.5			8GK4451-2KK12		1	1 unit	1BP
	500		457.5			8GK4451-2KK22		1	1 unit	1BP
	750		707.5			8GK4451-2KK32		1	1 unit	1BP
450	250	395	207.5			8GK4451-3KK12		1	1 unit	1BP
	500		457.5			8GK4451-3KK22		1	1 unit	1BP
	750		707.5			8GK4451-3KK32		1	1 unit	1BP
600	250	545	207.5			8GK4451-4KK12		1	1 unit	1BP
	500		457.5			8GK4451-4KK22		1	1 unit	1BP
	750		707.5			8GK4451-4KK32		1	1 unit	1BP

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.3/16).
- If the fitted mounting plate extends over several panel widths, it is not possible to place a longitudinal stay in the middle.
- For accessories, see page 17.3/26.

8GK9531-4KK10

Cabinet-high mounting plates

- With fixing screws
- Sendzimir-galvanized sheet steel
- For mounting on longitudinal stays
- No covers available
- Not depth-adjustable

External dimensions in mm		Mounting plate dimensions in mm		Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Height	Width	Height	Width							
600	250	596	243			8GK9531-4KK10		1	1 unit	1BP
	500		493			8GK9531-4KK20		1	1 unit	1BP
750	250	685	243			8GK9531-5KK10		1	1 unit	1BP
	500		493			8GK9531-5KK20		1	1 unit	1BP
900	250	835	243			8GK9531-6KK10		1	1 unit	1BP
	500		493			8GK9531-6KK20		1	1 unit	1BP
1050	250	985	243			8GK9531-7KK10		1	1 unit	1BP
	500		493			8GK9531-7KK20		1	1 unit	1BP
1200	250	1135	243			8GK9531-8KK10		1	1 unit	1BP
	500		493			8GK9531-8KK20		1	1 unit	1BP
1350	250	1285	243			8GK9532-8KK10		1	1 unit	1BP
	500		493			8GK9532-8KK20		1	1 unit	1BP

Note

- If these mounting plates are installed in distribution boards of safety class II, safety class II is no longer guaranteed!
- If the fitted mounting plate extends over several panel widths, it is not possible to place a longitudinal stay in the middle.
- For accessories, see page 17.3/26.

* You can order this quantity or a multiple thereof.

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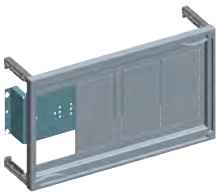
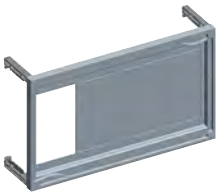


8GK4550-2KK22

Assembly kits for 3NP1 fuse switch disconnectors, for mounting on support plates

- Assembly kits for individual and project-related assembly, comprising: Support plate, front cover including supports, molded-plastic masking frame, screws and mounting accessories
- Panel-size grid dimensions H × W (mm): 150 × 250
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports

Number of assembly kits for size	Fuse switch disconnectors	Height in mm	Width in mm	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
2 × 00/000	2 × 3NP1123... / 3NP1133...	300	250		8GK4550-2KK12		1	1 unit	1BP
4 × 00/000	4 × 3NP1123... / 3NP1133...		500		8GK4550-2KK22		1	1 unit	1BP
1 × 1	1 × 3NP1143…	450	250		8GK4550-3KK12		1	1 unit	1BP
2 × 1	2 × 3NP1143…		500		8GK4550-3KK22		1	1 unit	1BP
1 × 2	1 × 3NP1153…	450	250		8GK4551-3KK12		1	1 unit	1BP
1 × 3	1 × 3NP1163…		500		8GK4551-3KK22		1	1 unit	1BP
Accessories:									
• 3NP1123... cover, size 000 (required only for size 000 fuse switch disconnectors)					8GK9912-0KK00		1	1 unit	1BP
• Busbar supports - 40 mm, 5-pole - 60 mm, 3-pole					8GK9650-0KK00 8GK9711-0KK03		1 1	1 unit 1 unit	1BP 1BP
Note									
• For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.3/16). • For mounting size 000 fuse switch disconnectors you also need the cover 8GK9912-0KK00 (see Accessories on page 17.3/21). • For more accessories, see page 17.3/26.									



8GK4650-2KK12

Assembly kits for 3NP1 fuse switch disconnectors, for mounting on busbars

- Assembly kits for individual and project-related assembly, comprising: Front cover including supports, molded-plastic masking frame, screws and mounting accessories
- Panel-size grid dimensions H × W (mm): 150 × 250
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports

Number of assembly kits for size	Fuse switch disconnectors	Height in mm	Width in mm	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
2 × 00/000	2 × 3NP1123... / 3NP1133...	300	250		8GK4650-2KK12		1	1 unit	1BP
4 × 00/000	4 × 3NP1123... / 3NP1133...		500		8GK4650-2KK22		1	1 unit	1BP
2 × 00/000	2 × 3NP1123... / 3NP1133...	450	250		8GK4650-3KK12		1	1 unit	1BP
4 × 00/000	4 × 3NP1123... / 3NP1133...		500		8GK4650-3KK22		1	1 unit	1BP
1 × 1	1 × 3NP1143…	450	250		8GK4651-3KK12		1	1 unit	1BP
2 × 1	2 × 3NP1143…		500		8GK4651-3KK22		1	1 unit	1BP
1 × 2	1 × 3NP1153…		250		8GK4652-3KK12		1	1 unit	1BP
Accessories:									
• 3NP1123... cover, size 000 (required only for size 000 fuse switch disconnectors)					8GK9912-0KK00		1	1 unit	1BP
• Busbar supports - 40 mm, 5-pole - 60 mm, 3-pole					8GK9650-0KK00 8GK9711-0KK03		1 1	1 unit 1 unit	1BP 1BP
Note									
• For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.3/16). • For mounting size 000 fuse switch disconnectors you also need the cover 8GK9912-0KK00 (see Accessories on page 17.3/21). • The Cu busbar and the busbar supports must be ordered separately (see page 17.3/28). • For more accessories, see page 17.3/26.									

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Assembly kits for unequipped distribution boards

8GK4730-2KK12

Assembly kits, for 3VA10.. and 3VA11.. molded case circuit breakers (100 A/160 A) NEW

- Assembly kits comprising:
  - Matching device support plate
  - Front cover including supports
  - Fixing screws
- Assembly kit for 3-pole and 4-pole devices

External dimensions in mm Height	Width	Possible breakers	Operating mechanism	RCD	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
450	250	1	--	--		8GK4730-2KK12		1	1 unit	1BP
			Motor	--		8GK4734-2KK12		1	1 unit	1BP
			Motor	Infeed side		8GK4734-3KK12		1	1 unit	1BP
			---	Infeed side		8GK4731-3KK12		1	1 unit	1BP
	500	3	--	--		8GK4730-2KK22		1	1 unit	1BP
			Motor	--		8GK4734-2KK22		1	1 unit	1BP
			Motor	Infeed side		8GK4734-3KK22		1	1 unit	1BP
			---	Infeed side		8GK4731-3KK22		1	1 unit	1BP

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.3/16).

8GK4730-3KK10

Assembly kits,for 3VA20.. and 3VA22.. molded case circuit breakers (100 A/160 A/250 A) NEW

- Assembly kits comprising:
  - Matching device support plate
  - Front cover including supports
  - Fixing screws
- Assembly kit for 3-pole and 4-pole devices

External dimensions in mm Height	Width	Possible breakers	Operating mechanism	RCD	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
450	250	1	--	--		8GK4730-3KK10		1	1 unit	1BP
	500	3	--	--		8GK4730-3KK20		1	1 unit	1BP
600	250	1	Motor	Infeed side		8GK4736-4KK12		1	1 unit	1BP
			---	Infeed side		8GK4735-4KK12		1	1 unit	1BP
	500	3	Motor	Infeed side		8GK4736-4KK22		1	1 unit	1BP
			---	Infeed side		8GK4735-4KK22		1	1 unit	1BP

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.3/16).

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8GK4701-3KK12

8GK4721-3KK10

Assembly kits for 3VL molded case circuit breakers and 3VT switch disconnectors

- Assembly kits for individual and project-related assembly, comprising: Support plate, front cover including supports, screws and mounting accessories
- Panel-size grid dimensions H × W (mm): 150 × 250
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports

Versions	External dimensions in mm Height	Width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
• 3- and 4-pole, 3VL molded case circuit breakers								
- 1 × 3VL160/3VL160X	300	250		**8GK4701-2KK12**		1	1 unit	1BP
- 1 × 3VL160X, 1 × 3VL160, 1 × 3VL250	450			**8GK4701-3KK12**		1	1 unit	1BP
- 1 × 3VL400	600			**8GK4702-4KK12**		1	1 unit	1BP
• 3- and 4-pole, 3VT switch disconnectors								
- 2 × 3VT 1	300	250		**8GK4710-2KK10**		1	1 unit	1BP
- 1 × 3VT 2	450			**8GK4710-3KK10**		1	1 unit	1BP
- 1 × 3VT 3	600			**8GK4710-4KK10**		1	1 unit	1BP
• For installation with mounted RCD module								
- 1 × 3VL160X + RCD	450	250		**8GK4720-3KK10**		1	1 unit	1BP
- 1 × 3VL160/3VL250 + RCD				**8GK4721-3KK10**		1	1 unit	1BP
- 1 × 3VL400 + RCD	750			**8GK4720-5KK10**		1	1 unit	1BP

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.3/16).
- For accessories, see page 17.3/26.

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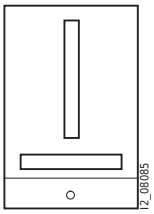
Assembly kits for unequipped distribution boards

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Assembly kits, for meter mounting without top and bottom termination area							
	• Meter assembly kit including front cover • Not standardized, 375 mm • Height 450 mm (external dimension) • With 250 mm (external dimension) • Panel-size grid dimensions H × W (mm): 150 × 250 Note • For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.3/16) • For accessories, see page 17.3/26.		8GE3713-4		1	1 unit	1BP
Assembly kits, for meter mounting with top and bottom termination area							
	Meter support plate, H=450 mm, W=250 mm		8GS4007-4		1	1 unit	1BP
	Cover for top/bottom termination area, H=150 mm, W=250 mm		8GS4006-0		1	1 unit	1BP
	Cover for top/bottom termination area, H=300 mm, W=250 mm		8GS4006-5		1	1 unit	1BP
	Front cover support (2 units), top/bottom termination area		8GS4018-8		1	1 set	1BP
	Standard mounting rail, top/bottom termination area		8GS4010-6		1	1 unit	1BP
	Partition, order in appropriate height for neighboring panel, see page 17.3/30 Note • Meter support plate cannot be placed on left or right in the cabinet! • A partition is required in the neighboring panel! • For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.3/16) • For accessories, see page 17.3/26.						
 8GK4801-2KK12	**Assembly kits for bus-mounting fuse bases for mounting on busbar systems** • 3-pole, busbar center-to-center spacing of 60 mm • Assembly kits for individual and project-related assembly, comprising: Front cover including supports, busbar supports for bus-mounting fuse bases, screws and mounting accessories • Panel-size grid dimensions H × W (mm): 150 × 250 • The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports. • 7 × NEOZED D02 External dimensions in mm Height / Width 300 / 250 450 Note • For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.3/16). • The Cu busbar must be ordered separately (see page 17.3/28). • For accessories, see page 17.3/26.		8GK4801-2KK12 8GK4801-3KK12		1 1	1 unit 1 unit	1BP 1BP

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	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8GK4801-2KK13	**Assembly kits for busbar-adaptable units** • For 40 mm or 60 mm busbar system • Busbar center-to-center spacing of 40 mm/60 mm • Assembly kits for individual and project-related assembly, comprising: Deep-drawn front cover with supports • Panel-size grid dimensions H × W (mm): 150 × 250 • The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports						
	External dimensions in mm Height / Width						
	300 / 250		**8GK4801-2KK13**		1	1 unit	1BP
	300 / 500		**8GK4801-2KK23**		1	1 unit	1BP
	300 / 750		**8GK4801-2KK33**		1	1 unit	1BP
	450 / 250		**8GK4801-3KK13**		1	1 unit	1BP
	450 / 500		**8GK4801-3KK23**		1	1 unit	1BP
	450 / 750		**8GK4801-3KK33**		1	1 unit	1BP
	Note • Busbar supports (8GK9711-0KK03) not included in delivery. • For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.3/16). • The Cu busbar and the busbar supports must be ordered separately (see page 17.3/28).						
	Supports for blanking covers	►	**8US1922-2EA00**		1	4 units	1CU
	Blanking covers	►	**8US1922-2EB00**		1	2 units	1CU

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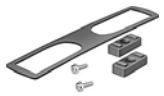
Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
For assembly kits							
8GK9912-0KK00	**3NP1123... cover, size 000**		**8GK9912-0KK00**		1	1 unit	1BP
For unequipped distribution boards							
8GK9912-0KK10	**Wall-mounting rails** • For all wall-mounted distribution boards • The distribution board can be quickly and precisely mounted by a single person						
	Length in mm						
	250		**8GK9912-0KK10**		1	1 unit	1BP
	500		**8GK9912-0KK20**		1	1 unit	1BP
	750		**8GK9912-0KK30**		1	1 unit	1BP
	1000		**8GK9912-0KK40**		1	1 unit	1BP
	1250		**8GK9912-0KK50**		1	1 unit	1BP
	Cabinet mounting lugs, flat						
	Versions						
	• For mounting and fixing a distribution board directly against the wall without a clearance (1 set = 4 lugs including screws)		**8GK9910-0KK36**		1	5 sets	1BP
	• For connecting 2 distribution boards and for mounting and fixing them directly against the wall without a clearance, 8GK9910-0KK36 is additionally required for the ends of a row of distribution boards (1 set = 2 lugs including screws)		**8GK9910-0KK37**		1	1 set	1BP
	Hollow wall sets For fixing flush-mounting distribution boards in hollow walls		**8GK9910-0KK28**		1	1 set	1BP
	Locking systems						
	Versions						
8GK9560-0KK04	• Standard locking devices - Color: Black - Made of plastic - With rotary handle for wall-mounted distribution boards, degree of protection, IP43 - Cannot be retrofitted to other locking devices		**8GK9560-0KK04**		1	1 unit	1BP
 8GK9560-0KK05	• Retrofit kits - For standard locking device to degree of protection IP55 - Can only be used for distribution boards with degree of protection IP55		**8GK9560-0KK05**		1	1 set	1BP
8GK9560-0KK06	• Rotary handle locking device, for profile semi-cylinders - Color: Black - For wall-mounted distribution boards with degree of protection IP43/IP55, with mounting option for a profile semicylinder (length 40 mm)		**8GK9560-0KK06**		1	1 unit	1BP
	• Lockable rotary handles - Including E012 lock and two keys		**8GK9560-0KK13**		1	1 unit	1BP
	Accessories						
	Spare key for E012 lock		**8GF9390-2**		1	1 unit	1BP

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	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
	Profile semicylinders						
	Versions						
8GK9560-0KK07	• With E012 lock and 2 keys		8GK9560-0KK07		1	1 unit	1BP
8GK9560-0KK08	• With Senat tumbler and 2 keys		8GK9560-0KK08		1	1 unit	1BP
8GK9560-0KK10	• With 3-mm pin as double-bit lock		8GK9560-0KK10		1	1 unit	1BP
	Flanges For fast and correct wiring						
	Versions						
8GK9100-0KK00	• 1-component flanges (for IP43 distribution boards, installed on bottom panel) - For bottom cable entry, with 11 possible knockouts - Max. ∅ 50.5 mm, plastic		8GK9100-0KK00		1	1 unit	1BP
8GK9100-0KK01	• 2-component flanges (degree of protection: IP55) - For top/bottom cable entry - With 44 possible knockouts - Comprising 2 elastic components		8GK9100-0KK01		1	1 unit	1BP
8GK9100-0KK03	• Flange plate made of sheet steel (only safety class 1) - For metric screw connections, degree of protection: IP55 (2 units)		8GK9100-0KK03		1	1 unit	1BP
8GK9100-0KK10	• Connecting flanges		8GK9100-0KK10		1	1 unit	1BP
	Circuit diagram pockets						
8GK9910-0KK23	Versions						
	• DIN A3, made of sheet steel, depth 10 mm		8GK9910-0KK22		1	1 unit	1BP
	• DIN A4, transparent sleeve		8GK9910-0KK23		1	20 units	1BP
	• DIN A4, made of plastic, depth 30 mm		8GD9132		1	1 unit	1BP
SIEMENS 8GD9084	**Siemens nameplates** • Made of aluminum • Self-adhesive • Color: Petrol		8GD9084		1	1 unit	1BP
8GK9120-0KK30	**Ventilation grilles**		8GK9120-0KK30		1	4 units	1BP

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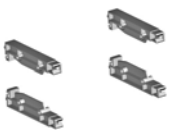
Accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
For quick-assembly kits and assembly kits							
8GS4016-1	**Mounting plates for telecommunication units** • Made of perforated steel plate • With insert nuts and quick-locking technology • With 1 set of captive nuts size M5, width 250 mm						
	Height in mm						
	900		8GS4016-1		1	1 unit	1BP
	1050		8GS4016-2		1	1 unit	1BP
	1200		8GS4016-3		1	1 unit	1BP
	1350		8GS4016-4		1	1 unit	1BP
8GK9650-0KK00	**Busbar supports**						
	Versions						
	• 1-pole - For Cu busbars 12 × 5 (10) mm, 20 × 5 (10) mm, 30 × 5 (10) mm - Height 150 mm		5SH3540		1	1 unit	1CU
8GK9711-0KK03	• 5-pole - Busbar center-to-center spacing of 40 mm - For Cu busbars 12 × 5 (10) mm - For mounting 3NP fuse switch disconnectors - Height 300 mm		8GK9650-0KK00		1	1 unit	1BP
	• 3-pole - Busbar center-to-center spacing of 60 mm - For Cu busbars 12 × 5 (10) mm, 20 × 5 (10) mm, 30 × 5 (10) mm - For bus-mounting fuse bases and switch disconnectors, used together with assembly kits (mounting directly on the stays)		8GK9711-0KK03		1	1 unit	1BP
	• 4-pole - Busbar center-to-center spacing of 60 mm - For Cu busbars 12 × 5 (10) mm, 30 × 5 (10) mm, - Interior mounting - Width: 20 mm		8US1923-4AA00		1	10 units	1CU
8GK973.	**Cu busbars**						
	Versions						
	• Cu cross-section of 12 × 5 mm, 250 A						
	- Length 250 mm		8GK9731-0KK10		1	5 units	1BP
	- Length 500 mm		8GK9731-0KK20		1	5 units	1BP
	- Length 750 mm		8GK9731-0KK30		1	5 units	1BP
	- Length 1000 mm		8GK9731-0KK40		1	5 units	1BP
	- Length 1250 mm		8GK9731-0KK50		1	5 units	1BP
	• Cu cross-section of 20 × 5 mm, 320 A						
	- Length 250 mm		8GK9733-0KK10		1	5 units	1BP
	- Length 500 mm		8GK9733-0KK20		1	5 units	1BP
	- Length 750 mm		8GK9733-0KK30		1	5 units	1BP
	- Length 1000 mm		8GK9733-0KK40		1	5 units	1BP
	- Length 1250 mm		8GK9733-0KK50		1	5 units	1BP
	• Cu cross-section of 30 × 5 mm, 450 A						
	- Length 250 mm		8GK9735-0KK10		1	5 units	1BP
	- Length 500 mm		8GK9735-0KK20		1	5 units	1BP
	- Length 750 mm		8GK9735-0KK30		1	5 units	1BP
	- Length 1000 mm		8GK9735-0KK40		1	5 units	1BP
	- Length 1250 mm		8GK9735-0KK50		1	5 units	1BP
 8GK9910-0KK30	**Supports for front cover** • Long version • Plastic • 1 set = 4 supports		8GK9910-0KK30		1	5 sets	1BP
8GK9910-0KK11	**N/PE bars as plug-in terminals** • Width 250 mm • Each with 6 screw terminals from 2.5 to 16 mm^2						
	Versions						
	• 21 plug-in terminals from 1.5 to 4 mm^2, for mounting on longitudinal stays at a 30° inclination		8GK9910-0KK11		1	1 unit	1BP
	• 21 plug-in terminals from 1.5 to 4 mm^2 for PE bar and one N-N bar each with 2 screw terminals from 2.5 to 16 mm^2 and 10 plug-in terminals from 1.5 to 4 mm^2, for mounting on longitudinal stays at a 30° inclination		8GK9910-0KK12		1	1 unit	1BP

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	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8GS4034-1	**N terminals** • For snap-on mounting onto the standard mounting rail • For distributing the neutral conductor when using several RCBBs • 2 × screw terminal, conductor cross-section max. 16 mm² • 14 × plug-in terminal, conductor cross-section max. 4 mm²	►	8GS4034-1		1	1 unit	1BP
8GS4034-2	**PE terminals** • For snap-on mounting onto the standard mounting rail • 2 × screw terminal, conductor cross-section max. 16 mm² • 14 × plug-in terminal, conductor cross-section max. 4 mm²	►	8GS4034-2		1	1 unit	1BP
8GS4034-3	**N/PE terminals** • For snap-on mounting onto the standard mounting rail • For distributing the neutral conductor when using several RCBBs • 1 × screw terminal, conductor cross-section max. 16 mm² 1) • 7 × plug-in terminal, conductor cross-section max. 4 mm² 1) Footnote 1) Per PE or N potential.	►	8GS4034-3		1	1 unit	1BP
8GS4034-4	**N/N terminal** • For snap-on mounting onto the standard mounting rail • For distributing the neutral conductor when using several RCBBs • 1 × screw terminal, conductor cross-section max. 16 mm² 1) • 7 × plug-in terminal, conductor cross-section max. 4 mm² 1) Footnote 1) Per PE or N potential.	►	8GS4034-4		1	1 unit	1BP
8US1921-2AA00...AD00	**Terminals for circular conductors** Versions • Busbar thickness 5 mm - Conductor cross-section 1.5 ... 16 mm²	►	8US1921-2AA00		100	100 units	1CU
	- Conductor cross-section 1.5 ... 35 mm²	►	8US1921-2AB00		100	50 units	1CU
	- Conductor cross-section 16 ... 70 mm²	►	8US1921-2AD00		1	50 units	1CU
	- Conductor cross-section 16 ... 120 mm²	►	8US1921-2AC00		1	50 units	1CU
	• Busbar thickness 10 mm - Conductor cross-section 1.5 ... 16 mm²	►	8US1921-2BA00		1	100 units	1CU
	- Conductor cross-section 1.5 ... 35 mm²	►	8US1921-2BB00		1	50 units	1CU
	- Conductor cross-section 16 ... 70 mm²	►	8US1921-2BD00		1	50 units	1CU
	- Conductor cross-section 16 ... 120 mm²	►	8US1921-2BC00		1	50 units	1CU
8GK9920-0KK24	**Replacement door hinges** • For wall/floor-mounted distribution boards • 1 set = 2 hinges		8GK9920-0KK24		1	1 set	1BP

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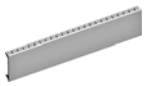
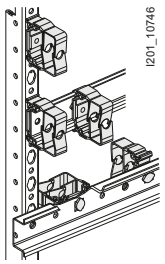
Accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
	Partitions • For the visual and spatial separation of different potentials • Plastic • For mounting depth 210 mm						
	Versions						
 8GK9301-2KK01	• Vertical						
	- Height 300 mm		8GK9301-2KK01		1	1 unit	1BP
	- Height 450 mm		8GK9301-3KK01		1	1 unit	1BP
	- Height 600 mm		8GK9101-4KK01		1	1 unit	1BP
	- Height 750 mm		8GK9101-5KK01		1	1 unit	1BP
	- Height 900 mm		8GK9101-6KK01		1	1 unit	1BP
	- Height 1050 mm		8GK9101-7KK01		1	1 unit	1BP
	- Height 1200 mm		8GK9101-8KK01		1	1 unit	1BP
	- Height 1350 mm		8GK9102-8KK01		1	1 unit	1BP
 8GK9103-0KK10	• Horizontal						
	- Width 250 mm		8GK9103-0KK10		1	1 unit	1BP
	- Width 500 mm		8GK9103-0KK20		1	1 unit	1BP
	- Width 750 mm		8GK9103-0KK30		1	1 unit	1BP
 8GK9910-0KK00	**Blanking strips** Color RAL 7035 (light gray)						
	Versions						
	• For 12 MW (1 MW = 18 mm)		8GK9910-0KK00		1	10 units	1BP
	• Length 1 m without pressure-relief joint, to cut to length		8GK9910-0KK01		1	1 unit	1BP
 8GK9920-0KK31	**Connecting kits, IP43/IP55** • For side-by-side mounting of enclosures • Comprising: - Screws - Washers - Nuts - 10 m roll of sealing strip		8GK9920-0KK31		1	1 unit	1BP
	Note						
	A bushing flange is required for electrical connections!						
 8GK9910-0KK80	**Cable holders on standard mounting rail** • Height 45 mm • Width 40 mm		8GK9910-0KK80		1	200 units	1BP
 8GK9910-0KK27	**ALPHA assembly tools** • For supports • Short and long version • With ergonomic handle		8GK9910-0KK27		1	1 unit	1BP
 8GK9910-0KK34	**Extra-deep brackets** • For recessed installation of stand. mounting rails • 1 set = 2 brackets including mounting material		8GK9910-0KK34		1	1 set	1BP
 8GK9911-0KK00	**Screws** • Self-tapping • M5 x 10 • Large pack: 500 units		8GK9911-0KK00		1	500 units	1BP

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3

* You can order this quantity or a multiple thereof.

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	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8GK9911-0KK01	**Extra-deep brackets** • Depth-adjustable • Large pack: 10 units		8GK9911-0KK01		1	10 units	1BP
8GK9911-0KK02	**Drop-down brackets, universal** • Large pack: 10 units		8GK9911-0KK02		1	10 units	1BP
8GK9911-0KK03	**Support extensions** • 7.5 mm • Large pack: 100 units		8GK9911-0KK03		1	100 units	1BP
8GK9911-0KK05	**Iso supports** • For insulated standard mounting rail assembly • Large pack: 50 units						
	Versions in mm						
	12		8GK9911-0KK04		1	50 units	1BP
	31.5		8GK9911-0KK05		1	50 units	1BP
	55.5		8GK9911-0KK06		1	50 units	1BP
8GK9910-0KK35	**Standard mounting rails, lowered**						
	Width in mm						
	250		8GK9910-0KK35		1	1 unit	1BP
	500		8GK9910-0KK40		1	1 set	1BP
	750		8GK9910-0KK41		1	1 set	1BP
8GK9910-0KK38	**Stay support** • For depth of 210 mm when mounting stays are to be shifted forward by 55 mm • Note: Necessary whenever standard mounting rails are mounted directly on the stays		8GK9910-0KK38		1	20 units	1BP

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3

* You can order this quantity or a multiple thereof.

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Special colors option

Special colors	Color designation	Option	ALPHA 400 Surcharge
	RAL 9016 traffic white semi-gloss smooth	**C10**	None
	RAL 7035 light gray semi-gloss smooth	**C11**	None
	RAL 7035 light gray semi-gloss textured	**C12**	✓
	RAL 7032 pebble gray semi-gloss textured	**C13**	✓
	RAL 7038 agate gray semi-gloss textured	**C14**	✓
	RAL 9010 pure white semi-gloss smooth	**C15**	✓
	SN 610 Siemens white semi-gloss textured	**C16**	✓
	SN 610 Siemens white silky gloss textured	**C17**	✓
	RAL 9002 gray white semi-gloss smooth	**C18**	✓
	RAL 9002 gray white semi-gloss smooth	**C19**	✓
	RAL 9003 signal white semi-gloss textured	**C20**	✓
	RAL 9001 cream semi-gloss smooth	**C21**	✓
	RAL 5017 traffic blue silky gloss textured	**C22**	✓
	RAL 5005 signal blue semi-gloss smooth	**C23**	✓
	RAL 5010 gentian blue semi-gloss smooth	**C24**	✓
	RAL 2000 yellow orange semi-gloss smooth	**C25**	✓
	RAL 6018 yellow green semi-gloss smooth	**C26**	✓
	RAL 1003 signal yellow semi-gloss smooth	**C27**	✓
	RAL 7033 cement gray semi-gloss textured	**C28**	✓
	RAL 9002 gray white silky gloss smooth	**C29**	✓
	RAL 9010 pure white semi-gloss textured	**C30**	✓
	RAL 3000 flame red silky gloss textured	**C31**	✓

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17.4/2 **Introduction**

Unequipped distribution boards
17.4/7 8GK1 surface-mounting distribution boards, IP43
17.4/8 8GK1 surface-mounting distribution boards, IP55

17.4/10 **Marshaling boxes**

17.4/11 **Assembly kits for unequipped distribution boards**

17.4/19 **Accessories**

17.4/25 **Accessories – Ordering large quantities**

17.4/26 **Special colors option**

NEW

Direct reference to the products in the Industry Mall from the selection and ordering data tables:

Article No.
www.siemens.com/product?Article No.
3VA2025-5HL36-0AA0

Paper catalog:
To get more product information enter the Web address plus Article No.

PDF catalog:
Get more product information with just a mouse click.

For further technical product information:

Siemens Industry Online Support:
www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
Download
FAQ
Manual
Product note
Software archive
Technical data

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Introduction

Overview

		Devices	Page	Surface-mounting distribution boards	Flush-mounting distribution boards	Rated current	Cubicle depth	Safety class	
						A	mm	1	2
	Small distribution boards	SIMBOX XL small distribution boards:							
		• Flush-mounting and hollow-wall distribution boards	17.1/6	--	✔	63	88[1]	--	✔
		• IP30 surface-mounting distribution boards	17.1/11	✔	--	63	99	--	✔
		SIMBOX WP small distribution boards:							
		• IP65 surface-mounting distribution boards	17.1/15	✔	--	63	100/140/160	--	✔
	ALPHA 160 DIN technology distribution boards	Cubicle, partially equipped	17.2/6	✔	✔	160	140	--	✔
		Unequipped distribution board	17.2/8	✔	✔	160	140	--	✔
	ALPHA 400 DIN technology distribution boards	Unequipped distribution board, as flat pack	17.3/9	✔	--	400	210	✔	✔
		Unequipped distribution board	17.3/10	✔	✔	400	210	✔	✔
	ALPHA 630 DIN technology distribution boards	Unequipped distribution board, as flat pack	17.4/7	✔	--	630	210	✔	✔
		Unequipped distribution board	17.4/7	✔	--	630	210/250/320	✔	✔
		Unequipped distribution board, with open side panels	17.4/8	✔	--	630	250/320	✔	--
	ALPHA 1250 DIN technology distribution boards	Unequipped distribution board	17.5/7	✔	--	1250	400	✔	--

[1] Mounting depth

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Degree of protection	VDE	EN	DIN	IEC
IP30	DIN VDE 0603	--	DIN 43871	IEC 61439-1/-3
IP65	DIN VDE 0603-1, VDE 0660-600-1/-3	EN 61439-1/-3	DIN 43871	IEC 61439-1/-3
IP31 / IP43 / IP44	VDE 0660-600-1/-3	EN 61439-1/-3	--	IEC 61439-1/-3
IP43	VDE 0660-600-1/-2/-3	EN 61439-1/-2/-3	--	IEC 61439-1/-2/-3
IP31 / IP43 / IP55				
IP43	VDE 0660-600-1/-2	EN 61439-1/-2	--	IEC 61439-1/-2
IP43 / IP55				
IP55				
IP55	VDE 0660-600-1/-2	EN 61439-1/-2	--	Type verification according to IEC 61439-1/-2

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ALPHA 630 Distribution Boards

Introduction

System

The modular design of our Siemens distribution board system draws on our decades of experience.

This system has been tailored to meet individual requirements for distribution board installation.

The system includes unequipped distribution boards as flat packs (delivered in individual parts for customer assembly, see also Part 3) in degree of protection IP43, unequipped distribution boards welded and riveted in degree of protection IP55, assembly kits for project-related and individual compilation, and a comprehensive range of accessories.

Enclosure

- Material: Electrogalvanized and powder-coated sheet steel
- Sheet thickness, degree of protection IP43/IP55: Body 1 mm, door 1 mm
- Color: RAL 7035 (light gray), further RAL colors available on request. For special colors, see page 17.4/26.

Assembly kits

The assembly kits are made of sendzimir-galvanized sheet steel and are equipped with molded-plastic covers for a wide range of equipping options, e.g. with switching devices and modular installation devices.

The largest controls that can be installed in the ALPHA 630 DIN technology distribution boards are the Siemens controls up to a maximum rated current of 630 A.

Cabinet dimensions

All dimensions in mm.

- Height:
  - Internal dimensions: 1800
  - External dimension with base: 1950
- Width (internal/external dimensions): 250/300, 500/550, 750/800, 1000/1050, 1250/1300
- Depth (external dimension): 210, 250, 320
- Assembly kits in panel-size grid dimensions, height × width: 150 × 250 mm

Benefits

- Plan and configure quickly, simply and conveniently with the SIMARIS ConFiguration Basic software
- Delivery options:
  - Flat pack (assembly kit for self-assembly)
  - Unequipped distribution board, welded and riveted
  - The cabinet-high quick-assembly kits and the assembly kits can be mounted directly onto the platform (rear panel)
  - Additional mounting stays are required for mounting the assembly kits! 2 longitudinal stays per panel width must be ordered separately for the assembly kits.
- Easy planning thanks to modular design
- Ample wiring space behind the standard mounting rail
- Extensive range of assembly kits for Siemens switching devices and modular installation devices for individual and project-related composition
- Easy assembly thanks to keyhole-fastened components and modules with quick-acting locks
- System concept according to DIN, EN and VDE standards
- Solid sheet-steel enclosure
- Degrees of protection: IP43 and IP55
- Safety class 1 (protective conductor connection) and safety class 2 (total insulation)
- High-quality surface finish: Distribution boards made of electrogalvanized and powder-coated sheet steel, system components made of sendzimir-galvanized sheet steel, galvanized and transparently chromated small components and screws
- Doors can be hinged on the right or left
- Door opening angle of 170°
- Replaceable locking systems (accessories)
- Front cover with sealable 90° quick-acting locks
- Environmentally-friendly and recyclable plastics

Application

The ALPHA 630 DIN technology distribution boards are used for all applications for which the ALPHA 400 DIN technology distribution boards do not provide sufficient equipping or wiring space, e.g. in administrative, non-residential, commercial and industrial buildings.

They round off the Siemens distribution board product range with three different mounting depths: 210 mm, 250 mm and 320 mm.

The distribution board and its components are of modular design.

With just a few standard components, it is possible to achieve a wide range of project-related mounting and equipping options.

The ALPHA 630 DIN technology distribution board range comprises wall-mounted distribution boards with up to 12 modular installation devices, each with 12 MW per mounting width (250 mm). The standard mounting rail tier spacing is 150 mm. A total of 5 cabinet mounting widths are available, each with an internal dimension of 250 mm.

The distribution boards are designed to meet safety class 1 (protective conductor connection) and safety class 2 (total insulation). For floor-mounted distribution boards the standard degrees of protection are IP43 with a depth of 210 mm (flat pack: delivery in individual parts) and IP55 (unequipped distribution board, welded and riveted) with depths of 250 mm and 320 mm. The rated current is 630 A.

40 mm or 60 mm busbar systems with dimensions up to 30 × 10 mm can be installed.

The modular design of the board enables easy planning, configuration, calculation, ordering and mounting.

Assembly kits that only require a one-size screwdriver for assembly are available for all mountable switching and modular installation devices.

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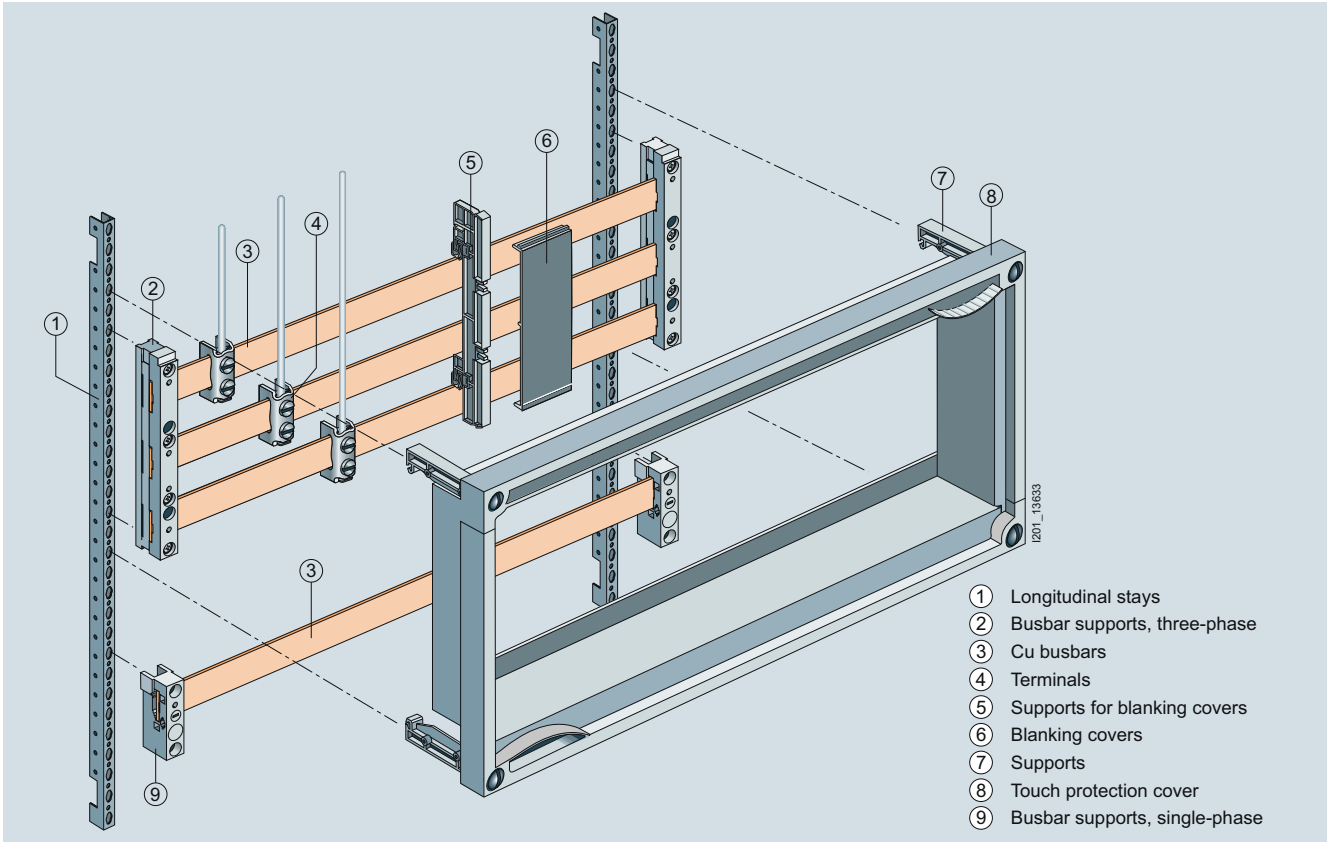
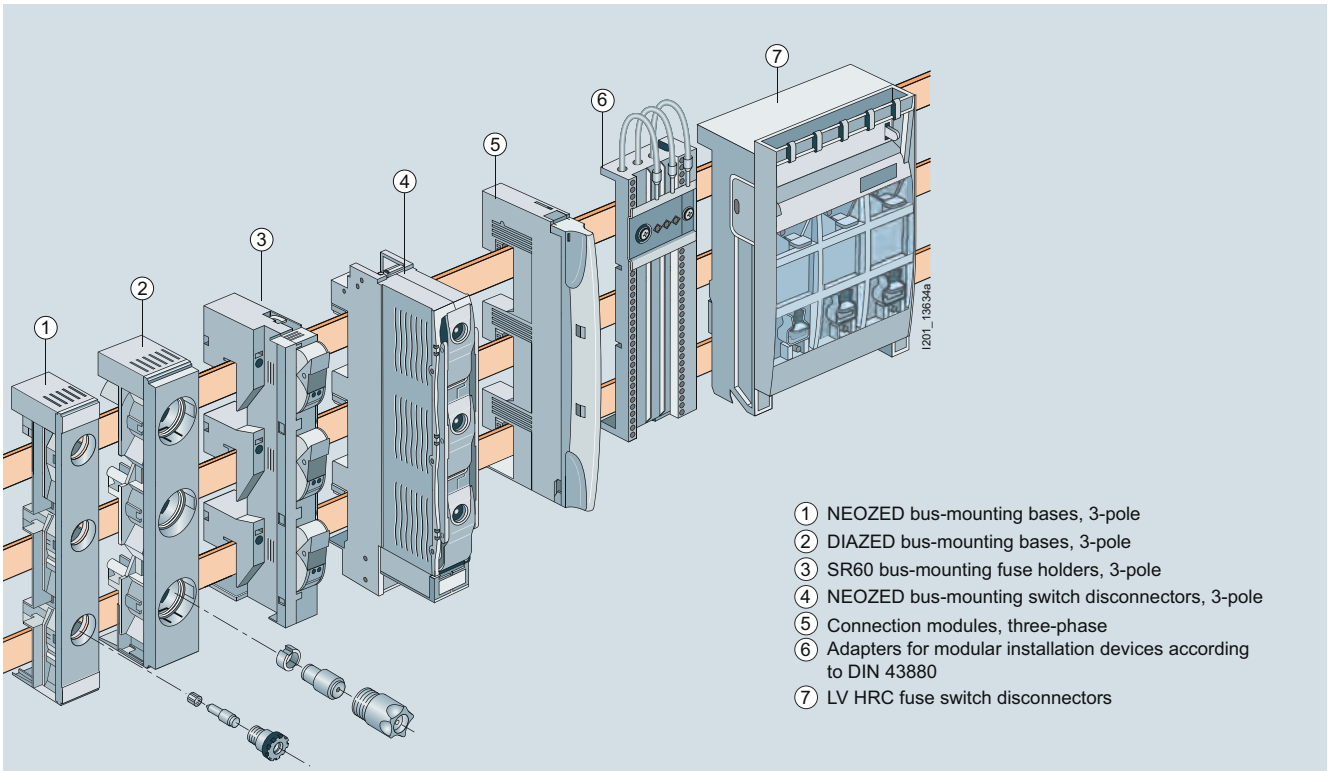
Design



Distribution board components for the SR60 busbar system, 60 mm



Built-in components for the SR60 busbar system, 60 mm

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Technical specifications

Overvoltage category	III
Rated impulse withstand voltage U_{imp} in kV	6
Clearance and creepage distances	EN 60664-1
Rated insulation voltage U_i in V	690
Rated operational voltage U_e in V AC/DC	690
Rated voltage U_n (40 Hz ... 60 Hz AC) in V	690 for built-in devices
Rated current in A	Up to 630
Rated peak short-circuit current I_{pk} in kA	Up to 76 (3-pole)[2]
Rated short-time current I_{cw} in kA	34, conduction interval of 1 s
Protective measures	Safety class 1 (protective conductor connection) Safety class 2 (total insulation)
Number of conductors in the busbar run	4/5
Degree of protection acc. to EN 60529	IP43 with door, IP55 with door (with matching flanges)
Standard mounting rail tier spacing per standard mounting rail tier in mm	150
Modular width (MW)	18 mm, 12 MW + 1 mountable MW
Pollution degree	3
Ambient temperature in °C	35 (24-h mean value)
Relative air humidity in %	50 at 40 °C
Test specifications	EN 61439-1/-2 (VDE 0660-600-1/-2)
Enclosure	Sheet steel
Mounting dimensions	DIN 43870
Surface	Electrogalvanized and powder-coated
Color[1]	RAL 7035 (light gray)
Lock	3-point locking with integrated espagnolette lock (can be replaced with other locking systems if required)
Packing material	Shock-proof, environmentally-friendly

[1] Further RAL colors are available on request.
For special colors, see page 17.4/26.

[2] Busbar support spacing: 250 mm, Cu busbars 30 × 10 mm.

Cabinet dimensions

Cabinet (external dimensions)		
Height	**Width**	**Depth**
mm	mm	mm
1950 with base (100 mm)	300 550 800 1050 1300	210
1950 with base (100 mm)	300 550 800 1050 1300	250
1950 with base (100 mm)	300 550 800 1050 1300	320

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Overview

- Delivery options:
  - Flat pack (assembly kit for self-assembly)
  - Unequipped distribution board, welded and riveted
  - The cabinet-high quick-assembly kits and the assembly kits can be mounted directly onto the platform (rear panel)
  - Additional mounting stays are required for mounting the assembly kits! 2 longitudinal stays per panel width must be ordered separately for the assembly kits.
- Cabinet depth of 210 mm
- Safety class 1 (protective conductor) and 2 (total insulation)
- Degree of protection IP43
- Color RAL 7035 (light gray)
- For special colors, see page 17.4/26
- Unassembled enclosure (with base) with unassembled enclosed door or pre-assembled enclosure (with base) complete with door and espagnolette lock, which can be replaced with other locking systems. Distribution boards with a width of 750 mm/800 mm or more will be supplied with a double door
- Flanges: one 2-component flange at the top per panel width

Selection and ordering data

Internal/external dimensions with base		Panel width	DT	Surface-mounting distribution boards					DT				
				Safety class 1						**Safety class 2**			
Height	Width			Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG		Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
mm	mm													
Cabinet depth of 210 mm				**Type of delivery: Flat pack, degree of protection IP43**										
1800/1950	250/300	□		8GK1302-8KK12		1	1 unit	1BP		8GK1312-8KK12		1	1 unit	1BP
	500/550	□□		8GK1302-8KK22		1	1 unit	1BP		8GK1312-8KK22		1	1 unit	1BP
	750/800	□□□		8GK1302-8KK32		1	1 unit	1BP		8GK1312-8KK32		1	1 unit	1BP
	1000/1050	□□□□		8GK1302-8KK42		1	1 unit	1BP		8GK1312-8KK42		1	1 unit	1BP
	1250/1300	□□□□□		8GK1302-8KK52		1	1 unit	1BP		8GK1312-8KK52		1	1 unit	1BP
8GK1302-8KK12														
Cabinet depth of 210 mm				**Delivery as welded and riveted unequipped distribution board, degree of protection IP43** NEW										
1800/1950	250/300	□		8GK1322-8KA12		1	1 unit	1BP		8GK1332-8KA12		1	1 unit	1BP
	500/550	□□		8GK1322-8KA22		1	1 unit	1BP		8GK1332-8KA22		1	1 unit	1BP
	750/800	□□□		8GK1322-8KA32		1	1 unit	1BP		8GK1332-8KA32		1	1 unit	1BP
	1000/1050	□□□□		8GK1322-8KA42		1	1 unit	1BP		8GK1332-8KA42		1	1 unit	1BP
	1250/1300	□□□□□		8GK1322-8KA52		1	1 unit	1BP		8GK1332-8KA52		1	1 unit	1BP
8GK1322-8KK12														

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Accessories							
8GK4853-8KK00	**Longitudinal stays** • To mount the assembly kits in unequipped distribution boards, 2 longitudinal stays are required for each assembly kit width • Height 1800 mm, width 210 mm • 1 set = 2 stays		8GK4853-8KK00		1	1 set	1BP
8GK9910-0KK32	**Connecting kits for longitudinal stays** • Connecting plate for stays • 1 set = 4 units		8GK9910-0KK32		1	1 unit	1BP

For assembly kits, see page 17.4/11 onwards.

For accessories, see page 17.4/19 onwards.

* You can order this quantity or a multiple thereof.

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8GK1 surface-mounting distribution boards, IP55

Overview

- Type of delivery: Unequipped distribution board, welded and riveted
- Cabinet depths: 250 mm and 320 mm
- Safety class 1 (protective conductor connection) and safety class 2 (total insulation)
- IP55 degree of protection
- Color RAL 7035 (light gray)
- For special colors, see page 17.4/26
- Unassembled enclosure (with base) with unassembled enclosed door or pre-assembled enclosure (with base) complete with door and espagnolette lock, which can be replaced with other locking systems. Distribution boards with a width of 750 mm/800 mm or more will be supplied with a double door.
- SCII flange:
  - Depth 250 mm: Per panel width, one 2-component flange each at the top and bottom
  - Depth 320 mm: Per panel width, two 2-component flanges each at the top and bottom
- SCI flange:
  - Depth 250 mm: Per panel width, one 2-component flange each at the top
  - Depth 320 mm: Two 2-component flanges per panel width at the top (to achieve degree of protection IP55, a 2-component flange is also required at the bottom; please order separately if required)

Selection and ordering data

Internal/external dimensions		Panel width		ALPHA 630 DIN technology distribution board, delivery as unequipped distribution board, degree of protection: IP55, color: RAL 7035									
Height	Width		DT	Safety class 1 Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	DT	Safety class 2 Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
With closed side panel, cabinet depth 250 mm														
1800/1950	300	□		8GK1323-8KN13		1	1 unit	1BP		8GK1333-8KN13		1	1 unit	1BP
	550	□□		8GK1323-8KN23		1	1 unit	1BP		8GK1333-8KN23		1	1 unit	1BP
	800	□□□		8GK1323-8KN33		1	1 unit	1BP		8GK1333-8KN33		1	1 unit	1BP
	1050	□□□□		8GK1323-8KN43		1	1 unit	1BP		8GK1333-8KN43		1	1 unit	1BP
	1300	□□□□□		8GK1323-8KN53		1	1 unit	1BP		8GK1333-8KN53		1	1 unit	1BP
8GK1323-8KN23														
With closed side panel, cabinet depth 320 mm														
1800/1950	300	□		8GK1323-8KN14		1	1 unit	1BP		8GK1333-8KN14		1	1 unit	1BP
	550	□□		8GK1323-8KN24		1	1 unit	1BP		8GK1333-8KN24		1	1 unit	1BP
	800	□□□		8GK1323-8KN34		1	1 unit	1BP		8GK1333-8KN34		1	1 unit	1BP
	1050	□□□□		8GK1323-8KN44		1	1 unit	1BP		8GK1333-8KN44		1	1 unit	1BP
	1300	□□□□□		8GK1323-8KN54		1	1 unit	1BP		8GK1333-8KN54		1	1 unit	1BP
With open side panel, cabinet depth 250 mm														
1800/1950	300	□		8GK1323-8KP13		1	1 unit	1BP		--				
	550	□□		8GK1323-8KP23		1	1 unit	1BP		--				
	800	□□□		8GK1323-8KP33		1	1 unit	1BP		--				
	1050	□□□□		8GK1323-8KP43		1	1 unit	1BP		--				
	1300	□□□□□		8GK1323-8KP53		1	1 unit	1BP		--				
8GK1323-8KP23														
With open side panel, cabinet depth 320 mm														
1800/1950	300	□		8GK1323-8KP14		1	1 unit	1BP		--				
	550	□□		8GK1323-8KP24		1	1 unit	1BP		--				
	800	□□□		8GK1323-8KP34		1	1 unit	1BP		--				
	1050	□□□□		8GK1323-8KP44		1	1 unit	1BP		--				
	1300	□□□□□		8GK1323-8KP54		1	1 unit	1BP		--				

* You can order this quantity or a multiple thereof.

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	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8GK9520-0KK03	**Side panel** • Gray • Depth 250/320 mm		**8GK9520-0KK03**		1	1 set	1BP
Accessories							
8GK4853-8KK02	**Longitudinal stays, (latchable pivot stays)** • In order to mount the assembly kits in unequipped distribution boards, 2 longitudinal stays are required for each assembly kit width • Height 1800 mm • Depth 250/320 mm • 1 set = 2 stays		**8GK4853-8KK02**		1	1 set	1BP
8GK9910-0KK32	**Connecting kits for longitudinal stays** • Connecting plate for stays • 1 set = 4 units		**8GK9910-0KK32**		1	1 unit	1BP
8GK9913-0KK30	**Masking frames** • Sheet steel • For recessed installation of stays • Height 1800 mm						
	Width in mm						
	250		**8GK9913-0KK10**		1	1 unit	1BP
	500		**8GK9913-0KK20**		1	1 unit	1BP
	750		**8GK9913-0KK30**		1	1 unit	1BP
	1000		**8GK9913-0KK40**		1	1 unit	1BP
	1250		**8GK9913-0KK50**		1	1 unit	1BP

For assembly kits, see page 17.4/11 onwards.
For accessories, see page 17.4/19 onwards.

* You can order this quantity or a multiple thereof.

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Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
	Surface-mounting distribution boards Safety class 1 • Marshaling boxes for supporting the incoming/outgoing cables, option for terminal blocks available • Large, foamed front cover with fixing screws • Color RAL 7035 (light gray)						
	Marshaling box depth in mm: 210; Degree of protection: IP43; External dimensions in mm – Height: 350; Width: 300; Panel width: □		8GK1382-0KK12		1	1 unit	1BP
	Width: 550; Panel width: □□		8GK1382-0KK22		1	1 unit	1BP
	Width: 800; Panel width: □□□		8GK1382-0KK32		1	1 unit	1BP
	Width: 1050; Panel width: □□□□		8GK1382-0KK42		1	1 unit	1BP
	Width: 1300; Panel width: □□□□□		8GK1382-0KK52		1	1 unit	1BP
8GK1382-0KK12							
	Marshaling box depth in mm: 250; Degree of protection: IP55; External dimensions in mm – Height: 350; Width: 300; Panel width: □		8GK1383-0KK13		1	1 unit	1BP
	Width: 550; Panel width: □□		8GK1383-0KK23		1	1 unit	1BP
	Width: 800; Panel width: □□□		8GK1383-0KK33		1	1 unit	1BP
	Width: 1050; Panel width: □□□□		8GK1383-0KK43		1	1 unit	1BP
	Width: 1300; Panel width: □□□□□		8GK1383-0KK53		1	1 unit	1BP
8GK1383-0KK13							
	Marshaling box depth in mm: 320; Degree of protection: IP55; External dimensions in mm – Height: 350; Width: 300; Panel width: □		8GK1383-0KK14		1	1 unit	1BP
	Width: 550; Panel width: □□		8GK1383-0KK24		1	1 unit	1BP
	Width: 800; Panel width: □□□		8GK1383-0KK34		1	1 unit	1BP
	Width: 1050; Panel width: □□□□		8GK1383-0KK44		1	1 unit	1BP
	Width: 1300; Panel width: □□□□□		8GK1383-0KK54		1	1 unit	1BP
8GK1383-0KK14							
	Note						
	Flanges and 8GK9 920-0KK31 connecting kit must be ordered separately, see accessories from page 17.4/19 onwards.						
Accessories							
8GK4855-2KK02	**Longitudinal stays, for marshaling boxes** • Stays are available for mounting in the marshaling boxes • Height 300 mm, depth 210 mm / 250 mm / 320 mm • 1 set = 2 stays		8GK4855-2KK02		1	1 set	1BP
8GK9513-8KK10	**Replacement door for cabinets** Height 1950 mm						
	Width mm: 300; Door version: Complete; Door width mm: 300		8GK9513-8KK10		1	1 unit	1BP
	Width: 550; Door version: Complete; Door width: 550		8GK9513-8KK20		1	1 unit	1BP
	Width: 800/1050; Door version: Left; Door width: 525		8GK9513-8KK30		1	1 unit	1BP
	Width: 800; Door version: Right; Door width: 275		8GK9513-8KK40		1	1 unit	1BP
	Width: 1050/1300; Door version: Right; Door width: 525		8GK9513-8KK50		1	1 unit	1BP
	Width: 1300; Door version: Left; Door width: 775		8GK9513-8KK60		1	1 unit	1BP

* You can order this quantity or a multiple thereof.

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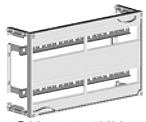
Selection and ordering data

Assembly kits, for modular installation devices
- Tier spacing of 150 mm, without N/PE bar
- Panel-size grid dimensions H × W (mm): 150 × 250
- Assembly kits for individual and project-related assembly, comprising: device racks, front cover including supports, screws and mounting accessories
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports

	External dimensions in mm Height	Width	Tiers/MW	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8GK4351-1KK12	150	250	1/12		8GK4351-1KK12		1	1 unit	1BP
		500	1/24		8GK4351-1KK22		1	1 unit	1BP
		750	1/36		8GK4351-1KK32		1	1 unit	1BP
 8GK4351-2KK12	300	250	2/24		8GK4351-2KK12		1	1 unit	1BP
		500	2/48		8GK4351-2KK22		1	1 unit	1BP
		750	2/72		8GK4351-2KK32		1	1 unit	1BP
8GK4351-3KK12	450	250	3/36		8GK4351-3KK12		1	1 unit	1BP
		500	3/72		8GK4351-3KK22		1	1 unit	1BP
		750	3/108		8GK4351-3KK32		1	1 unit	1BP
8GK4351-4KK12	600	250	4/48		8GK4351-4KK12		1	1 unit	1BP
		500	4/96		8GK4351-4KK22		1	1 unit	1BP
		750	4/144		8GK4351-4KK32		1	1 unit	1BP

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see pages 17.4/7 and 17.4/9).
- The assembly kits with a width of 250 mm are equipped with 7.5 mm standard mounting rails.
- The assembly kits with a width of 500/750 mm are equipped with 15 mm standard mounting rails.
- For accessories, see page 17.4/22 onwards.

Assembly kits for horizontal terminal blocks
- Terminal blocks with graded insulation design, with closed front cover
- Assembly kits for individual and project-related assembly, comprising: device racks, front cover including supports, screws and mounting accessories
- Panel-size grid dimensions H × W (mm): 150 × 250
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports

8GK4401-3KK32

External dimensions in mm Height	Width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
150	250		8GK4401-1KK12		1	1 unit	1BP
300	250		8GK4401-2KK12		1	1 unit	1BP
	500		8GK4401-2KK22		1	1 unit	1BP
	750		8GK4401-2KK32		1	1 unit	1BP
450	250		8GK4401-3KK12		1	1 unit	1BP
	500		8GK4401-3KK22		1	1 unit	1BP
	750		8GK4401-3KK32		1	1 unit	1BP

Note

For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see pages 17.4/7 and 17.4/9).

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Assembly kits for unequipped distribution boards

8GK4402-2KK12

Assembly kits for vertical terminal blocks
- Terminal blocks, separate design, with closed front cover
- Assembly kits for individual and project-related assembly, comprising: device racks, front cover including supports, screws and mounting accessories
- Panel-size grid dimensions H × W (mm): 150 × 250
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports

External dimensions in mm Height	Width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
300	250		8GK4402-2KK12		1	1 unit	1BP
	500		8GK4402-2KK22		1	1 unit	1BP
	750		8GK4402-2KK32		1	1 unit	1BP
450	250		8GK4402-3KK12		1	1 unit	1BP
	500		8GK4402-3KK22		1	1 unit	1BP
	750		8GK4402-3KK32		1	1 unit	1BP
600	250		8GK4402-4KK12		1	1 unit	1BP
	500		8GK4402-4KK22		1	1 unit	1BP
	750		8GK4402-4KK32		1	1 unit	1BP

Note

For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see pages 17.4/7 and 17.4/9).

8GK4500-2KK20

Assembly kit front covers, for measuring devices, cutout dimensions 92 x 92 mm

8GK4500-2KK20 — 1 — 1 unit — 1BP

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see pages 17.4/7 and 17.4/9).
- For accessories, see page 17.4/22 onwards.

8GK4501-4KK12

Assembly kits for unequipped panels
- Gray
- Assembly kits for individual and project-related assembly, comprising: Front cover including supports, screws and mounting accessories
- Panel-size grid dimensions H × W (mm): 150 × 250
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports

External dimensions in mm Height	Width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
75	250		8GK4501-0KK12		1	1 unit	1BP
	500		8GK4501-0KK22		1	1 unit	1BP
150	250		8GK4501-1KK12		1	1 unit	1BP
	500		8GK4501-1KK22		1	1 unit	1BP
	750		8GK4501-1KK32		1	1 unit	1BP
300	250		8GK4501-2KK12		1	1 unit	1BP
	500		8GK4501-2KK22		1	1 unit	1BP
	750		8GK4501-2KK32		1	1 unit	1BP
450	250		8GK4501-3KK12		1	1 unit	1BP
	500		8GK4501-3KK22		1	1 unit	1BP
	750		8GK4501-3KK32		1	1 unit	1BP
600	250		8GK4501-4KK12		1	1 unit	1BP
	500		8GK4501-4KK22		1	1 unit	1BP
	750		8GK4501-4KK32		1	1 unit	1BP
750	250		8GK4501-5KK12		1	1 unit	1BP
	500		8GK4501-5KK22		1	1 unit	1BP
	750		8GK4501-5KK32		1	1 unit	1BP

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see pages 17.4/7 and 17.4/9).
- For accessories, see page 17.4/22 onwards.

* You can order this quantity or a multiple thereof.

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Assembly kits for unequipped distribution boards

8GK4501-3KK23

Assembly kits for unequipped panels with deep-drawn cover, 40 mm

- Assembly kits for individual and project-related assembly, comprising: Front cover including supports, screws and mounting accessories
- Panel-size grid dimensions H × W (mm): 150 × 250
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports

External dimensions in mm Height	Width	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
300	250			8GK4501-2KK13		1	1 unit	1BP
	500			8GK4501-2KK23		1	1 unit	1BP
	750			8GK4501-2KK33		1	1 unit	1BP
450	250			8GK4501-3KK13		1	1 unit	1BP
	500			8GK4501-3KK23		1	1 unit	1BP
	750			8GK4501-3KK33		1	1 unit	1BP

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see pages 17.4/7 and 17.4/9).
- For accessories, see page 17.4/22 onwards.

8GK4451-4KK12

Assembly kits with mounting plates

- With closed front cover
- Assembly kits for individual and project-related assembly, comprising: Mounting plate, front cover including supports, mounting brackets (depth-adjustable), screws and mounting accessories
- Panel-size grid dimensions H × W (mm): 150 × 250
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports

External dimensions in mm Height	Width	Mounting plate dimensions in mm Height	Width	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
300	250	245	207.5	8GK4451-2KK12		1	1 unit	1BP
	500		457.5	8GK4451-2KK22		1	1 unit	1BP
	750		707.5	8GK4451-2KK32		1	1 unit	1BP
450	250	395	207.5	8GK4451-3KK12		1	1 unit	1BP
	500		457.5	8GK4451-3KK22		1	1 unit	1BP
	750		707.5	8GK4451-3KK32		1	1 unit	1BP
600	250	545	207.5	8GK4451-4KK12		1	1 unit	1BP
	500		457.5	8GK4451-4KK22		1	1 unit	1BP
	750		707.5	8GK4451-4KK32		1	1 unit	1BP

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see pages 17.4/7 and 17.4/9).
- If the fitted mounting plate extends over several panel widths, it is not possible to place a longitudinal stay in the middle.
- For accessories, see page 17.4/22 onwards.

8GK9533-0KK10

Cabinet-high mounting plates

- With fixing screws
- Sendzimir-galvanized sheet steel
- For mounting on longitudinal stays
- No covers available

Internal dimensions of cabinet in mm Height	Width	Mounting plate dimensions in mm Height	Width	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
1800	250	1680	242	8GK9533-0KK10		1	1 unit	1BP
	500		492	8GK9533-0KK20		1	1 unit	1BP
	750		742	8GK9533-0KK30		1	1 unit	1BP
	1000		992	8GK9533-0KK40		1	1 unit	1BP
	1250		1242	8GK9533-0KK50		1	1 unit	1BP

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see pages 17.4/7 and 17.4/9).
- If these mounting plates are installed in distribution boards of safety class II, safety class II is no longer guaranteed!
- If the fitted mounting plate extends over several panel widths, it is not possible to place a longitudinal stay in the middle.
- For accessories, see page 17.4/22 onwards.

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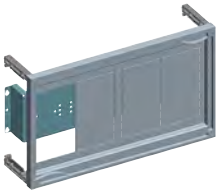
Assembly kits for unequipped distribution boards



8GK4550-2KK22

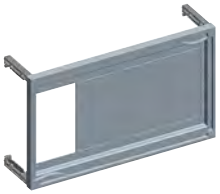
Assembly kits for 3NP1 fuse switch disconnectors, for mounting on support plates

- Assembly kits for individual and project-related assembly, comprising: Support plate, front cover including supports, molded-plastic masking frame, screws and mounting accessories
- Panel-size grid dimensions H × W (mm): 150 × 250
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports

Number of assembly kits for size	Fuse switch disconnectors	Height in mm	Width in mm	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
2 × 00/000	2 × 3NP1123... / 3NP1133...	300	250		8GK4550-2KK12		1	1 unit	1BP
4 × 00/000	4 × 3NP1123... / 3NP1133...		500		8GK4550-2KK22		1	1 unit	1BP
1 × 1	1 × 3NP1143…	450	250		8GK4550-3KK12		1	1 unit	1BP
2 × 1	2 × 3NP1143…		500		8GK4550-3KK22		1	1 unit	1BP
1 × 2	1 × 3NP1153…	450	250		8GK4551-3KK12		1	1 unit	1BP
1 × 3	1 × 3NP1163…		500		8GK4551-3KK22		1	1 unit	1BP

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see pages 17.4/7 and 17.4/9).
- For mounting size 000 fuse switch disconnectors you also need the cover 8GK9912-0KK00 (see page 17.4/22).
- For more accessories, see page 17.4/22 onwards.



8GK4650-2KK12

Assembly kits for 3NP1 fuse switch disconnectors, for mounting on busbars

- Assembly kits for individual and project-related assembly, comprising: Front cover including supports, molded-plastic masking frame, screws and mounting accessories
- Panel-size grid dimensions H × W (mm): 150 × 250
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports

Number of assembly kits for size	Fuse switch disconnectors	Height in mm	Width in mm	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
2 × 00/000	2 × 3NP1123... / 3NP1133...	300	250		8GK4650-2KK12		1	1 unit	1BP
4 × 00/000	4 × 3NP1123... / 3NP1133...		500		8GK4650-2KK22		1	1 unit	1BP
2 × 00/000	2 × 3NP1123... / 3NP1133...	450	250		8GK4650-3KK12		1	1 unit	1BP
4 × 00/000	4 × 3NP1123... / 3NP1133...		500		8GK4650-3KK22		1	1 unit	1BP
1 × 1	1 × 3NP1143…	450	250		8GK4651-3KK12		1	1 unit	1BP
2 × 1	2 × 3NP1143…		500		8GK4651-3KK22		1	1 unit	1BP
1 × 2	1 × 3NP1153…		250		8GK4652-3KK12		1	1 unit	1BP

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see pages 17.4/7 and 17.4/9).
- The Cu busbar and the busbar supports must be ordered separately (see page 17.4/23).
- For mounting size 000 fuse switch disconnectors you also need the cover 8GK9912-0KK00 (see page 17.4/22).
- For more accessories, see page 17.4/22 onwards.

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8GK4730-2KK12

Assembly kits, for 3VA10.. and 3VA11.. molded case circuit breakers (100 A/160 A) NEW

- Assembly kits comprising:
  - Matching device support plate
  - Front cover including supports
  - Fixing screws
- Assembly kit for 3-pole and 4-pole devices

External dimensions in mm Height	Width	Possible breakers	Operating mechanism	RCD	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
450	250	1	--	--	8GK4730-2KK12		1	1 unit	1BP
			Motor	--	8GK4734-2KK12		1	1 unit	1BP
			Motor	Infeed side	8GK4734-3KK12		1	1 unit	1BP
			---	Infeed side	8GK4731-3KK12		1	1 unit	1BP
	500	3	--	--	8GK4730-2KK22		1	1 unit	1BP
			Motor	--	8GK4734-2KK22		1	1 unit	1BP
			Motor	Infeed side	8GK4734-3KK22		1	1 unit	1BP
			---	Infeed side	8GK4731-3KK22		1	1 unit	1BP

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see pages 17.4/7 and 17.4/9).

8GK4730-3KK10

Assembly kits, for 3VA20.. and 3VA22.. molded case circuit breakers (100 A/160 A/250 A) NEW

- Assembly kits comprising:
  - Matching device support plate
  - Front cover including supports
  - Fixing screws
- Assembly kit for 3-pole and 4-pole devices

External dimensions in mm Height	Width	Possible breakers	Operating mechanism	RCD	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
450	250	1	--	--	8GK4730-3KK10		1	1 unit	1BP
	500	3	--	--	8GK4730-3KK20		1	1 unit	1BP
600	250	1	Motor	Infeed side	8GK4736-4KK12		1	1 unit	1BP
			---	Infeed side	8GK4735-4KK12		1	1 unit	1BP
	500	3	Motor	Infeed side	8GK4736-4KK22		1	1 unit	1BP
			---	Infeed side	8GK4735-4KK22		1	1 unit	1BP

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see pages 17.4/7 and 17.4/9).

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Assembly kits for unequipped distribution boards

	Version			DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
	Assembly kits for 3VL molded case circuit breakers and 3VT switch disconnectors • Assembly kits for individual and project-related assembly, comprising: Support plate, front cover including supports, screws and mounting accessories • Panel-size grid dimensions H × W (mm): 150 × 250 • The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports.								
	Versions	External dimensions in mm Height	Width						
8GK4704-4KK13	• 3- and 4-pole, 3VL molded case circuit breakers								
	- 1 × 3VL160/3VL160X	300	250		**8GK4701-2KK12**		1	1 unit	1BP
	- 1 × 3VL160X, 1 × 3VL160, 1 × 3VL250	450	250		**8GK4701-3KK12**		1	1 unit	1BP
	- 1 × 3VL400	600	250		**8GK4702-4KK12**		1	1 unit	1BP
	• 3-pole, 3VL molded case circuit breakers								
	- 1 × 3VL630	600	250		**8GK4703-4KK13**		1	1 unit	1BP
	• 4-pole, 3VL molded case circuit breakers								
	- 1 × 3VL630	600	500		**8GK4704-4KK13**		1	1 unit	1BP
	• 3- and 4-pole, 3VT switch disconnectors								
	- 2 × 3VT 1	300	250		**8GK4710-2KK10**		1	1 unit	1BP
	- 1 × 3VT 2	450			**8GK4710-3KK10**		1	1 unit	1BP
	- 1 × 3VT 3	600			**8GK4710-4KK10**		1	1 unit	1BP
8GK4721-3KK10	• For installation with mounted RCD module								
	- 1 × 3VL160X + RCD	450	250		**8GK4720-3KK10**		1	1 unit	1BP
	- 1 × 3VL160/VL250 + RCD	450	250		**8GK4721-3KK10**		1	1 unit	1BP
	- 1 × 3VL400 + RCD	750	250		**8GK4720-5KK10**		1	1 unit	1BP
8GK4722-3KK10	• For installation with front-operated rotary operating mechanism								
	- 1 × 3VL160X/3VL160/3VL250[1]	450	250		**8GK4722-3KK10**		1	1 unit	1BP
	- 1 × 3VL400[2]	600	250		**8GK4722-4KK10**		1	1 unit	1BP
	- 1 × 3VL630 3-pole[2]	600	250		**8GK4723-4KK10**		1	1 unit	1BP
	- 1 × 3VL630 4-pole[2]	600	500		**8GK4721-4KK20**		1	1 unit	1BP
	Note								
	• For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see pages 17.4/7 and 17.4/9). • For accessories, see page 17.4/22 onwards.								
	Footnote								
	[1] Depth of distribution board: 250/320 mm. [2] Depth of distribution board: 320 mm.								
	Assembly kits for 3KA switch disconnectors on support plate								
8GK4707-3KK17	Type	External dimensions in mm Height	Width						
	• 1 × 3KA 50/51/52/53, mounting depth 250 mm (only 3-pole devices)	300	250		**8GK4707-3KK17**		1	1 unit	1BP
	• 1 × 3KA 55/57/58, mounting depth 320 mm	300	500		**8GK4707-4KK27**		1	1 unit	1BP
	Note								
	• For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see pages 17.4/7 and 17.4/9). • For accessories, see page 17.4/22 onwards.								

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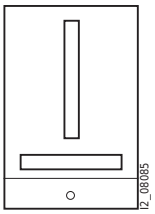
Assembly kits for unequipped distribution boards

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Assembly kits, for meter mounting without top and bottom termination area							
	• Meter assembly kit including front cover • Not standardized, 375 mm • Height 450 mm (external dimension) • With 250 mm (external dimension) • Panel-size grid dimensions H × W (mm): 150 × 250 Note • For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see pages 17.4/7 and 17.4/9). • For accessories, see page 17.4/19.		8GE3713-4		1	1 unit	1BP
Assembly kits, for meter mounting with top and bottom termination area							
	Meter support plate, H = 450 mm, W = 250 mm		8GS4007-4		1	1 unit	1BP
	Cover for top/bottom termination area, H = 150 mm, W = 250 mm		8GS4006-0		1	1 unit	1BP
	Cover for top/bottom termination area, H = 300 mm, W = 250 mm		8GS4006-5		1	1 unit	1BP
	Front cover support (2 units), top/bottom termination area		8GS4018-8		1	1 set	1BP
	Standard mounting rail, top/bottom termination area		8GS4010-6		1	1 unit	1BP
	Partition, order in appropriate height for neighboring panel, see page 17.4/22 Note • Meter support plate cannot be placed on left or right in the cabinet! • A partition is required in the neighboring panel! • For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.4/9) • For accessories, see page 17.4/19.						
 8GK4751-4KK33	**Assembly kits for 3NJ4 in-line fuse switch disconnectors** • Assembly kits for individual and project-related assembly, comprising: Front cover including supports, busbar holders on support plate, screws and mounting accessories • Panel-size grid dimensions H × W (mm): 150 × 250 • The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports. • Note: Values in brackets below apply to bars with fixing claws						
	Versions — External dimensions in mm: Height / Width						
	• Busbar center-to-center spacing of 100 mm, with busbar support						
	- 4 (3) × 3NJ4, size 00 — 600 / 250		8GK4751-4KK13		1	1 unit	1BP
	- 9 (8) × 3NJ4, size 00 — 600 / 500		8GK4751-4KK23		1	1 unit	1BP
	- 14 (13) × 3NJ4, size 00 — 600 / 750		8GK4751-4KK33		1	1 unit	1BP
	• Busbar center-to-center spacing of 185 mm, with busbar support						
	- 2 × 3NJ4, size 1-3 — 750 / 250		8GK4752-5KK15		1	1 unit	1BP
	- 4 × 3NJ4, size 1-3 — 750 / 500		8GK4752-5KK25		1	1 unit	1BP
 8GK4752-5KK35	- 7 × 3NJ4, size 1-3 — 750 / 750		8GK4752-5KK35		1	1 unit	1BP
	Note • Observe max. rated current of 630 A! • For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see pages 17.4/7 and 17.4/9). • The Cu busbar must be ordered separately. • The assembly kits for sizes 1-3 require a mounting depth of 320 mm. • If the assembly kits are fully equipped, an incoming feeder bay is required. • When mounting the in-line fuse switch disconnectors with 3NJ4911-3AA00 busbar terminals, the assembly kits cannot be fully equipped. • For accessories, see page 17.4/22 onwards						

* You can order this quantity or a multiple thereof.

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Assembly kits for unequipped distribution boards

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
3NJ4912-2AA00	**Blanking covers** Type / Width in mm • For switchboard cutout — 50 • For size 1 to 3 switch disconnectors — 100 • for 3NJ4410-3 — 50		3NJ4912-2AA00 3NJ4912-2BA00 3NJ4912-2CA00		1 1 1	1 unit 1 unit 1 unit	1DL 1DL 1DL
8GK4801-3KK12	**Assembly kits for bus-mounting fuse bases for mounting on busbar systems** • 3-pole • Busbar center-to-center spacing 60 mm • 7 × NEOZED D02 • Assembly kits for individual and project-related assembly, comprising: Front cover including supports, busbar supports for bus-mounting fuse bases, screws and mounting accessories • Panel-size grid dimensions H × W (mm): 150 × 250 • The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports External dimensions in mm: Height / Width 300 / 250 450 / 250 Note • For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see pages 17.4/7 and 17.4/9). • The Cu busbar must be ordered separately (see page 17.4/23). • For accessories, see page 17.4/22 onwards.		8GK4801-2KK12 8GK4801-3KK12		1 1	1 unit 1 unit	1BP 1BP
8GK4801-2KK13	**Assembly kits for busbar-adaptable units for 40 mm or 60 mm busbar system** • Busbar center-to-center spacing of 40 mm/60 mm • Assembly kits for individual and project-related assembly, comprising: Deep-drawn front cover with supports • Panel-size grid dimensions H × W (mm): 150 × 250 • The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports External dimensions in mm: Height / Width 300 / 250 300 / 500 300 / 750 450 / 250 450 / 500 450 / 750 Note • Busbar supports (8GK9711-0KK03) not included in delivery. • For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see pages 17.4/7 and 17.4/9). • The Cu busbar and the busbar supports must be ordered separately (see page 17.4/23). • For accessories, see page 17.4/22 onwards.		8GK4801-2KK13 8GK4801-2KK23 8GK4801-2KK33 8GK4801-3KK13 8GK4801-3KK23 8GK4801-3KK33		1 1 1 1 1 1	1 unit 1 unit 1 unit 1 unit 1 unit 1 unit	1BP 1BP 1BP 1BP 1BP 1BP
8US1922-2EA00	**Supports for blanking covers**	►	8US1922-2EA00		1	4 units	1CU
8US1922-2EB00	**Blanking covers**	►	8US1922-2EB00		1	2 units	1CU

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Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
For unequipped distribution boards							
	Cabinet mounting lugs, flat						
	Versions						
	• For mounting and fixing a distribution board directly against the wall without spacing (one set = four lugs including screws)		8GK9910-0KK36		1	5 sets	1BP
	• For connecting two distribution boards and for mounting and fixing the distribution boards directly against the wall without spacing, (8GK9910-0KK36 also required for the ends of a row of distribution boards) (one set = two lugs including screws)		8GK9910-0KK37		1	1 set	1BP
8GK9100-0KK01	**Flanges** For fast and correct wiring						
	Versions						
	• 1-component flanges (for IP43 distribution boards, installed on bottom panel) - For bottom cable entry, with 11 possible knockouts - Max. Ø 50.5 mm, plastic		8GK9100-0KK00		1	1 unit	1BP
8GK9100-0KK03	• 2-component flanges (degree of protection: IP55) - For top/bottom cable entry - With 44 possible knockouts - Comprising 2 elastic components		8GK9100-0KK01		1	1 unit	1BP
8GK9100-0KK10	• Flange plate made of sheet steel (only safety class 1) - For metric screw connections, degree of protection: IP55 (2 units)		8GK9100-0KK03		1	1 unit	1BP
	• Connecting flanges		8GK9100-0KK10		1	1 unit	1BP
	Bases for flat pack floor-mounted distribution boards External height: 100 mm						
	External dimensions in mm Depth / Width						
8GK99010KA12	210 / 300		8GK9901-0KK12		1	1 unit	1BP
	210 / 550		8GK9901-0KK22		1	1 unit	1BP
	210 / 800		8GK9901-0KK32		1	1 unit	1BP
	210 / 1050		8GK9901-0KK42		1	1 unit	1BP
	210 / 1300		8GK9901-0KK52		1	1 unit	1BP
	Bases for pre-assembled (welded) floor-mounted distribution boards External height: 100 mm						
	External dimensions in mm Depth / Width						
8GK99010KA12	210 / 300		8GK9901-0KA12		1	1 unit	1BP
	210 / 550		8GK9901-0KA22		1	1 unit	1BP
	210 / 800		8GK9901-0KA32		1	1 unit	1BP
	210 / 1050		8GK9901-0KA42		1	1 unit	1BP
	210 / 1300		8GK9901-0KA52		1	1 unit	1BP
8GK9900-0KK13	250 / 300		8GK9900-0KK13		1	1 unit	1BP
	250 / 550		8GK9900-0KK23		1	1 unit	1BP
	250 / 800		8GK9900-0KK33		1	1 unit	1BP
	250 / 1050		8GK9900-0KK43		1	1 unit	1BP
	250 / 1300		8GK9900-0KK53		1	1 unit	1BP
8GK9900-0KK14	320 / 300		8GK9900-0KK14		1	1 unit	1BP
	320 / 550		8GK9900-0KK24		1	1 unit	1BP
	320 / 800		8GK9900-0KK34		1	1 unit	1BP
	320 / 1050		8GK9900-0KK44		1	1 unit	1BP
	320 / 1300		8GK9900-0KK54		1	1 unit	1BP
8GK9100-0KK04	**Flange plates** • IP55 degree of protection • Safety class 1 • For cabinet depth 320 mm, if center plate is removed • Sheet steel, without knockouts		8GK9100-0KK04		1	1 unit	1BP

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Accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8GK9561-0KK01	**Locking systems**						
	Versions						
	• Rotary handles - Can be recessed, with pushbutton technique		8GK9561-0KK01		1	1 unit	1BP
	• Lock insert - For installation of profile semicylinders		8GK9561-0KK02		1	1 unit	1BP
	• Profile semicylinders, 40 mm, with E012 lock and 2 keys - With insert for the rotary handle - Only to be used together with the lock insert (this must be ordered separately)		8GK9561-0KK00		1	1 unit	1BP
	• Profile semicylinder with Senat tumbler		8GK9560-0KK03		1	1 unit	1BP
	Accessories						
	Spare key for E012 lock		8GF9390-2		1	1 unit	1BP
8GK9561-0KK02							
8GK9561-0KK00							
8GK9911-0KK10	**Cable clamping rails** • For strain relief • C-profile 30 x 15 mm						
	Versions						
	• Width 250 mm		8GK9911-0KK10		1	1 unit	1BP
	• Width 500 mm		8GK9911-0KK20		1	1 unit	1BP
	• Width 750 mm		8GK9911-0KK30		1	1 unit	1BP
	• Width 1000 mm		8GK9911-0KK40		1	1 unit	1BP
	• Width 1250 mm		8GK9911-0KK50		1	1 unit	1BP
8GK9910-0KK22	**Circuit diagram pockets**						
	Versions						
	• DIN A 3, made of sheet steel, depth 10 mm		8GK9910-0KK22		1	1 unit	1BP
	• DIN A 4, transparent sleeve		8GK9910-0KK23		1	20 units	1BP
	• DIN A 4, made of plastic, depth 30 mm		8GD9132		1	1 unit	1BP
SIEMENS 8GD9084	**Siemens nameplates** Made of aluminum, self-adhesive, color: petrol		8GD9084		1	1 unit	1BP
8GK4853-0KK20	**Crossbeams**						
	Versions						
	• Width 500 mm		8GK4853-0KK20		1	2 units	1BP
	• Width 750 mm		8GK4853-0KK30		1	2 units	1BP

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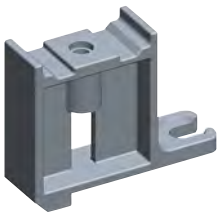
	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
	Partitions • Sheet steel • For mounting depth 250/320 mm						
	Versions						
 8GK9520-8KK00	• Vertical (Vertical separation for 320 mm depth only: at a depth of 250 mm, the stays reach the rear panel) - Height 1800 mm		8GK9520-8KK00		1	1 unit	1BP
 8GK9520-0KK20	• Horizontal (for 250 mm depth: push separation back to break it off) - Width 250 mm		8GK9520-0KK10		1	1 unit	1BP
	- Width 500 mm		8GK9520-0KK20		1	1 unit	1BP
 8GK9911-0KK00	**Screws** • Self-tapping • M5 x 10 • Large pack: 500 units		8GK9911-0KK00		1	500 units	1BP
 8GK9911-0KK01	**Extra-deep brackets** • Depth-adjustable • Large pack: 10 units		8GK9911-0KK01		1	10 units	1BP
 8GK9911-0KK02	**Drop-down brackets, universal** Large pack: 10 units		8GK9911-0KK02		1	10 units	1BP
 8GK9911-0KK03	**Support extensions** • 7.5 mm • Large pack: 100 units		8GK9911-0KK03		1	100 units	1BP
 8GK9911-0KK05	**Iso supports** • For insulated standard mounting rail assembly • Large pack: 50 units						
	Versions						
	• 12 mm		8GK9911-0KK04		1	50 units	1BP
	• 31.5 mm		8GK9911-0KK05		1	50 units	1BP
	• 55.5 mm		8GK9911-0KK06		1	50 units	1BP

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Accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8GK9301-2KK01 8GK9103-0KK10	**Partitions (for 210 mm depth)** • For the visual and spatial separation of different potentials • Plastic • For mounting depth 210 mm						
	Versions						
	• Vertical						
	- Height 300 mm		8GK9301-2KK01		1	1 unit	1BP
	- Height 450 mm		8GK9301-3KK01		1	1 unit	1BP
	- Height 600 mm		8GK9101-4KK01		1	1 unit	1BP
	- Height 750 mm		8GK9101-5KK01		1	1 unit	1BP
	- Height 900 mm		8GK9101-6KK01		1	1 unit	1BP
	- Height 1050 mm		8GK9101-7KK01		1	1 unit	1BP
	- Height 1200 mm		8GK9101-8KK01		1	1 unit	1BP
	- Height 1350 mm		8GK9102-8KK01		1	1 unit	1BP
	• Horizontal						
	- Width 250 mm		8GK9103-0KK10		1	1 unit	1BP
	- Width 500 mm		8GK9103-0KK20		1	1 unit	1BP
	- Width 750 mm		8GK9103-0KK30		1	1 unit	1BP
8GK9120-0KK30	**Ventilation grilles**		8GK9120-0KK30		1	4 units	1BP
For assembly kits							
8GK9912-0KK00	**3NP1123... cover, size 000**		8GK9912-0KK00		1	1 unit	1BP
8GK9650-0KK00	**Busbar supports**						
	Versions						
	• 1-pole - For Cu busbars 12 × 5 (10) mm, 20 × 5 (10) mm, 30 × 5 (10) mm - Height 150 mm		5SH3540		1	1 unit	1CU
8GK9711-0KK03	• 3-pole - Busbar center-to-center spacing of 60 mm - For Cu busbars 12 × 5 (10) mm, 20 × 5 (10) mm, 30 × 5 (10) mm - For bus-mounting fuse bases and 3NP4076 switch disconnectors, used together with assembly kits (mounting directly on the stays)		8GK9711-0KK03		1	1 unit	1BP
	• 4-pole - Busbar center-to-center spacing of 60 mm - For Cu busbars 12 × 5 (10) mm, 30 × 5 (10) mm, - Interior mounting - Width: 20 mm		8US1923-4AA00		1	10 units	1CU
	• 5-pole - Busbar center-to-center spacing of 40 mm - For Cu busbars 12 × 5 (10) mm and for mounting 3NP fuse switch disconnectors - Height 300 mm		8GK9650-0KK00		1	1 unit	1BP

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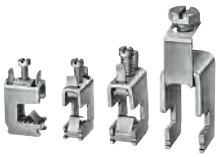
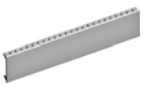
	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8GK973.	**Cu busbars**						
	Versions						
	• Cu cross-section of 12 × 5 mm, 250 A						
	- Length 250		8GK9731-0KK10		1	5 units	1BP
	- Length 500		8GK9731-0KK20		1	5 units	1BP
	- Length 750		8GK9731-0KK30		1	5 units	1BP
	- Length 1000		8GK9731-0KK40		1	5 units	1BP
	- Length 1250		8GK9731-0KK50		1	5 units	1BP
	• Cu cross-section of 20 × 5 mm, 320 A						
	- Length 250		8GK9733-0KK10		1	5 units	1BP
	- Length 500		8GK9733-0KK20		1	5 units	1BP
	- Length 750		8GK9733-0KK30		1	5 units	1BP
	- Length 1000		8GK9733-0KK40		1	5 units	1BP
	- Length 1250		8GK9733-0KK50		1	5 units	1BP
	• Cu cross-section of 30 × 5 mm, 450 A						
	- Length 250		8GK9735-0KK10		1	5 units	1BP
	- Length 500		8GK9735-0KK20		1	5 units	1BP
	- Length 750		8GK9735-0KK30		1	5 units	1BP
	- Length 1000		8GK9735-0KK40		1	5 units	1BP
	- Length 1250		8GK9735-0KK50		1	5 units	1BP
	• Cu cross-section of 30 × 10 mm, 630 A						
	- Length 250		8GK9736-0KK10		1	5 units	1BP
	- Length 500		8GK9736-0KK20		1	5 units	1BP
	- Length 750		8GK9736-0KK30		1	5 units	1BP
	- Length 1000		8GK9736-0KK40		1	5 units	1BP
	- Length 1250		8GK9736-0KK50		1	5 units	1BP
8GK9910-0KK30	**Supports for front cover** • Long version • Plastic • 1 set = 4 supports		8GK9910-0KK30		1	5 sets	1BP
8GK9910-0KK11	**N/PE bars as plug-in terminals**						
	Versions						
	• Each with 6 screw terminals from 2.5 to 16 mm² and 21 plug-in terminals from 1.5 to 4 mm² for mounting on longitudinal stays at a 30° inclination		8GK9910-0KK11		1	1 unit	1BP
	• With 6 screw terminals from 2.5 to 16 mm² and 21 plug-in terminals from 1.5 to 4 mm², for PE bar and one neutral-neutral bar each with 2 screw terminals from 2.5 to 16 mm² and 10 plug-in terminals from 1.5 to 4 mm², for mounting on longitudinal stays at a 30° inclination		8GK9910-0KK12		1	1 unit	1BP
 8US1921-2AA00	**Terminals for circular conductors**						
	Versions						
	• Busbar thickness 5 mm						
	- Conductor cross-section 1.5 ... 16 mm²	▶	8US1921-2AA00		100	100 units	1CU
	- Conductor cross-section 1.5 ... 35 mm²	▶	8US1921-2AB00		100	50 units	1CU
	- Conductor cross-section 16 ... 70 mm²	▶	8US1921-2AD00		1	50 units	1CU
	- Conductor cross-section 16 ... 120 mm²	▶	8US1921-2AC00		1	50 units	1CU
	• Busbar thickness 10 mm						
	- Conductor cross-section 1.5 ... 16 mm²	▶	8US1921-2BA00		1	100 units	1CU
	- Conductor cross-section 1.5 ... 35 mm²	▶	8US1921-2BB00		1	50 units	1CU
	- Conductor cross-section 16 ... 70 mm²	▶	8US1921-2BD00		1	50 units	1CU
	- Conductor cross-section 16 ... 120 mm²	▶	8US1921-2BC00		1	50 units	1CU
8GK9920-0KK24	**Replacement door hinges** • For wall/floor-mounted distribution boards • 1 set = 2 hinges		8GK9920-0KK24		1	1 set	1BP
 8GK9910-0KK00	**Blanking strips** Color RAL 7035 (light gray)						
	Versions						
	• For 12 MW (1 MW = 18 mm)		8GK9910-0KK00		1	10 units	1BP
	• Length 1 m Without pressure-relief joint, to cut to length		8GK9910-0KK01		1	1 unit	1BP

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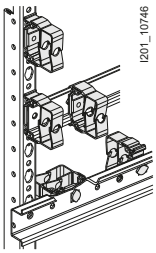
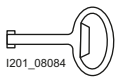
Accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8GK9920-0KK31	**Connecting kits, IP43/IP55** • For side-by-side mounting of enclosures • Comprising: - Screws - Washers - Nuts - 10 m roll of sealing strip Note A bushing flange is required for electrical connections!		8GK9920-0KK31		1	1 unit	1BP
 8GK9910-0KK80	**Cable holders** For standard mounting rails		8GK9910-0KK80		1	200 units	1BP
 8GK9290	**Spare keys** For double-bit locking mechanism		8GD9290		1	1 unit	1BP
8GK9910-0KK34	**Extra-deep brackets** For recessed installation of stand. mounting rails		8GK9910-0KK34		1	1 set	1BP
8GK9910-0KK26	**Quick-lock screws** • Plastic • Color RAL 7035		8GK9910-0KK26		1	20 units	1BP
8GK9910-0KK27	**Assembly tools** • For supports • Short and long version • With ergonomic handle		8GK9910-0KK27		1	1 unit	1BP
8GK9918-0KK00	**Transport eyebolts** M12		8GK9918-0KK00		1	1 unit	1BP
8GK9910-0KK35	**Standard mounting rails, lowered** Width • 250 mm • 500 mm • 750 mm		8GK9910-0KK35 8GK9910-0KK40 8GK9910-0KK41		1 1 1	1 unit 1 set 1 set	1BP 1BP 1BP
8GK9910-0KK38	**Stay supports** • For depth of 210 mm when mounting stays are to be shifted forward by 55 mm Note Necessary whenever standard mounting rails are mounted directly on the stays		8GK9910-0KK38		1	20 units	1BP

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Selection and ordering data

Front covers

8GK9601-4KK10

Front covers, closed
Front covers in large order quantities (Big Pack)

External height in mm	External width in mm	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
75	250		8GK9601-0KK10		1	10 units	1BP
150	250		8GK9601-1KK10		1	10 units	1BP
	500		8GK9601-1KK20		1	10 units	1BP
	750		8GK9601-1KK30		1	10 units	1BP
300	250		8GK9601-2KK10		1	10 units	1BP
	500		8GK9601-2KK20		1	10 units	1BP
	750		8GK9601-2KK30		1	10 units	1BP
450	250		8GK9601-3KK10		1	10 units	1BP
	500		8GK9601-3KK20		1	10 units	1BP
	750		8GK9601-3KK30		1	10 units	1BP
600	250		8GK9601-4KK10		1	10 units	1BP
	500		8GK9601-4KK20		1	10 units	1BP
	750		8GK9601-4KK30		1	10 units	1BP

8GK9601-4KK11

Front covers, with cutout
Front covers in large order quantities (Big Pack)

External height in mm	External width in mm	Tiers/MW	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
150	250	1/12		8GK9601-1KK11		1	10 units	1BP
	500	1/24		8GK9601-1KK21		1	10 units	1BP
	750	1/36		8GK9601-1KK31		1	10 units	1BP
300	250	2/24		8GK9601-2KK11		1	10 units	1BP
	500	2/48		8GK9601-2KK21		1	10 units	1BP
	750	2/72		8GK9601-2KK31		1	10 units	1BP
450	250	3/36		8GK9601-3KK11		1	10 units	1BP
	500	3/72		8GK9601-3KK21		1	10 units	1BP
	750	3/108		8GK9601-3KK31		1	10 units	1BP
600	250	4/48		8GK9601-4KK11		1	10 units	1BP
	500	4/96		8GK9601-4KK21		1	10 units	1BP
	750	4/144		8GK9601-4KK31		1	10 units	1BP

Assembly kits

8GK9910-0KK31

Supports for front cover
Plastic

Versions	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
• Long version (for use when mounting an 8GK9910-1KK.0 15 mm standard mounting rail on standard mounting rail holders)		8GK9910-0KK31		1	100 units	1BP
• Short version (for use when mounting an 8GK9910-1KK.0 15 mm standard mounting rail directly on the stays)		8GK9910-0KK24		1	100 units	1BP

8GK9910-1KK10

Standard mounting rails 15 mm

Versions	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
• Width 250 mm		8GK9910-1KK10		1	10 units	1BP
• Width 500 mm		8GK9910-1KK20		1	10 units	1BP
• Width 750 mm		8GK9910-1KK30		1	10 units	1BP
• Width 1000 mm		8GK9910-1KK40		1	10 units	1BP
• Width 1250 mm		8GK9910-1KK50		1	10 units	1BP

8GK9910-1KK83

Standard mounting rail holders
- For standard mounting rail, 15 mm and supports
- Long version
- Comprising 1 left and 1 right holder
- 1 set = 20 holders, 10 × left, 10 × right

Versions	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
• For 1 standard mounting rail		8GK9910-1KK81		1	1 set	1BP
• For 2 standard mounting rails		8GK9910-1KK83		1	1 set	1BP
• For 3 standard mounting rails		8GK9910-1KK84		1	1 set	1BP
• For 4 standard mounting rails		8GK9910-1KK85		1	1 set	1BP

8GK9910-1KK84

8GK9910-1KK85

* You can order this quantity or a multiple thereof.

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Special colors option

Special colors	Color designation		ALPHA 630
		Option	Surcharge
	RAL 9016 traffic white semi-gloss smooth	C10	None
	RAL 7035 light gray semi-gloss smooth	C11	None
	RAL 7035 light gray semi-gloss textured	C12	✓
	RAL 7032 pebble gray semi-gloss textured	C13	✓
	RAL 7038 agate gray semi-gloss textured	C14	✓
	RAL 9010 pure white semi-gloss smooth	C15	✓
	SN 610 Siemens white semi-gloss textured	C16	✓
	SN 610 Siemens white silky gloss textured	C17	✓
	RAL 9002 gray white semi-gloss smooth	C18	✓
	RAL 9002 gray white semi-gloss smooth	C19	✓
	RAL 9003 signal white semi-gloss textured	C20	✓
	RAL 9001 cream semi-gloss smooth	C21	✓
	RAL 5017 traffic blue silky gloss textured	C22	✓
	RAL 5005 signal blue semi-gloss smooth	C23	✓
	RAL 5010 gentian blue semi-gloss smooth	C24	✓
	RAL 2000 yellow orange semi-gloss smooth	C25	✓
	RAL 6018 yellow green semi-gloss smooth	C26	✓
	RAL 1003 signal yellow semi-gloss smooth	C27	✓
	RAL 7033 cement gray semi-gloss textured	C28	✓
	RAL 9002 gray white silky gloss smooth	C29	✓
	RAL 9010 pure white semi-gloss textured	C30	✓
	RAL 3000 flame red silky gloss textured	C31	✓

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ALPHA 1250 Distribution Boards

17.5/2	**Introduction**
17.5/7	**Unequipped distribution boards**
17.5/9	**Assembly kits for unequipped distribution boards**
17.5/18	**Accessories**
17.5/23	**Accessories – Ordering large quantities**
17.5/24	**Special colors option**

NEW

Direct reference to the products in the Industry Mall from the selection and ordering data tables:

Article No.
www.siemens.com/product?Article No.
3VA2025-5HL36-0AA0

Paper catalog:
To get more product information enter the Web address plus Article No.

PDF catalog:
Get more product information with just a mouse click.

For further technical product information:

Siemens Industry Online Support:
www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
Download
FAQ
Manual
Product note
Software archive
Technical data

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Introduction

Overview

		Devices	Page	Surface-mounting distribution boards	Flush-mounting distribution boards	Rated current	Cubicle depth	Safety class	
						A	mm	1	2
	Small distribution boards	SIMBOX XL small distribution boards:							
		• Flush-mounting and hollow-wall distribution boards	17.1/6	--	✔	63	88[1]	--	✔
		• IP30 surface-mounting distribution boards	17.1/11	✔	--	63	99	--	✔
		SIMBOX WP small distribution boards:							
		• IP65 surface-mounting distribution boards	17.1/15	✔	--	63	100/140/160	--	✔
	ALPHA 160 DIN technology distribution boards	Cubicle, partially equipped	17.2/6	✔	✔	160	140	--	✔
		Unequipped distribution board	17.2/8	✔	✔	160	140	--	✔
	ALPHA 400 DIN technology distribution boards	Unequipped distribution board, as flat pack	17.3/9	✔	--	400	210	✔	✔
		Unequipped distribution board	17.3/10	✔	✔	400	210	✔	✔
	ALPHA 630 DIN technology distribution boards	Unequipped distribution board, as flat pack	17.4/7	✔	--	630	210	✔	✔
		Unequipped distribution board	17.4/7	✔	--	630	210/250/320	✔	✔
		Unequipped distribution board, with open side panels	17.4/8	✔	--	630	250/320	✔	--
	ALPHA 1250 DIN technology distribution boards	Unequipped distribution board	17.5/7	✔	--	1250	400	✔	--

[1] Mounting depth

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Degree of protection	VDE	EN	DIN	IEC
IP30	DIN VDE 0603	--	DIN 43871	IEC 61439-1/-3
IP65	DIN VDE 0603-1, VDE 0660-600-1/-3	EN 61439-1/-3	DIN 43871	IEC 61439-1/-3
IP31 / IP43 / IP44	VDE 0660-600-1/-3	EN 61439-1/-3	--	IEC 61439-1/-3
IP43	VDE 0660-600-1/-2/-3	EN 61439-1/-2/-3	--	IEC 61439-1/-2/-3
IP31 / IP43 / IP55				
IP43	VDE 0660-600-1/-2	EN 61439-1/-2	--	IEC 61439-1/-2
IP43 / IP55				
IP55				
IP55	VDE 0660-600-1/-2	EN 61439-1/-2	--	Type verification according to IEC 61439-1/-2

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ALPHA 1250 Distribution Boards

Introduction

System

The modular design of our Siemens distribution board system draws on our decades of experience.

This system has been tailored to meet individual requirements for distribution board installation.

The ALPHA 1250 DIN technology distribution board system (1250 A) comprises unequipped distribution boards with removable rear plates, doors, bases with degree of protection IP55, assembly kits for individual assembly, and an extensive range of accessories.

Enclosure

- Material: Electrogalvanized and powder-coated sheet steel
- Sheet thickness, degree of protection IP43/IP55:
  Body 1.25 mm, door 1 mm
- Color: RAL 7035 (light gray), further RAL colors available on request.
- For special colors, see page 17.5/24

Assembly kits

The assembly kits are made of sendzimir-galvanized sheet steel and are equipped with molded-plastic covers for a wide range of equipping options, e.g. with switching devices and modular installation devices.

The largest switching devices that can installed in the ALPHA 1250 are Siemens switching devices with a rated current of up to 1250 A.

Cabinet dimensions

All dimensions in mm.

- Height:
  - Internal dimensions: 1800
  - External dimension with base: 1950
- Width (internal/external dimensions): 250/300, 500/550, 750/800, 1000/1050, 1250/1300
- Depth (external dimension): 400
- Assembly kits in panel-size grid dimensions, height × width: 150 × 250.

Benefits

- Busbars are routed to the rear panel through side-by-side cabinets
- Rear wall can be removed for easy installation
- IP55 degree of protection
- Safety class 1 (protective conductor connection)
- Easy planning thanks to modular design
- Flexible expansion with a wide range of mounting kits from the ALPHA 630 distribution board system
- Ample wiring space
- Easy assembly thanks to keyhole-fastened components and modules with quick-acting locks
- System concept according to DIN, EN and VDE standards
- High-quality surface finish: Distribution boards made of electrogalvanized and powder-coated sheet steel, system components made of sendzimir-galvanized sheet steel, galvanized and transparently chromated small components and screws
- Doors can be hinged on the right or left
- Door opening angle of 170°
- Replaceable locking systems (accessories)
- Front cover with sealable 90° quick-acting locks
- Environmentally-friendly and recyclable plastics

Application

The ALPHA 1250 DIN technology distribution board (1250 A) is used wherever busbar systems are to be routed through several side-by-side floor-mounted cabinets or where floor-mounted cabinets require a greater enclosure depth (e.g. in administrative, non-residential and industrial buildings). It rounds off the Siemens range of floor-mounted distribution boards with an overall depth of 400 mm.

The distribution board and its components are of modular design.

The ALPHA 1250 distribution board (1250 A) is designed for ALPHA DIN assembly kits.

The modular distribution boards can be supplied in safety class 1 (protective conductor connection). IP55 degree of protection can be achieved with the necessary flanges.

With just a few standard components, it is possible to achieve a wide range of project-related mounting and equipping options.

40 mm, 60 mm and 185 mm busbar systems with dimensions up to 100 × 10 mm can be installed.

The modular design of the board enables easy planning, configuration, calculation, ordering and mounting.

Assembly kits that only require a one-size screwdriver for assembly are available for all mountable switching and modular installation devices.

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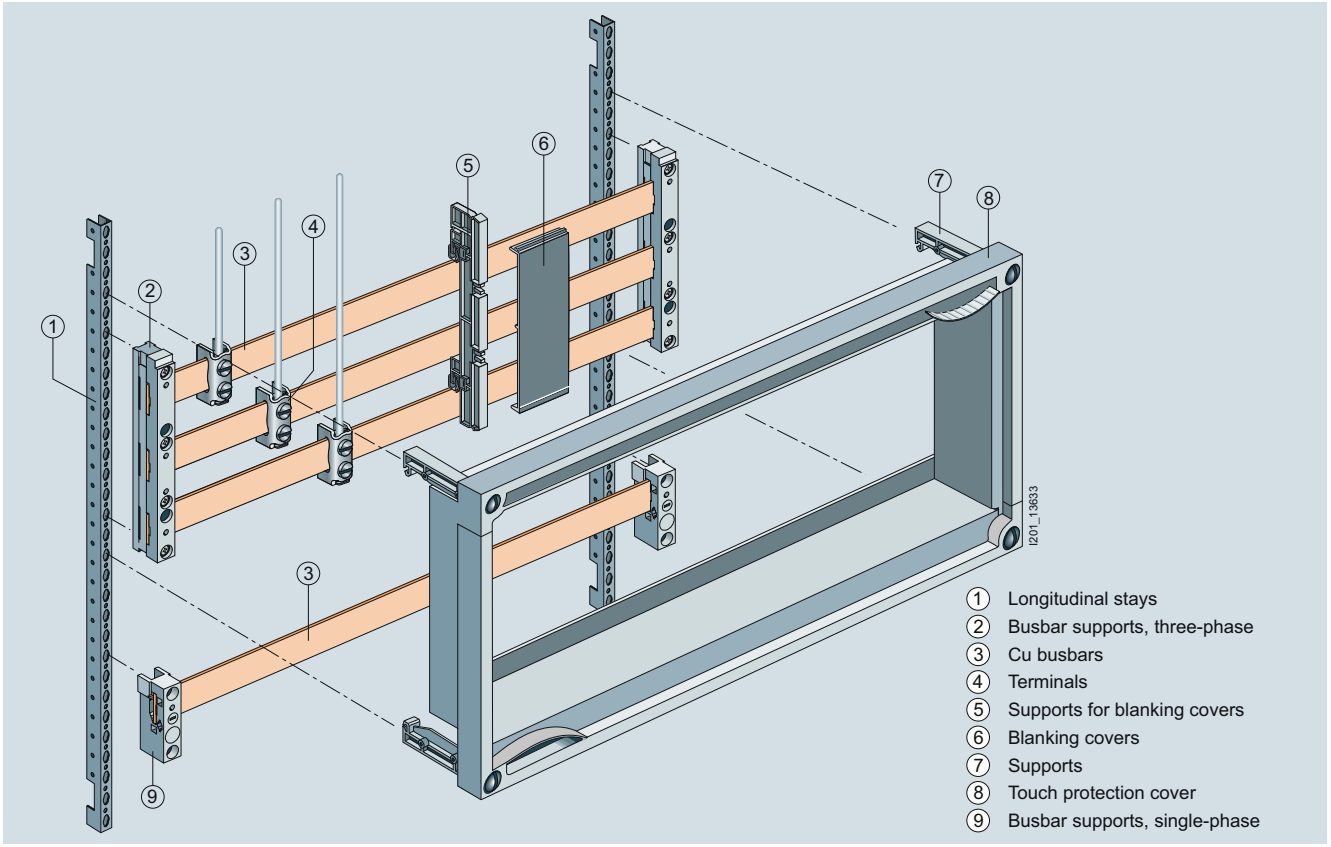
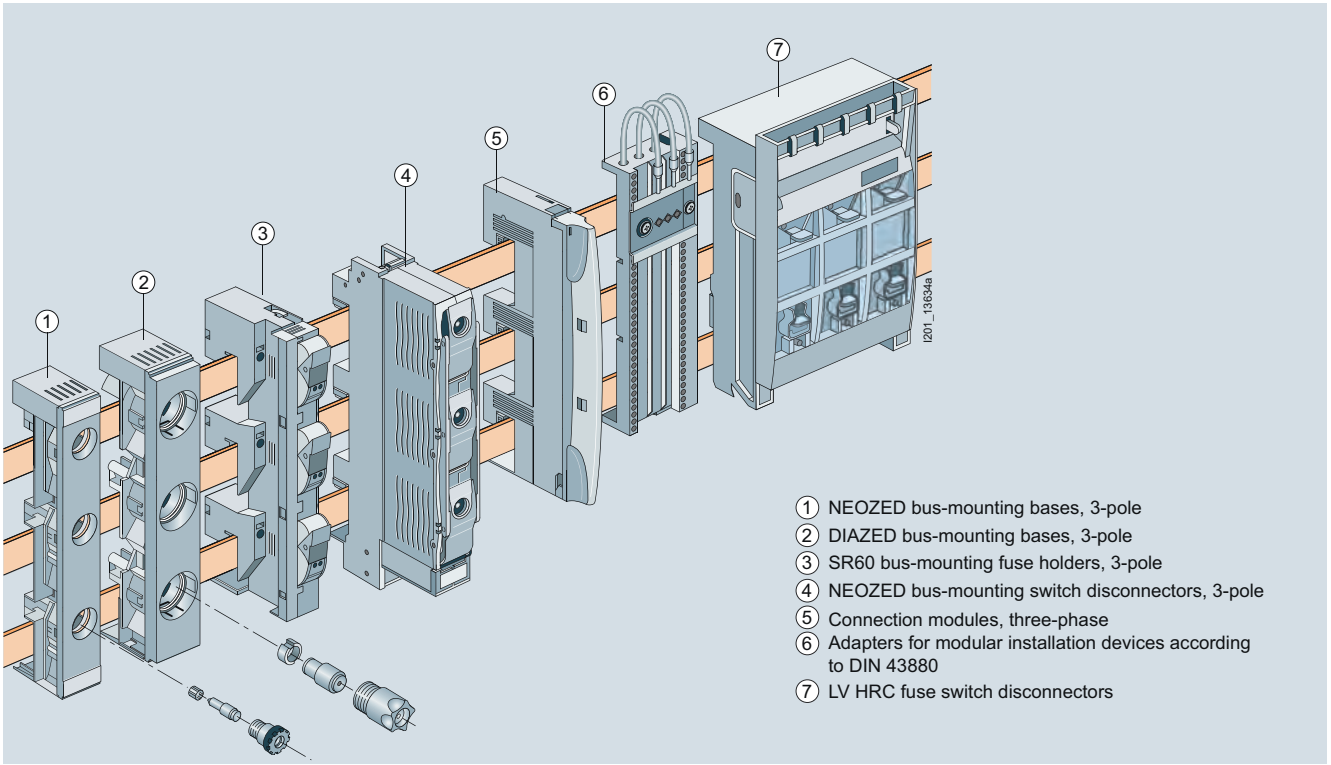
Design



Distribution board components of the 8GK4 assembly kits for the SR60 busbar system, 60 mm



Built-in components of the 8GK4 assembly kits for the SR60 busbar system, 60 mm

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Technical specifications

Overvoltage category	III
Rated impulse withstand voltage U_{imp} in kV	8
Clearance and creepage distances	EN 60664-1
Rated insulation voltage U_i in V	690
Rated operational voltage U_e in V AC/DC	690
Rated voltage U_n (40 Hz ... 60 Hz AC) in V	690 for built-in devices
Rated current in A	1250
Rated peak short-circuit current I_{pk} in kA • With busbar support, 60 mm • With busbar support, 185 mm	 Up to 78.9[1)] Up to 110[1)]
Rated short-time current I_{cw} in kA • With busbar support, 60 mm • With busbar support, 185 mm	 Up to 34[1)] Up to 35[1)]
Protective measures	Safety class 1 (protective conductor connection)
Number of conductors in the busbar run	4/5
Degree of protection acc. to EN 60529	IP55 with door (with matching flanges)
Standard mounting rail tier spacing per standard mounting rail tier in mm	150
Modular width (MW)	18 mm, 12 MW
Pollution degree	3
Ambient temperature in °C	35 (24-h mean value)
Relative air humidity in %	50 at 40 °C
Test specifications	EN 61439-1/-2 (VDE 0660-600-1/-2)
Enclosure	Sheet steel
Mounting dimensions	DIN 43880
Surface	Electrogalvanized and powder-coated
Color[2)]	RAL 7035 (light gray)
Lock	3-point locking with integrated espagnolette lock (can be replaced with other locking systems if required)
Packing material	Shock-proof, environmentally-friendly

1) Depending on distance of busbar support.

2) Further RAL colors are available on request.
For special colors, see page 17.5/24.

Cabinet dimensions

Cabinet (external dimensions)		
Height mm	**Width** mm	**Depth** mm
1950 with base (100 mm)	300 550 800 1050 1300	400

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Selection and ordering data

Modular distribution boards

8GK1423-8KK15

Modular distribution boards
- IP55 degree of protection
- Color RAL 7035 (light gray)
- External height: 1950 mm
- External depth: 400 mm
- Type of delivery: Welded and riveted unequipped distribution board, with removable rear panel, door and open side panels
- Safety class 1 (protective conductor connection)
- Enclosure (with base) with door and espagnolette lock (can be replaced with other locking systems). Distribution boards with a width of 750 mm/800 mm or more will be supplied with a double door
- Flanges must be ordered separately

External width in mm	Panel width	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
• 300	□	8GK1423-8KK15		1	1 unit	1BP
• 550	□□	8GK1423-8KK25		1	1 unit	1BP
• 800	□□□	8GK1423-8KK35		1	1 unit	1BP
• 1050	□□□□	8GK1423-8KK45		1	1 unit	1BP
• 1300	□□□□□	8GK1423-8KK55		1	1 unit	1BP

Note
- For assembly kits, see page 17.5/9 onwards.
- For accessories, see page 17.5/18 onwards.

8GK9513-8KK10

Replacement door for cabinets
Height 1950 mm

Width mm	Door version	Door width mm	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
300	Complete	300	8GK9513-8KK10		1	1 unit	1BP
550	Complete	550	8GK9513-8KK20		1	1 unit	1BP
800/1050	Left	525	8GK9513-8KK30		1	1 unit	1BP
800	Right	275	8GK9513-8KK40		1	1 unit	1BP
1050/1300	Right	525	8GK9513-8KK50		1	1 unit	1BP
1300	Left	775	8GK9513-8KK60		1	1 unit	1BP

8GK9520-0KK05

Side panels, modular distribution board
Depth 400 mm

8GK9520-0KK05 | | 1 | 1 unit | 1BP

Accessories

8GK4853-8KK02

Longitudinal stays (latchable pivot stays)
- In order to mount the assembly kits in unequipped distribution boards, 2 longitudinal stays are required for each assembly kit width
- Height 1800 mm
- Depth 250/320/400 mm
- 1 set = 2 stays

8GK4853-8KK02 | | 1 | 1 set | 1BP

8GK9910-0KK32

Connecting kits for longitudinal stays
- Connecting plate for stays
- 1 set = 4 units

8GK9910-0KK32 | | 1 | 1 unit | 1BP

* You can order this quantity or a multiple thereof.

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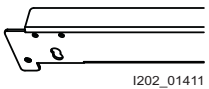
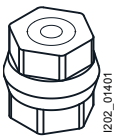
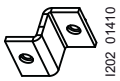
Unequipped distribution boards

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8GK9913-0KK30	**Assembly kits for masking frame for front cover** Height 1800 mm						
	Width in mm						
	250		**8GK9913-0KK10**		1	1 unit	1BP
	500		**8GK9913-0KK20**		1	1 unit	1BP
	750		**8GK9913-0KK30**		1	1 unit	1BP
	1000		**8GK9913-0KK40**		1	1 unit	1BP
	1250		**8GK9913-0KK50**		1	1 unit	1BP
	Note						
	Assembly kit only necessary if the mounting stays are mounted at the rear of the modular distribution board.						
8GK9100-0KK04	**Flange plates** For lower flange opening (sheet steel closed)		**8GK9100-0KK04**		1	1 unit	1BP
Expansion parts for busbars							
8GK9720-0KK00	**Busbar supports** • Busbar spacing 100/185 mm • Max. busbar current 1250 A • Max. Cu 1 × 80 × 10						
	Versions						
	• With matching support plate for mounting on the rear panel		**8GK9720-0KK00**		1	1 unit	1BP
	• Without support plate for mounting on the busbar (no fixing to the cabinet enclosure), including fixing screws		**8GK9720-0KK01**		1	1 unit	1BP
	Accessories						
	• PEN bar holder		**8GK9721-0KK00**		1	2 units	1BP
	• N/PE busbar supports		**8GK9110-0KK00**		1	1 unit	1BP
 I202_01411 8GK4854-0KK..	**Cross arm for N/PEN pin insulators and/or holders for PEN bars** Included in delivery: Cross arm for N/PEN main busbar, 4 × fixing screws M5 × 10						
	Versions						
	• W = 250 mm		**8GK4854-0KK10**		1	1 unit	1BP
	• W = 500 mm		**8GK4854-0KK20**		1	1 unit	1BP
	• W = 750 mm		**8GK4854-0KK30**		1	1 unit	1BP
	• W = 1000 mm		**8GK4854-0KK40**		1	1 unit	1BP
	• W = 1250 mm		**8GK4854-0KK50**		1	1 unit	1BP
 I202_01401 8GK9110-0KK00	**Pin insulator for N busbar including holder** Pin insulator, 1-pole, with M8 internal thread and holder		**8GK9110-0KK00**		1	1 unit	1BP
 I202_01410 8GK9721-0KK00	**ALPHA 1250 holder for PEN bar** PEN bar holder		**8GK9721-0KK00**		1	2 units	1BP

* You can order this quantity or a multiple thereof.

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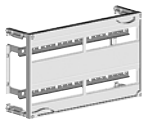
Selection and ordering data

	Version			DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
	Assembly kits, for modular installation devices • Tier spacing of 150 mm, without N/PE bar • Assembly kits for individual and project-related assembly, comprising: device racks, front cover including supports, screws and mounting accessories • Panel-size grid dimensions H × W (mm): 150 × 250 • The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports								
	External dimensions in mm Height	Width	Tiers/MW						
 8GK4351-1KK12	150	250 500 750	1/12 1/24 1/36		**8GK4351-1KK12** **8GK4351-1KK22** **8GK4351-1KK32**		1 1 1	1 unit 1 unit 1 unit	1BP 1BP 1BP
 8GK4351-2KK12	300	250 500 750	2/24 2/48 2/72		**8GK4351-2KK12** **8GK4351-2KK22** **8GK4351-2KK32**		1 1 1	1 unit 1 unit 1 unit	1BP 1BP 1BP
 8GK4351-3KK12	450	250 500 750	3/36 3/72 3/108		**8GK4351-3KK12** **8GK4351-3KK22** **8GK4351-3KK32**		1 1 1	1 unit 1 unit 1 unit	1BP 1BP 1BP
 8GK4351-4KK12	600	250 500 750	4/48 4/96 4/144		**8GK4351-4KK12** **8GK4351-4KK22** **8GK4351-4KK32**		1 1 1	1 unit 1 unit 1 unit	1BP 1BP 1BP
	Note								
	• For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.5/7). • The assembly kits with a width of 250 mm are equipped with 7.5 mm standard mounting rails. • The assembly kits with a width of 500/750 mm are equipped with 15 mm standard mounting rails. • For accessories, see page 17.5/21 onwards.								

* You can order this quantity or a multiple thereof.

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Assembly kits for unequipped distribution boards

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8GK4401-3KK32	**Assembly kits for horizontal terminal blocks** • Terminal blocks with graded insulation design • With closed front cover • Assembly kits for individual and project-related assembly, comprising: device racks, front cover including supports, screws and mounting accessories • Panel-size grid dimensions H × W (mm): 150 × 250 • The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports.						
	External dimensions in mm Height / Width						
	150 / 250		**8GK4401-1KK12**		1	1 unit	1BP
	300 / 250		**8GK4401-2KK12**		1	1 unit	1BP
	300 / 500		**8GK4401-2KK22**		1	1 unit	1BP
	300 / 750		**8GK4401-2KK32**		1	1 unit	1BP
	450 / 250		**8GK4401-3KK12**		1	1 unit	1BP
	450 / 500		**8GK4401-3KK22**		1	1 unit	1BP
	450 / 750		**8GK4401-3KK32**		1	1 unit	1BP
	Note • For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.5/7). • For accessories, see page 17.5/21 onwards.						
8GK4402-4KK12	**Assembly kits for vertical terminal blocks** • Terminal blocks with insulation design • With closed front cover • Assembly kits for individual and project-related assembly, comprising: device racks, front cover including supports, screws and mounting accessories • Panel-size grid dimensions H × W (mm): 150 × 250 • The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports.						
	External dimensions in mm Height / Width						
	300 / 250		**8GK4402-2KK12**		1	1 unit	1BP
	300 / 500		**8GK4402-2KK22**		1	1 unit	1BP
	300 / 750		**8GK4402-2KK32**		1	1 unit	1BP
	450 / 250		**8GK4402-3KK12**		1	1 unit	1BP
	450 / 500		**8GK4402-3KK22**		1	1 unit	1BP
	450 / 750		**8GK4402-3KK32**		1	1 unit	1BP
	600 / 250		**8GK4402-4KK12**		1	1 unit	1BP
	600 / 500		**8GK4402-4KK22**		1	1 unit	1BP
	600 / 750		**8GK4402-4KK32**		1	1 unit	1BP
	Note • For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.5/7). • For accessories, see page 17.5/21 onwards.						
8GK4500-2KK20	**Assembly kit front covers, for measuring devices, cutout dimensions 92 mm x 92 mm**		**8GK4500-2KK20**		1	1 unit	1BP

* You can order this quantity or a multiple thereof.

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Assembly kits for unequipped distribution boards

8GK4501-4KK12

Assembly kits for unequipped panels
- Gray
- Assembly kits for individual and project-related assembly, comprising: Front cover including supports, screws and mounting accessories
- Panel-size grid dimensions H × W (mm): 150 × 250
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports.

External dimensions in mm Height	Width	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
75	250	8GK4501-0KK12		1	1 unit	1BP
	500	8GK4501-0KK22		1	1 unit	1BP
150	250	8GK4501-1KK12		1	1 unit	1BP
	500	8GK4501-1KK22		1	1 unit	1BP
	750	8GK4501-1KK32		1	1 unit	1BP
300	250	8GK4501-2KK12		1	1 unit	1BP
	500	8GK4501-2KK22		1	1 unit	1BP
	750	8GK4501-2KK32		1	1 unit	1BP
450	250	8GK4501-3KK12		1	1 unit	1BP
	500	8GK4501-3KK22		1	1 unit	1BP
	750	8GK4501-3KK32		1	1 unit	1BP
600	250	8GK4501-4KK12		1	1 unit	1BP
	500	8GK4501-4KK22		1	1 unit	1BP
	750	8GK4501-4KK32		1	1 unit	1BP
750	250	8GK4501-5KK12		1	1 unit	1BP
	500	8GK4501-5KK22		1	1 unit	1BP
	750	8GK4501-5KK32		1	1 unit	1BP

Note

For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.5/7).

8GK4501-3KK23

Assembly kits for unequipped panels with deep-drawn cover, 40 mm
- Assembly kits for individual and project-related assembly, comprising: Front cover including supports, screws and mounting accessories
- Panel-size grid dimensions H × W (mm): 150 × 250
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports.

External dimensions in mm Height	Width	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
300	250	8GK4501-2KK13		1	1 unit	1BP
	500	8GK4501-2KK23		1	1 unit	1BP
	750	8GK4501-2KK33		1	1 unit	1BP
450	250	8GK4501-3KK13		1	1 unit	1BP
	500	8GK4501-3KK23		1	1 unit	1BP
	750	8GK4501-3KK33		1	1 unit	1BP

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.5/7).
- For mounting size 000 fuse switch disconnectors you also need the cover 8GK9912-0KK00 (see page 17.5/13).
- For accessories, see page 17.5/21 onwards.

* You can order this quantity or a multiple thereof.

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Assembly kits for unequipped distribution boards

8GK4451-4KK12

Assembly kits with mounting plates
- With closed front cover
- Assembly kits for individual and project-related assembly, comprising: Mounting plate, front cover including supports, mounting brackets (depth-adjustable), screws and mounting accessories
- Panel-size grid dimensions H × W (mm): 150 × 250
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports.

External dimensions (mm): Assembly kit Height	Width	Mounting plate dimensions in mm Height	Width	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
300	250	245	207.5	8GK4451-2KK12		1	1 unit	1BP
	500		457.5	8GK4451-2KK22		1	1 unit	1BP
	750		707.5	8GK4451-2KK32		1	1 unit	1BP
450	250	395	207.5	8GK4451-3KK12		1	1 unit	1BP
	500		457.5	8GK4451-3KK22		1	1 unit	1BP
	750		707.5	8GK4451-3KK32		1	1 unit	1BP
600	250	545	207.5	8GK4451-4KK12		1	1 unit	1BP
	500		457.5	8GK4451-4KK22		1	1 unit	1BP
	750		707.5	8GK4451-4KK32		1	1 unit	1BP

Note
- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.5/7)
- If the fitted mounting plate extends over several panel widths, it is not possible to place a longitudinal stay in the middle.

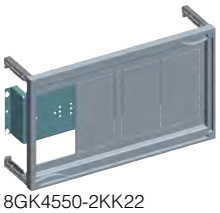
8GK9533-0KK10

Cabinet-high mounting plates
- With fixing screws
- Sendzimir-galvanized sheet steel
- For mounting on longitudinal stays or the rear panel
- No covers available

Internal dimensions of cabinet in mm Height	Width	Mounting plate dimensions in mm Height	Width	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
1800	250	1680	242	8GK9533-0KK10		1	1 unit	1BP
	500		492	8GK9533-0KK20		1	1 unit	1BP
	750		742	8GK9533-0KK30		1	1 unit	1BP
	1000		992	8GK9533-0KK40		1	1 unit	1BP
	1250		1242	8GK9533-0KK50		1	1 unit	1BP

Note

For mounting on the rear panel you always need a mounting plate in the cabinet width.



8GK4550-2KK22

Assembly kits for 3NP1 fuse switch disconnectors, for mounting on support plates
- Assembly kits for individual and project-related assembly, comprising: Support plate, front cover including supports, molded-plastic masking frame, screws and mounting accessories
- Panel-size grid dimensions H × W (mm): 150 × 250
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports.

Number of assembly kits of size	Fuse switch disconnectors	Height in mm	Width in mm	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
2 × 00/000	2 × 3NP1123... / 3NP1 133...	300	250	8GK4550-2KK12		1	1 unit	1BP
4 × 00/000	4 × 3NP1123... / 3NP1 133...		500	8GK4550-2KK22		1	1 unit	1BP
1 × 1	1 × 3NP1143…	450	250	8GK4550-3KK12		1	1 unit	1BP
2 × 1	2 × 3NP1143…		500	8GK4550-3KK22		1	1 unit	1BP
1 × 2	1 × 3NP1153…	450	250	8GK4551-3KK12		1	1 unit	1BP
1 × 3	1 × 3NP1163…		500	8GK4551-3KK22		1	1 unit	1BP

Accessories

	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
• 3NP1123... cover, size 000 (required only for size 000 fuse switch disconnectors)	8GK9912-0KK00		1	1 unit	1BP
• Busbar supports					
- 40 mm, 5-pole	8GK9650-0KK00		1	1 unit	1BP
- 60 mm, 3-pole	8GK9711-0KK03		1	1 unit	1BP

Note
- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.5/7).
- For mounting size 000 fuse switch disconnectors you also need the cover 8GK9912-0KK00 (see page 17.5/13).
- For accessories, see page 17.5/21 onwards.

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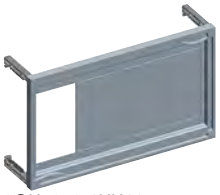

8GK4650-2KK12

Assembly kits for 3NP1 fuse switch disconnectors, for mounting on busbars

- Assembly kits for individual and project-related assembly, comprising: Front cover including supports, molded-plastic masking frame, screws and mounting accessories
- Panel-size grid dimensions H × W (mm): 150 × 250
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports.

Note

The Cu busbar and the busbar supports must be ordered separately (see page 17.5/21).

Number of assembly kits of size	Fuse switch disconnectors	Height in mm	Width in mm	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
2 × 00/000	2 × 3NP1123 ... / 3NP1133...	300	250		8GK4650-2KK12		1	1 unit	1BP
4 × 00/000	4 × 3NP1123 ... / 3NP1133...		500		8GK4650-2KK22		1	1 unit	1BP
2 × 00/000	2 × 3NP1123 ... / 3NP1133...	450	250		8GK4650-3KK12		1	1 unit	1BP
4 × 00/000	4 × 3NP1123 ... / 3NP1133...		500		8GK4650-3KK22		1	1 unit	1BP
1 × 1	1 × 3NP1143…	450	250		8GK4651-3KK12		1	1 unit	1BP
2 × 1	2 × 3NP1143…		500		8GK4651-3KK22		1	1 unit	1BP
1 × 2	1 × 3NP1153…		250		8GK4652-3KK12		1	1 unit	1BP

Accessories

• 3NP1123... cover, size 000 (required only for size 000 fuse switch disconnectors)					8GK9912-0KK00		1	1 unit	1BP
• Busbar supports					8GK9650-0KK00		1	1 unit	1BP
- 40 mm, 5-pole					8GK9711-0KK03		1	1 unit	1BP
- 60 mm, 3-pole									

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.5/7).
- For mounting size 000 fuse switch disconnectors you also need the cover 8GK9912-0KK00 (see page 17.5/13).
- For accessories, see page 17.5/21 onwards.

Assembly kits for 3VL molded case circuit breakers and 3VT switch disconnectors

- Assembly kits for individual and project-related assembly, comprising: Support plate, front cover including supports, screws and mounting accessories
- Panel-size grid dimensions H × W (mm): 150 × 250
- The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports.

8GK4704-4KK13

8GK4721-3KK10

8GK4722-3KK10

Versions	External dimensions in mm Height	Width	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
• 3- and 4-pole, 3VL molded case circuit breakers								
- 1 × 3VL160/3VL160X	300	250		8GK4701-2KK12		1	1 unit	1BP
- 1 × 3VL160X, 1 × 3VL160, 1 × 3VL250	450			8GK4701-3KK12		1	1 unit	1BP
- 1 × 3VL400	600			8GK4702-4KK12		1	1 unit	1BP
• 3-pole, 3VL molded case circuit breakers								
- 1 × 3VL630	600	250		8GK4703-4KK13		1	1 unit	1BP
- 1 × 3VL800				8GK4704-4KK15		1	1 unit	1BP
• 3-/4-pole, 3VL molded case circuit breakers								
- 1 × 3VL630	600	500		8GK4704-4KK13		1	1 unit	1BP
- 1 × 3VL800				8GK4704-4KK25		1	1 unit	1BP
- 1 × 3VL1250/1600				8GK4705-4KK25		1	1 unit	1BP
• 3- and 4-pole, 3VT switch disconnectors								
- 2 × 3VT 1	300	250		8GK4710-2KK10		1	1 unit	1BP
- 1 × 3VT 2	450			8GK4710-3KK10		1	1 unit	1BP
- 1 × 3VT 3	600			8GK4710-4KK10		1	1 unit	1BP
• For installation with mounted RCD module								
- 1 × 3VL160X + RCD	450	250		8GK4720-3KK10		1	1 unit	1BP
- 1 × 3VL160/3VL250 + RCD				8GK4721-3KK10		1	1 unit	1BP
- 1 × 3VL400 + RCD	750	250		8GK4720-5KK10		1	1 unit	1BP
• For installation with front-operated rotary operating mechanism								
- 1 × 3VL160X/VL160/VL250	450	250		8GK4722-3KK10		1	1 unit	1BP
- 1 × 3VL400	600			8GK4722-4KK10		1	1 unit	1BP
- 1 × 3VL630 3-pole				8GK4723-4KK10		1	1 unit	1BP
- 1 × 3VL630 4-pole		500		8GK4721-4KK20		1	1 unit	1BP

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.5/7).
- For accessories, see page 17.5/21 onwards.

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Assembly kits for unequipped distribution boards

8GK4730-2KK12

Assembly kits, for 3VA10.. and 3VA11.. molded case circuit breakers (100 A/160 A) NEW

- Assembly kits comprising:
  - Matching device support plate
  - Front cover including supports
  - Fixing screws
- Assembly kit for 3-pole and 4-pole devices

External dimensions in mm Height	Width	Possible breakers	Operating mechanism	RCD	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
450	250	1	--	--		8GK4730-2KK12		1	1 unit	1BP
			Motor	--		8GK4734-2KK12		1	1 unit	1BP
			Motor	Infeed side		8GK4734-3KK12		1	1 unit	1BP
			---	Infeed side		8GK4731-3KK12		1	1 unit	1BP
	500	3	--	--		8GK4730-2KK22		1	1 unit	1BP
			Motor	--		8GK4734-2KK22		1	1 unit	1BP
			Motor	Infeed side		8GK4734-3KK22		1	1 unit	1BP
			---	Infeed side		8GK4731-3KK22		1	1 unit	1BP

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.5/7).

8GK4730-3KK10

Assembly kits,for 3VA20.. and 3VA22.. molded case circuit breakers (100 A/160 A/250 A) NEW

- Assembly kits comprising:
  - Matching device support plate
  - Front cover including supports
  - Fixing screws
- Assembly kit for 3-pole and 4-pole devices

External dimensions in mm Height	Width	Possible breakers	Operating mechanism	RCD	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
450	250	1	--	--		8GK4730-3KK10		1	1 unit	1BP
	500	3	--	--		8GK4730-3KK20		1	1 unit	1BP
600	250	1	Motor	Infeed side		8GK4736-4KK12		1	1 unit	1BP
			---	Infeed side		8GK4735-4KK12		1	1 unit	1BP
	500	3	Motor	Infeed side		8GK4736-4KK22		1	1 unit	1BP
			---	Infeed side		8GK4735-4KK22		1	1 unit	1BP

Note

- For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.5/7).

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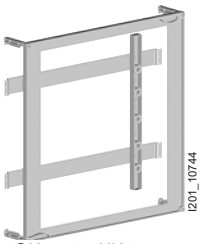
	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8GK4707-3KK17	**Assembly kits for 3KA switch disconnectors on support plate** • Panel-size grid dimensions H × W (mm): 150 × 250 • The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports.						
	Type / Height in mm / Width in mm						
	• 1 × 3KA 50/51/52/53 (only 3-pole devices) / 300 / 250		8GK4707-3KK17		1	1 unit	1BP
	• 1 × 3KA 55/57/58 / 300 / 500		8GK4707-4KK27		1	1 unit	1BP
	Note • For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.5/7). • For accessories, see page 17.5/21 onwards.						
	Assembly kits for 3NJ4 in-line fuse switch disconnectors • Assembly kits for individual and project-related assembly, comprising: Front cover including supports, busbar holders on support plate, screws and mounting accessories • Panel-size grid dimensions H × W (mm): 150 × 250 • The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports. • Note: Values in brackets below apply to bars with fixing claws						
	Versions / External dimensions in mm: Height / Width						
8GK4751-4KK33	• Busbar center-to-center spacing of 100 mm, with busbar support						
	- 4 (3) × 3NJ4, size 00 / 600 / 250		8GK4751-4KK13		1	1 unit	1BP
	- 9 (8) × 3NJ4, size 00 / 600 / 500		8GK4751-4KK23		1	1 unit	1BP
	- 14 (13) × 3NJ4, size 00 / 600 / 750		8GK4751-4KK33		1	1 unit	1BP
3NJ4912-2CA00	• Blanking covers						
	- Size 00 / 299 / 50		3NJ4912-2CA00		1	1 unit	1DL
 8GK4752-5KK35	• Busbar center-to-center spacing of 185 mm, with busbar support						
	- 2 × 3NJ4, size 1-3 / 750 / 250		8GK4752-5KK15		1	1 unit	1BP
	- 4 × 3NJ4, size 1-3 / 750 / 500		8GK4752-5KK25		1	1 unit	1BP
	- 7 × 3NJ4, size 1-3 / 750 / 750		8GK4752-5KK35		1	1 unit	1BP
3NJ4912-2.A00	• Blanking covers						
	- Size 00 / 699 / 50		3NJ4912-2AA00		1	1 unit	1DL
	- Size 1-3 / 699 / 100		3NJ4912-2BA00		1	1 unit	1DL
	Note • Observe max. rated current of 630 A! • For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.5/7). • The Cu busbar must be ordered separately. • The assembly kits for sizes 1-3 require a mounting depth of 320 mm. • If the assembly kits are fully equipped, an incoming feeder bay is required. • When mounting the in-line fuse switch disconnectors with 3NJ4911-3AA00 busbar terminals, the assembly kits cannot be fully equipped. • For accessories, see page 17.5/21 onwards.						

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Assembly kits for unequipped distribution boards

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8GK4801-3KK12	**Assembly kits for bus-mounting fuse bases for mounting on busbar systems** • 3-pole • Busbar center-to-center spacing 60 mm • 7 × NEOZED D02 • Assembly kits for individual and project-related assembly, comprising: Front cover including supports, busbar supports for bus-mounting fuse bases, screws and mounting accessories • Panel-size grid dimensions H × W (mm): 150 × 250 • The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports.						
	External dimensions in mm Height / Width						
	300 / 250		**8GK4801-2KK12**		1	1 unit	1BP
	450 / 250		**8GK4801-3KK12**		1	1 unit	1BP
	Note • For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.5/7). • The Cu busbar must be ordered separately (see page 17.5/21). • For accessories, see page 17.5/21 onwards.						
8GK4801-2KK13	**Assembly kits for busbar-adaptable units, SR60** • Busbar center-to-center spacing of 60 mm • Assembly kits for individual and project-related assembly, comprising: Deep-drawn front cover with supports • Panel-size grid dimensions H × W (mm): 150 × 250 • The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports.						
	External dimensions in mm Height / Width						
	300 / 250		**8GK4801-2KK13**		1	1 unit	1BP
	300 / 500		**8GK4801-2KK23**		1	1 unit	1BP
	300 / 750		**8GK4801-2KK33**		1	1 unit	1BP
	450 / 250		**8GK4801-3KK13**		1	1 unit	1BP
	450 / 500		**8GK4801-3KK23**		1	1 unit	1BP
	450 / 750		**8GK4801-3KK33**		1	1 unit	1BP
	Note • Busbar supports (8GK9711-0KK03) not included in delivery • Design of the 8GK4 assembly kits for the SR60 busbar system, 60 mm, see page 17.5/9. • For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.5/7). • The Cu busbar and the busbar supports must be ordered separately (see page 17.5/21).						
8US1922-2EA00	**Supports for blanking covers**	►	**8US1922-2EA00**		1	4 units	1CU
8US1922-2EB00	**Blanking covers**	►	**8US1922-2EB00**		1	2 units	1CU

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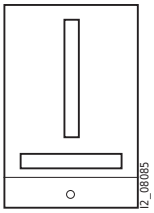
Assembly kits for unequipped distribution boards

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Assembly kits, for meter mounting without top and bottom termination area							
	• Meter assembly kit including front cover • Not standardized, 375 mm • Height 450 mm (external dimension) • With 250 mm (external dimension) • Panel-size grid dimensions H × W (mm): 150 × 250 Note • For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.5/7) • For accessories, see page 17.5/18.		8GE3713-4		1	1 unit	1BP
Assembly kits, for meter mounting with top and bottom termination area							
	Meter support plate, H=450 mm, W=250 mm		8GS4007-4		1	1 unit	1BP
	Cover for top/bottom termination area, H = 150 mm, W = 250 mm		8GS4006-0		1	1 unit	1BP
	Cover for top/bottom termination area, H = 300 mm, W = 250 mm		8GS4006-5		1	1 unit	1BP
	Front cover support (2 units), top/bottom termination area		8GS4018-8		1	1 set	1BP
	Standard mounting rail, top/bottom termination area		8GS4010-6		1	1 unit	1BP
	Partition, order in appropriate height for neighboring panel, see page 17.5/20 Note • Meter support plate cannot be placed on left or right in the cabinet! • A partition is required in the neighboring panel! • For mounting the assembly kits in the unequipped distribution boards, 2 longitudinal stays are required per assembly kit. These must be ordered separately (see page 17.5/7) • For accessories, see page 17.5/18.						

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Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
For unequipped distribution boards							
8GK9902-0KK13	**Additional bases** • For ALPHA distribution boards • Depth 400 mm • Height 100 mm • Color: RAL 7035						
	External width in mm						
	300		8GK9902-0KK13		1	1 unit	1BP
	550		8GK9902-0KK23		1	1 unit	1BP
	800		8GK9902-0KK33		1	1 unit	1BP
	1050		8GK9902-0KK43		1	1 unit	1BP
	1300		8GK9902-0KK53		1	1 unit	1BP
8GK9918-0KK00	**Transport eyebolts** M12		8GK9918-0KK00		1	1 unit	1BP
8GK9912-0KK00	**3NP1123... covers, size 000**		8GK9912-0KK00		1	1 unit	1BP
	Cabinet mounting lugs, flat						
	Versions						
	• For mounting and fixing a distribution board directly against the wall without spacing (one set = four lugs including screws)		8GK9910-0KK36		1	5 sets	1BP
	• For connecting two distribution boards and for mounting and fixing the distribution boards directly against the wall without spacing, (8GK9910-0KK36 also required for the ends of a row of distribution boards, one set = two lugs including screws)		8GK9910-0KK37		1	1 set	1BP
8GK9100-0KK01	**Flanges** For fast and correct wiring						
	Versions						
	• 1-component flanges (for IP43 distribution boards, installed on bottom panel) - For bottom cable entry, with 11 possible knockouts - Max. ∅ 50.5 mm, plastic		8GK9100-0KK00		1	1 unit	1BP
8GK9100-0KK03	• 2-component flanges (degree of protection: IP55) - For top/bottom cable entry - With 44 possible knockouts - Comprising 2 elastic components		8GK9100-0KK01		1	1 unit	1BP
8GK9100-0KK10	• Flange plate made of sheet steel (only safety class 1) - For metric screw connections, degree of protection: IP55 (2 units)		8GK9100-0KK03		1	1 unit	1BP
	• Connecting flanges		8GK9100-0KK10		1	1 unit	1BP
8GK9100-0KK04	**Flange plates** • IP55 degree of protection • Safety class 1		8GK9100-0KK04		1	1 unit	1BP

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	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
	Locking systems						
	Versions						
8GK9561-0KK01	• Rotary handles - Can be recessed, with pushbutton technique		8GK9561-0KK01		1	1 unit	1BP
8GK9561-0KK02	• Lock insert - For installation of profile semicylinders		8GK9561-0KK02		1	1 unit	1BP
8GK9561-0KK00	• Profile semicylinders, 40 mm, with E012 lock and 2 keys - With insert for the rotary handle - Only to be used together with the lock insert (this must be ordered separately)		8GK9561-0KK00		1	1 unit	1BP
	Accessories						
	Spare key for E012 lock		8GF9390-2		1	1 unit	1BP
	• Profile semicylinder with Senat tumbler		8GK9560-0KK03		1	1 unit	1BP
8GK9911-0KK10	**Cable clamping rails** • For strain relief • C-profile 30 mm x 15 mm						
	Width in mm						
	250		8GK9911-0KK10		1	1 unit	1BP
	500		8GK9911-0KK20		1	1 unit	1BP
	750		8GK9911-0KK30		1	1 unit	1BP
	1000		8GK9911-0KK40		1	1 unit	1BP
	1250		8GK9911-0KK50		1	1 unit	1BP
8GK9910-0KK22	**Circuit diagram pockets**						
	Versions						
	• DIN A3, made of sheet steel, depth 10 mm		8GK9910-0KK22		1	1 unit	1BP
	• DIN A4, transparent sleeve		8GK9910-0KK23		1	20 units	1BP
	• DIN A4, made of plastic, depth 30 mm		8GD9132		1	1 unit	1BP
SIEMENS 8GD9084	**Siemens nameplates** Made of aluminum, self-adhesive, color: petrol		8GD9084		1	1 unit	1BP

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Accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8GK4853-0KK20	**Crossbeams**						
	Width in mm						
	500		**8GK4853-0KK20**		1	2 units	1BP
	750		**8GK4853-0KK30**		1	2 units	1BP
	Partitions Depth 400 mm						
	Versions						
8GK9521-8KK00	• Vertical, height 1800 mm		**8GK9521-8KK00**		1	1 unit	1BP
8GK9520-0KK30	• Horizontal, width 250 mm		**8GK9520-0KK30**		1	1 unit	1BP
8GK9911-0KK00	**Screws** • Self-tapping • M5 x 10 • Large pack: 500 units		**8GK9911-0KK00**		1	500 units	1BP
8GK9911-0KK01	**Extra-deep brackets** • Depth-adjustable • Large pack: 10 units		**8GK9911-0KK01**		1	10 units	1BP
8GK9911-0KK02	**Drop-down brackets, universal** Large pack: 10 units		**8GK9911-0KK02**		1	10 units	1BP
8GK9911-0KK03	**Support extensions** • 7.5 mm • Large pack: 100 units		**8GK9911-0KK03**		1	100 units	1BP
8GK9911-0KK05	**Iso supports** • For insulated standard mounting rail assembly • Large pack: 50 units						
	Versions						
	12 mm		**8GK9911-0KK04**		1	50 units	1BP
	31.5 mm		**8GK9911-0KK05**		1	50 units	1BP
	55.5 mm		**8GK9911-0KK06**		1	50 units	1BP
8GK9120-0KK30	**Ventilation grilles**		**8GK9120-0KK30**		1	4 units	1BP

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	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
For assembly kits							
8GK9650-0KK00	**Busbar supports**						
	Versions						
	• 1-pole - For Cu busbars 12 × 5 (10) mm, 20 × 5 (10) mm, 30 × 5 (10) mm		5SH3540		1	1 unit	1CU
8GK9711-0KK03	• 3-pole - Busbar center-to-center spacing of 60 mm - For Cu busbars 12 × 5 (10) mm, 20 × 5 (10) mm, 30 × 5 (10) mm - For bus-mounting fuse bases and switch disconnectors, used together with assembly kits (mounting directly on the stays)		8GK9711-0KK03		1	1 unit	1BP
	• 4-pole - Busbar center-to-center spacing of 60 mm - For Cu busbars 12 × 5 (10) mm, 30 × 5 (10) mm, - Interior mounting - Width: 20 mm		8US1923-4AA00		1	10 units	1CU
	• 5-pole - Busbar center-to-center spacing of 40 mm - For Cu busbars 12 × 5 (10) mm and for mounting 3NP fuse switch disconnectors - Height 300 mm		8GK9650-0KK00		1	1 unit	1BP
8GK973.	**Cu busbars**						
	Versions						
	• Cu cross-section of 12 × 5 mm, 250 A						
	- Length 250		8GK9731-0KK10		1	5 units	1BP
	- Length 500		8GK9731-0KK20		1	5 units	1BP
	- Length 750		8GK9731-0KK30		1	5 units	1BP
	- Length 1000		8GK9731-0KK40		1	5 units	1BP
	- Length 1250		8GK9731-0KK50		1	5 units	1BP
	• Cu cross-section of 20 × 5 mm, 320 A						
	- Length 250		8GK9733-0KK10		1	5 units	1BP
	- Length 500		8GK9733-0KK20		1	5 units	1BP
	- Length 750		8GK9733-0KK30		1	5 units	1BP
	- Length 1000		8GK9733-0KK40		1	5 units	1BP
	- Length 1250		8GK9733-0KK50		1	5 units	1BP
	• Cu cross-section of 30 × 5 mm, 450 A						
	- Length 250		8GK9735-0KK10		1	5 units	1BP
	- Length 500		8GK9735-0KK20		1	5 units	1BP
	- Length 750		8GK9735-0KK30		1	5 units	1BP
	- Length 1000		8GK9735-0KK40		1	5 units	1BP
	- Length 1250		8GK9735-0KK50		1	5 units	1BP
	• Cu cross-section of 30 × 10 mm, 630 A						
	- Length 250		8GK9736-0KK10		1	5 units	1BP
	- Length 500		8GK9736-0KK20		1	5 units	1BP
	- Length 750		8GK9736-0KK30		1	5 units	1BP
	- Length 1000		8GK9736-0KK40		1	5 units	1BP
	- Length 1250		8GK9736-0KK50		1	5 units	1BP
8GK9910-0KK30	**Supports for front cover** • Long version • Plastic • 1 set = 4 supports		8GK9910-0KK30		1	5 sets	1BP
8GK9910-0KK11	**N/PE bars as plug-in terminals** For mounting on longitudinal stays at a 30° inclination						
	Versions						
	• Each with 6 screw terminals from 2.5 to 16 mm^2 and 21 plug-in terminals from 1.5 to 4 mm^2		8GK9910-0KK11		1	1 unit	1BP
	• With 6 screw terminals from 2.5 to 16 mm^2 and 21 plug-in terminals from 1.5 to 4 mm^2 , for PE bar and one neutral bar each with 2 screw terminals from 2.5 to 16 mm^2 and 10 plug-in terminals from 1.5 to 4 mm^2		8GK9910-0KK12		1	1 unit	1BP

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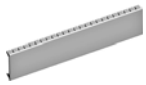
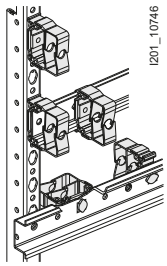
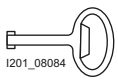
Accessories

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8US1921-2AA00	**Terminals for circular conductors**						
	Versions						
	• Busbar thickness 5 mm						
	- Conductor cross-section 1.5 ... 16 mm²	▶	8US1921-2AA00		100	100 units	1CU
	- Conductor cross-section 1.5 ... 35 mm²	▶	8US1921-2AB00		100	50 units	1CU
	- Conductor cross-section 16 ... 70 mm²	▶	8US1921-2AD00		1	50 units	1CU
	- Conductor cross-section 16 ... 120 mm²	▶	8US1921-2AC00		1	50 units	1CU
	• Busbar thickness 10 mm						
	- Conductor cross-section 1.5 ... 16 mm²	▶	8US1921-2BA00		1	100 units	1CU
	- Conductor cross-section 1.5 ... 35 mm²	▶	8US1921-2BB00		1	50 units	1CU
	- Conductor cross-section 16 ... 70 mm²	▶	8US1921-2BD00		1	50 units	1CU
	- Conductor cross-section 16 ... 120 mm²	▶	8US1921-2BC00		1	50 units	1CU
8GK9920-0KK24	**Replacement door hinges** • For wall/floor-mounted distribution boards • 1 set = 2 hinges		8GK9920-0KK24		1	1 set	1BP
 8GK9910-0KK00	**Blanking strips** Color RAL 7035 (light gray)						
	Versions						
	• For 12 MW (1 MW = 18 mm)		8GK9910-0KK00		1	10 units	1BP
	• Length 1 m Without pressure-relief joint, to cut to length		8GK9910-0KK01		1	1 unit	1BP
8GK9920-0KK31	**Connecting kits, IP43/IP55** • For side-by-side mounting of enclosures • Comprising: - Screws - Washers - Nuts - 10 m roll of sealing strip		8GK9920-0KK31		1	1 unit	1BP
	Note						
	A bushing flange is required for electrical connections!						
 8GK9910-0KK80	**Cable holders** For standard mounting rails		8GK9910-0KK80		1	200 units	1BP
 8GD9290	**Spare keys** For double-bit locking mechanism		8GD9290		1	1 unit	1BP
8GK9910-0KK34	**Extra-deep brackets** For recessed installation of stand. mounting rails		8GK9910-0KK34		1	1 set	1BP
8GK9910-0KK26	**Quick-lock screws** • Plastic • Color RAL 7035		8GK9910-0KK26		1	20 units	1BP
8GK9910-0KK27	**Assembly tools** • For supports • Short and long version • With ergonomic handle		8GK9910-0KK27		1	1 unit	1BP
8GK9910-0KK35	**Standard mounting rails, lowered**						
	Width						
	250 mm		8GK9910-0KK35		1	1 unit	1BP
	500 mm		8GK9910-0KK40		1	1 set	1BP
	750 mm		8GK9910-0KK41		1	1 set	1BP

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Selection and ordering data

Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
For front covers						
8GK9601-4KK10						
Front covers, closed • Front covers in large order quantities (Big Pack) • Tier spacing: 150						
External dimensions in mm Height / Width						
75 / 250		8GK9601-0KK10		1	10 units	1BP
150 / 250		8GK9601-1KK10		1	10 units	1BP
150 / 500		8GK9601-1KK20		1	10 units	1BP
150 / 750		8GK9601-1KK30		1	10 units	1BP
300 / 250		8GK9601-2KK10		1	10 units	1BP
300 / 500		8GK9601-2KK20		1	10 units	1BP
300 / 750		8GK9601-2KK30		1	10 units	1BP
450 / 250		8GK9601-3KK10		1	10 units	1BP
450 / 500		8GK9601-3KK20		1	10 units	1BP
450 / 750		8GK9601-3KK30		1	10 units	1BP
600 / 250		8GK9601-4KK10		1	10 units	1BP
600 / 500		8GK9601-4KK20		1	10 units	1BP
600 / 750		8GK9601-4KK30		1	10 units	1BP
8GK9601-4KK11						
Front covers, with cutout						
External dimensions in mm Height / Width / Tiers/MW						
150 / 250 / 1/12		8GK9601-1KK11		1	10 units	1BP
150 / 500 / 1/24		8GK9601-1KK21		1	10 units	1BP
150 / 750 / 1/36		8GK9601-1KK31		1	10 units	1BP
300 / 250 / 2/24		8GK9601-2KK11		1	10 units	1BP
300 / 500 / 2/48		8GK9601-2KK21		1	10 units	1BP
300 / 750 / 2/72		8GK9601-2KK31		1	10 units	1BP
450 / 250 / 3/36		8GK9601-3KK11		1	10 units	1BP
450 / 500 / 3/72		8GK9601-3KK21		1	10 units	1BP
450 / 750 / 3/108		8GK9601-3KK31		1	10 units	1BP
600 / 250 / 4/48		8GK9601-4KK11		1	10 units	1BP
600 / 500 / 4/96		8GK9601-4KK21		1	10 units	1BP
600 / 750 / 4/144		8GK9601-4KK31		1	10 units	1BP
For assembly kits						
8GK9910-0KK31						
Supports for front cover Plastic						
Versions						
• Long version (for use when mounting a 15 mm standard mounting rail on standard mounting rail holders)		8GK9910-0KK31		1	100 units	1BP
• Short version (for use when mounting a 15 mm standard mounting rail directly on the stays)		8GK9910-0KK24		1	100 units	1BP
8GK9910-1KK10						
Standard mounting rails 15 mm						
Width in mm						
250		8GK9910-1KK10		1	10 units	1BP
500		8GK9910-1KK20		1	10 units	1BP
750		8GK9910-1KK30		1	10 units	1BP
1000		8GK9910-1KK40		1	10 units	1BP
1250		8GK9910-1KK50		1	10 units	1BP
8GK9910-1KK84						
Standard mounting rail holders • For standard mounting rail, 15 mm and supports • Long version • Comprising 1 left and 1 right holder • 1 set = 20 holders, 10 × left, 10 × right						
Versions						
• For 1 standard mounting rail		8GK9910-1KK81		1	1 set	1BP
• For 2 standard mounting rails		8GK9910-1KK83		1	1 set	1BP
• For 3 standard mounting rails		8GK9910-1KK84		1	1 set	1BP
• For 4 standard mounting rails		8GK9910-1KK85		1	1 set	1BP

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Special colors option

Special colors	Color designation	Option	ALPHA 1250 Surcharge
	RAL 9016 traffic white semi-gloss smooth	**C10**	None
	RAL 7035 light gray semi-gloss smooth	**C11**	None
	RAL 7035 light gray semi-gloss textured	**C12**	✓
	RAL 7032 pebble gray semi-gloss textured	**C13**	✓
	RAL 7038 agate gray semi-gloss textured	**C14**	✓
	RAL 9010 pure white semi-gloss smooth	**C15**	✓
	SN 610 Siemens white semi-gloss textured	**C16**	✓
	SN 610 Siemens white silky gloss textured	**C17**	✓
	RAL 9002 gray white semi-gloss smooth	**C18**	✓
	RAL 9002 gray white semi-gloss smooth	**C19**	✓
	RAL 9003 signal white semi-gloss textured	**C20**	✓
	RAL 9001 cream semi-gloss smooth	**C21**	✓
	RAL 5017 traffic blue silky gloss textured	**C22**	✓
	RAL 5005 signal blue semi-gloss smooth	**C23**	✓
	RAL 5010 gentian blue semi-gloss smooth	**C24**	✓
	RAL 2000 yellow orange semi-gloss smooth	**C25**	✓
	RAL 6018 yellow green semi-gloss smooth	**C26**	✓
	RAL 1003 signal yellow semi-gloss smooth	**C27**	✓
	RAL 7033 cement gray semi-gloss textured	**C28**	✓
	RAL 9002 gray white silky gloss smooth	**C29**	✓
	RAL 9010 pure white semi-gloss textured	**C30**	✓
	RAL 3000 flame red silky gloss textured	**C31**	✓

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17.6/2 **Introduction**

For further technical product information:

Siemens Industry Online Support:
www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
Download
FAQ
Manual
Product note
Software archive
Technical data

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ALPHA 3200 Power Distribution Boards NEW

Introduction

Overview

ALPHA 3200 power distribution boards up to 3200 A

Design verification according to IEC 61439-1/2

For infrastructure applications

In rugged frame construction

Panel types:

- Incoming feeder panels 3WL air circuit breakers, 3VA, 3VL molded case circuit breakers
- Outgoing feeder panels in universal mounting design, 3VA, 3VL molded case circuit breakers, 3KA, 3KD switch disconnectors
- Outgoing feeder panels 3NJ4 fuse switch disconnectors, fixed-mounted
- Outgoing feeder panels 3NJ6 switch disconnectors with fuses, plugged in
- ALPHA outgoing feeder panels
- Coupling panels longitudinal and transverse

Benefits

- Compact, space-saving design, perfectly matched to the innovative SENTRON components from Siemens
- High integration density of a host of devices and their accessories from the SENTRON portfolio
- Fast, simple and reliable planning of the enclosure and required components with the configuration software SIMARIS ConFiguration
- Comprehensive plant documentation (parts lists, calculation of losses, design graphics)

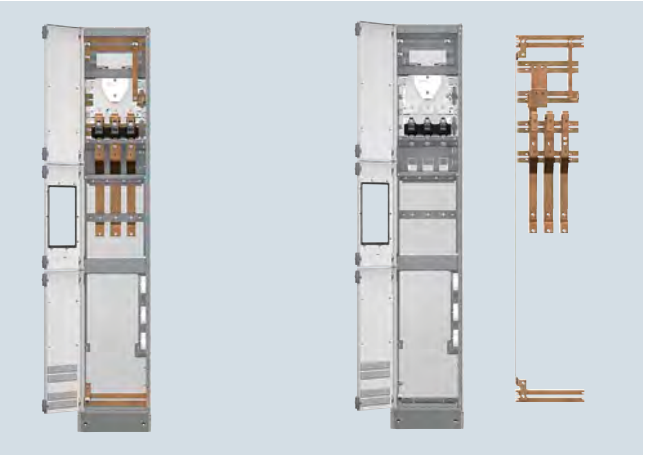
Application

Power distribution in a low-voltage system usually takes place via a power distribution board and a number of sub-distribution boards. For infrastructure applications, the ALPHA 3200 power distribution board supplements our range of ALPHA distribution boards up to a rated current of 3200 A.

Design

The ALPHA 3200 power distribution board is matched to the SENTRON protection, switching, measuring and monitoring devices. In addition, the assembly kits of the ALPHA distribution boards can be integrated into the switchboard.

Type of delivery



Pre-assembled with copper

Pre-assembled without copper

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Technical specifications

Type		**Design-verified controlgear assembly**	
Standards and regulations		**IEC 61439-1/2, EN 61439-1/2**	
Clearance and creepage distances	Rated impulse withstand voltage (U_{imp})	8 kV	
	Overvoltage category	III	
	Pollution degree	3	
Rated insulation voltage (U_i)		1000 V	
Rated operational voltage (U_e)		Up to 690 V	
Busbar 3-pole / 4-pole	Rated currents (I_n) of the main busbars	Up to 3200 A	
	Rated peak withstand current (I_{pk})	Up to 165 kA, 1s	
	Rated short-time withstand current (I_{cw})	Up to 75 kA	
Degree of protection	Acc. to IEC 60529, EN 60529	Up to IP41 (ventilated)	
		IP54 (unventilated)	
Form of internal separation	Acc. to IEC 61439-1, EN 61439-1, Section 7.7	Up to form 2b	
Frame variants	Height	2000 mm	
	Depth	600 mm	
Protection against mechanical damage	IK shock resistance to IEC 62262	IK 08	Masking frame
		IK 09	Roof plate
		IK 10	Door, side panel, rear panel

More information

Software

The ALPHA 3200 power distribution board is configured, ordered and documented using the configuring software SIMARIS ConFiguration, see chapter "Software".

Availability

For infrastructure applications, the ALPHA 3200 power distribution board is expected to be available from January 2016.

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Notes

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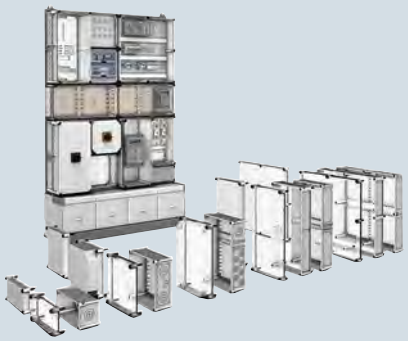

18/2 Overview
18/2 More information

These products are being discontinued.
They can be ordered up to mid-2016 at:
www.siemens.com/industrymall

For further technical product information:

Siemens Industry Online Support:
www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
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FAQ
Manual
Product note
Software archive
Technical data

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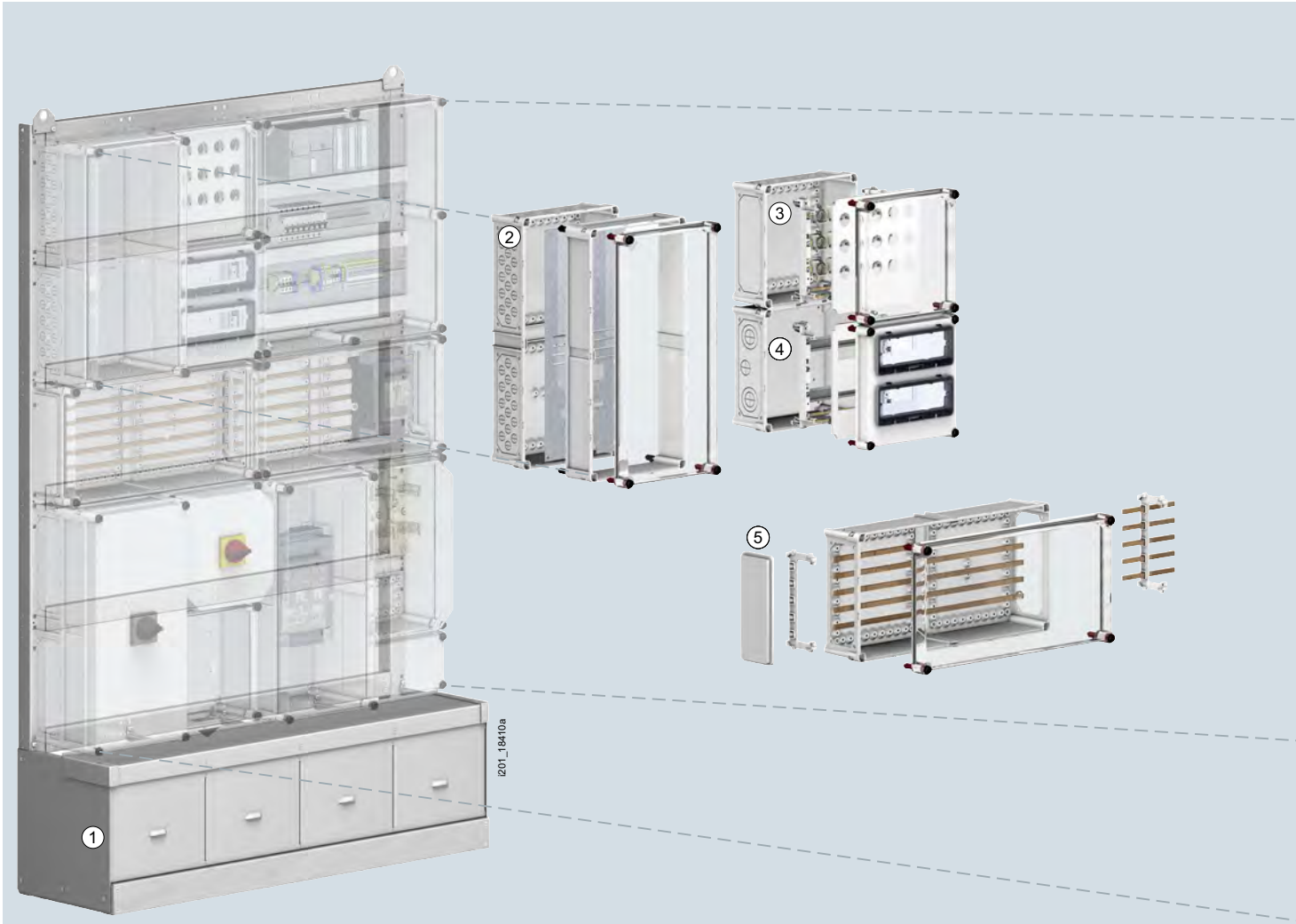
Overview



1. Support rack with cable space cover
2. Meter enclosures
3. DIAZED/NEOZED fuse systems
4. Modular installation devices
5. 8US busbar system
6. Enclosure with mounting plate
7. 3VL molded case circuit breakers
8. 3NP1 fuse switch disconnectors
9. 3KA, 3KE switch disconnectors
10. Flanges for cable entry
11. 3NP1 fuse switch disconnectors
12. LV HRC fuse bases

Components of the ALPHA 8HP molded-plastic distribution system

More information

These products are being discontinued.
They can be ordered up to mid-2016 at:
www.siemens.com/industrymall

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Notes

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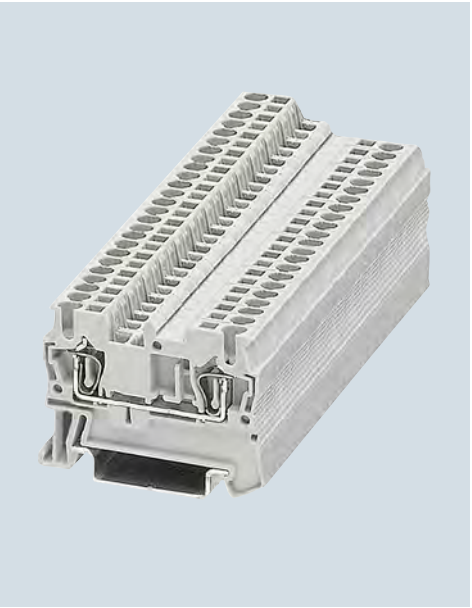
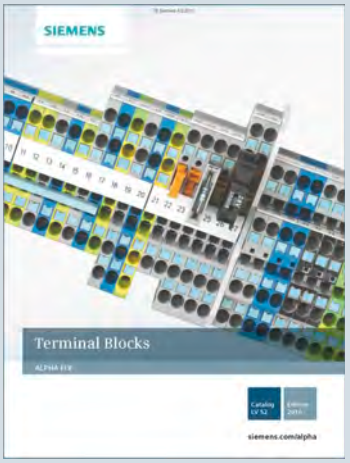


19/2	**Introduction**
19/3	**General data on 8WH**
19/7	**8WH through-type terminals**[1)]
19/18	**8WH hybrid through-type terminals** [1)]
19/21	**8WH fuse terminals**
19/23	**8WH isolating blade terminals**
19/25	**8WH isolating terminals**
19/27	**8WH two-tier terminals**[1)]
19/33	**8WH three-tier terminals**
19/35	**8WH four-tier motor terminals**
19/37	**8WH diode terminals**
19/39	**8WH two-tier diode terminals**
	Accessories
19/41	Accessories for labeling system
19/42	Standard labeling system
19/47	Mounting accessories

For further information
See Catalog LV 52



[1)] Also available as a PE version

For further technical product information:

Siemens Industry Online Support:
www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
Download
FAQ
Manual
Product note
Software archive
Technical data

NEW

Direct reference to the products in the Industry Mall from the selection and ordering data tables:

Article No.
www.siemens.com/product?Article No.
3VA2025-5HL36-0AA0

Paper catalog:
To get more product information enter the Web address plus Article No.

PDF catalog:
Get more product information with just a mouse click.

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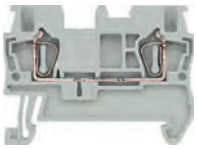
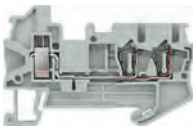
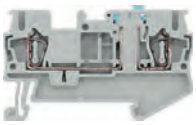
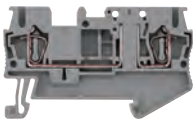
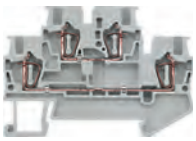
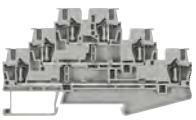
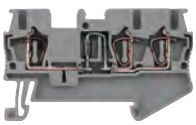
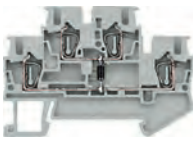
Introduction

Overview

	Devices	Page	Application
8WH terminals			
	Through-type terminals	19/7	Connection of incoming and outgoing conductors up to 35 mm^2
	Hybrid through-type terminals	19/18	Terminals with a range of connection methods
	Fuse terminals	19/21	Terminals which can be used to protect control circuits, for example
	Isolating blade terminals	19/23	Isolation of the circuit, e.g. for test purposes
	Isolating terminals	19/25	Isolation of the circuit, e.g. for test purposes
	Two-tier terminals	19/27	Compact form of the terminal blocks in which two connection wires can be installed
	Three-tier terminals	19/33	Compact terminal blocks up to 2.5 mm^2, in which three connection wires can be installed
	Four-tier motor terminals	19/35	Compact terminal blocks up to 4 mm^2, in which three connection wires plus PE can be installed
	Diode terminals	19/37	Terminal blocks with integrated diodes
	Two-tier diode terminals	19/39	Terminal blocks with integrated diodes

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Overview

Conductor cross-section	Terminal type → / Terminal type[1)]	Color	Standard spring-loaded connection			Two-tier		Article No. (digits 8 ... 12)
	Design →		Standard					
	No. of clamping points →		2	3	4	4	6	
	Article No. (digits 1 ... 7) →		8WH2000	8WH2003	8WH2004	8WH2020	8WH2023	
1.5 mm²	Through-type	Gray	✔	✔	✔	✔	--	0AE00
		Blue	✔	✔	✔	✔	--	0AE01
	PE	Green/yellow	✔	✔	✔	✔	--	0CE07
2.5 mm²	Through-type	Gray	✔	✔	✔	✔	✔	0AF00
		Blue	✔	✔	✔	✔	✔	0AF01
	Isolating	Gray	✔	✔	✔	--	--	6AF00
	Isolating blade	Gray	✔	✔	✔	--	--	0CF00
	PE	Green/yellow	✔	✔	✔	✔	✔	0CF07
4 mm²	Through-type	Gray	✔	✔	✔	✔	--	0AG00
		Blue	✔	✔	✔	✔	--	0AG01
	Isolating	Gray	✔	--	--	--	--	6AG00
	Isolating blade	Gray	✔	--	--	--	--	6CG00
	PE	Green/yellow	✔	✔	✔	✔	--	0CG07
6 mm²	Through-type	Gray	✔	✔	--	--	--	0AH00
		Blue	✔	✔	--	--	--	0AH01
	PE	Green/yellow	✔	✔	--	--	--	0CH07
10 mm²	Through-type	Gray	✔	--	--	--	--	0AJ00
		Blue	✔	--	--	--	--	0AJ01
	PE	Green/yellow	✔	--	--	--	--	0CJ07
16 mm²	Through-type	Gray	✔	--	--	--	--	0AK00
		Blue	✔	--	--	--	--	0AK01
	PE	Green/yellow	✔	--	--	--	--	0CK07
35 mm²	Through-type	Gray	✔	--	--	--	--	0AM00
		Blue	✔	--	--	--	--	0AM01
	PE	Green/yellow	✔	--	--	--	--	0CM07

1) Only the main terminal types are listed here. You will find further versions on the following pages.

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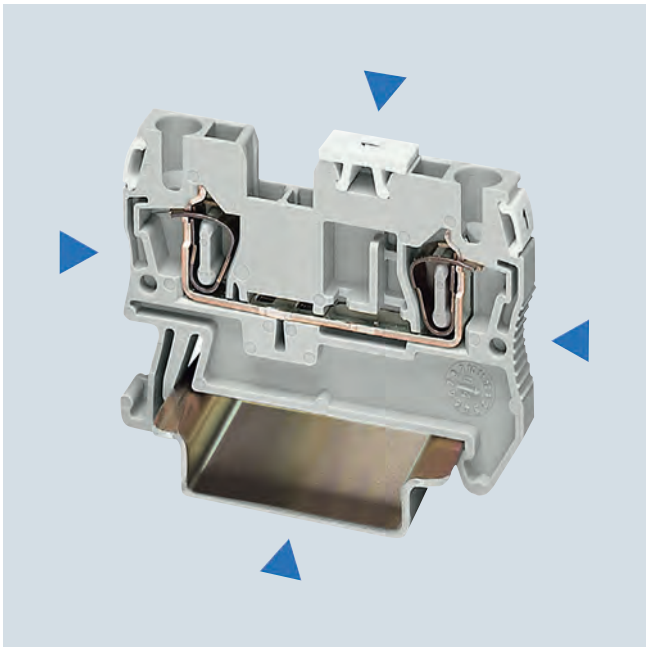
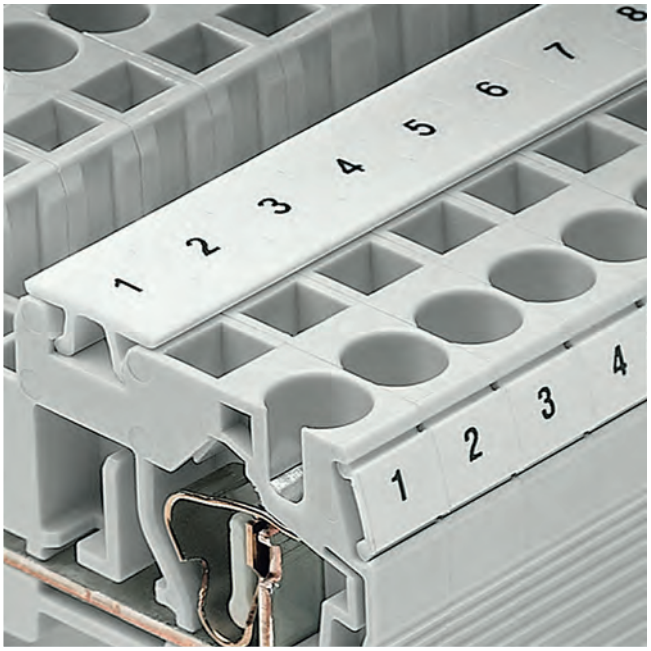
General data on 8WH

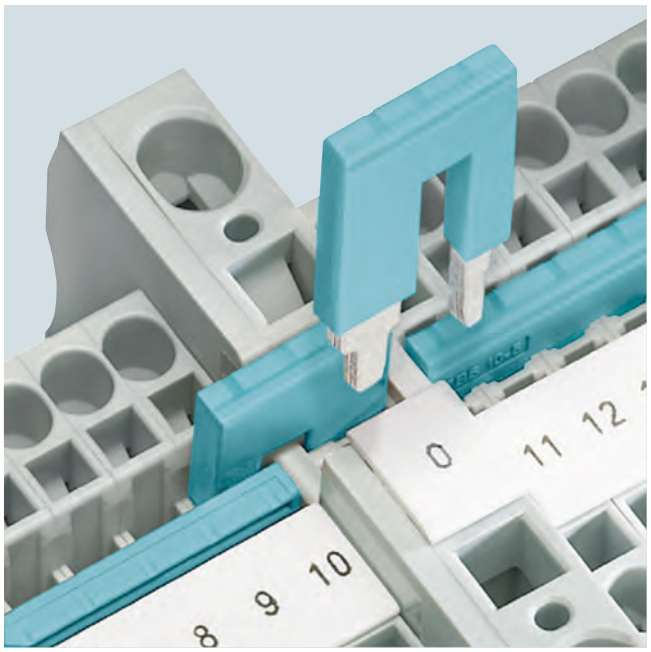


The space-saving design and conductor routing from above make spring-loaded terminals ideal for controlgear installations with minimum available space. The terminals are open at one end and can be closed using the appropriate covers.



The large and unambiguous marking in the center of the terminal is essential for ensuring reliable installation in minimum time. Each clamping point can also be separately labeled.

Spring-loaded terminals provide a large connection compartment for fast wiring of flexible and rigid conductors, including conductors with nominal cross-section and a fitted end sleeve.



Reducing combs enable easy connection of terminals with various nominal cross-sections. For example, they can be used for the fast creation of infeed blocks, e.g. by connecting a 10 mm^2 spring-loaded terminal with a 2.5 or 4 mm^2 spring-loaded terminal.

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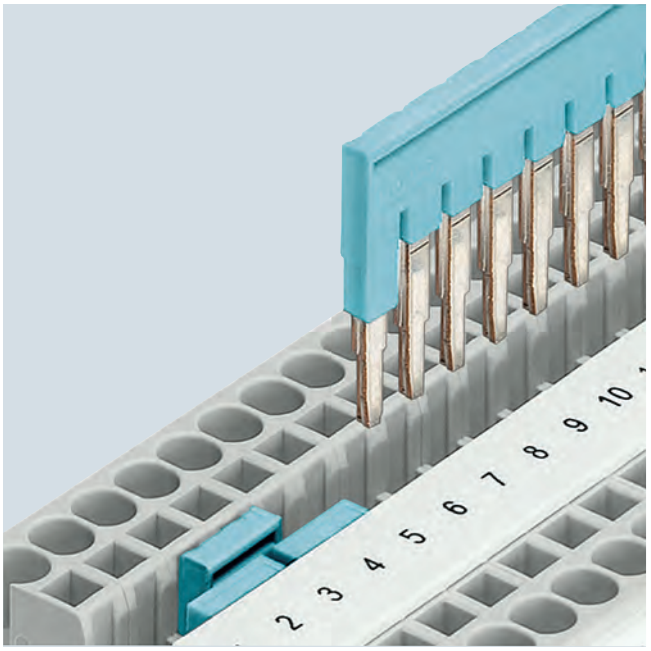
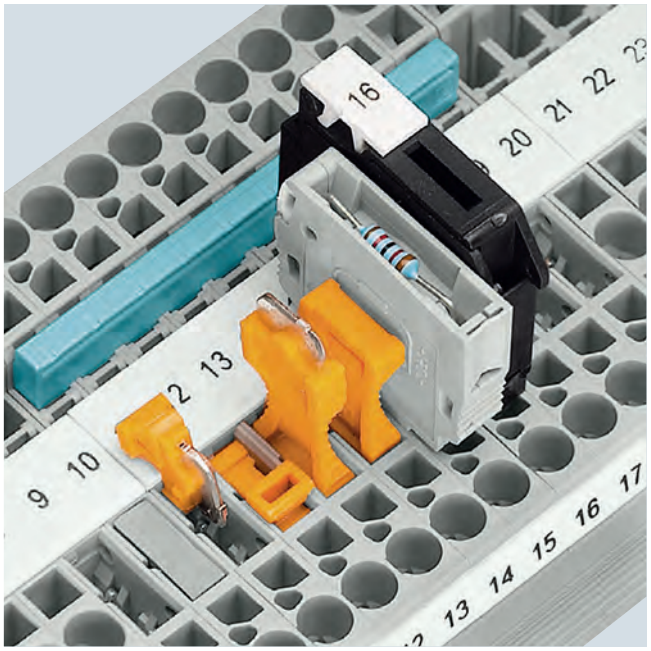
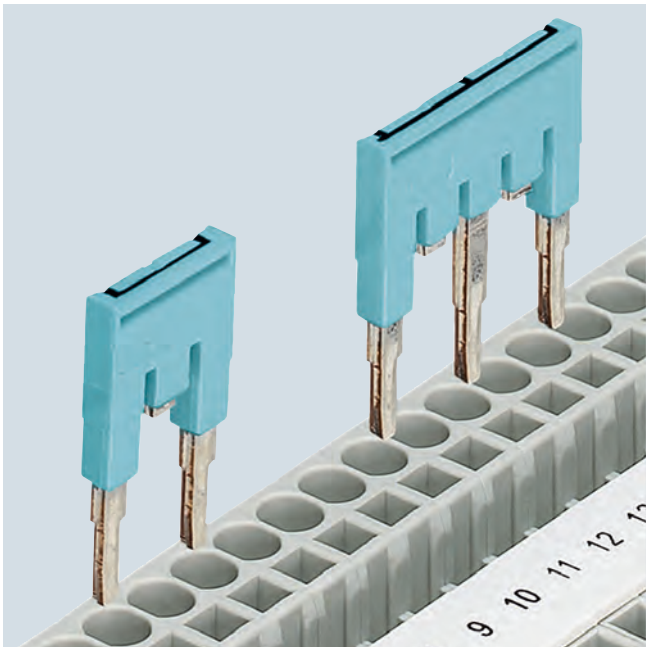


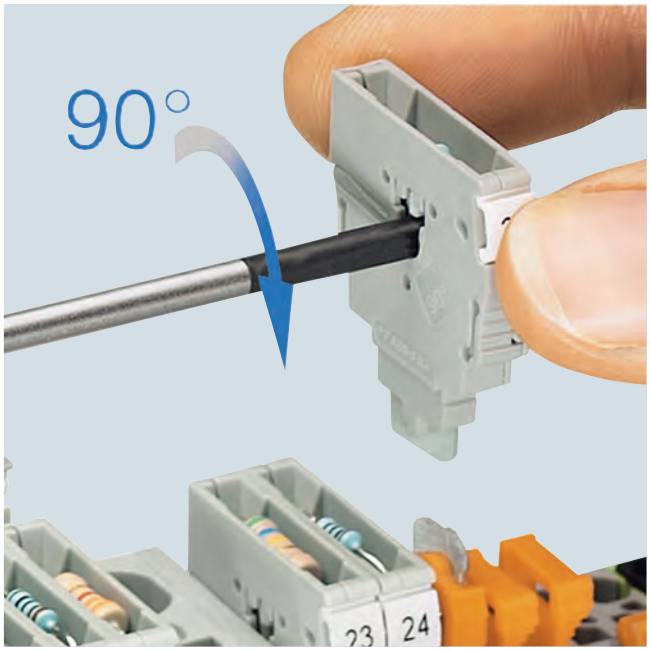
The 2- to 50-pole connecting combs also considerably reduce the time needed for assembly and wiring as they enable up to 50 terminals to be connected in a single step.



The universal plug-in zones of the isolating terminal can accommodate the isolated through-type connectors, isolating plugs, component connectors and fused connectors.



Contact tabs can be removed from the standard comb in order to skip individual terminals. This means that two potentials can run in parallel on a single terminal strip. The contact points can additionally be marked.



The component connector enables the convenient equipping with electronic components. One turn of the screwdriver opens the contact points and the component is easily inserted.

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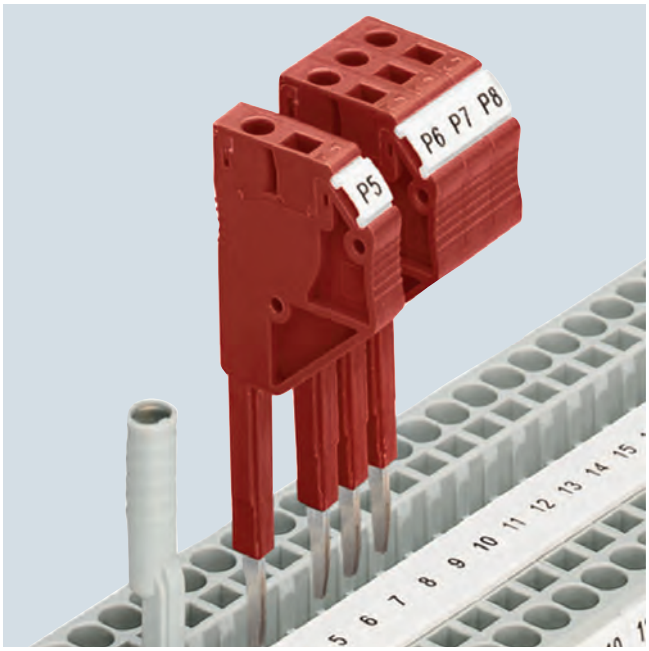
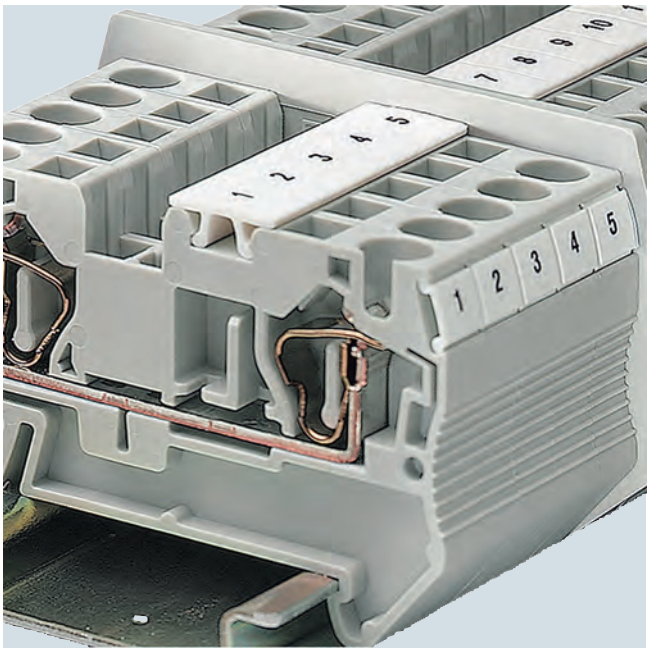
General data on 8WH



A comprehensive range of test accessories is also available for the spring-loaded terminal series. The test adapters for Ø 4 mm test plugs and modular test plugs enable all measuring and testing jobs to be performed in minimum time.

Cover segments are used to cover the projecting terminal segments of three and four-wire terminals when mounting two-wire terminals side-by-side. This ensures touch protection.

Note: The accessories for 8WH can only be used for 8WH terminals.



The compartment partitions project beyond the contours of the terminals and separate the groups both visually and electrically.

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Overview

With two clamping points

The through-type terminals have an impressive space-saving design and offer optimized handling. With its front connection arrangement this series provides additional space between the cable ducts for wiring.

The double bridge shaft enables individual chain bridging with connecting combs. Accessories are available for testing and labeling.

With three clamping points

Terminals with three clamping points are a space-saving alternative to the standard through-type terminals for branching the potential.

It is often necessary for three conductors to be routed to a single terminal.This three clamping point version enables this without the need for additional terminals and jumpers.

With four clamping points

The double connection of the through-type terminals with four clamping points enables four conductors to be connected to a single potential. These versions with four clamping points are therefore suitable for use as compact potential distributors.

A label can be snapped on to the middle of each terminal at the front. Further labels can also be mounted flat on the side of the terminals.

PE/ground conductor function

The PE through-type terminals are available with the same contour as the through-type terminals. Simply snap the terminals onto the support rail to achieve full mechanical and electrical contact with the support rail.

The PE through-type terminals meet all the requirements of IEC 60947-7-2:

- Low contact resistance
- Stainless clamping points
- Green-yellow enclosure
- Additional inscription options

Technical specifications

	8WH2000-0AE0.	8WH2000-0CE07	8WH2003-0AE00 8WH2003-0AE01	8WH2003-0CE07	8WH2004-0AE00 8WH2004-0AE01
Dimensions • Width/length/cover width in mm • Height (NS 35/7.5 / NS 35/15) in mm	4.2 / 48.5 / 2.2 36.8 / 44		4.2 / 60.5 / 2.2 36.5 / 44		4.2 / 72 / 2.2
Technical specifications acc. to IEC/ DIN VDE • Max. load current in A / cross-section in mm^2 • Rated impulse withstand voltage in kV / pollution degree • Overvoltage category / molded plastic group	17.5 / 1.5 6 / 3 III / I	--	17.5 / 1.5	--	17.5 / 1.5
Connection capacities • Flexible with end sleeve, with plastic sleeve in mm^2 • Flexible with end sleeve, without plastic sleeve in mm^2 • Flexible with two-wire connection end sleeve, with plastic sleeve in mm^2	0.25 ... 1.5 0.25 ... 1.5 0.5				
Stripped length in mm	10				
Plug gauge (IEC 60947-1)	A1				
Molded plastic type • Flammability Class acc. to UL 94	PA V0				
Approval data (UL/cUL and CSA) • Rated voltage / rated current / conductor sizes - UL/cUL: in V / A / AWG - CSA: in V / A / AWG	 300 / 15 / 26 ... 14 300 / 15 / 26 ... 14	 -- / -- / 26 ... 14 -- / -- / 26 ... 14	 300 / 15 / 26 ... 14 300 / 15 / 26 ... 14	 -- / -- / 26 ... 14 --	 300 / 15 / 26 ... 14 300 / 15 / 26 ... 14
Support rails/protective conductor busbars	--	See Catalog LV 52, Chapter 1, section "Support rails"	--	See Catalog LV 52, Chapter 1, section "Support rails"	--

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8WH through-type terminals

	8WH2004-0CE07	8WH2000-0AF0.	8WH2000-0CF07	8WH2003-0AF00 8WH2003-0AF01	8WH2003-0CF07
Dimensions					
• Width/length/cover width in mm	4.2 / 72 / 2.2	5.2 / 48.5 / 2.2		5.2 / 60.5 / 2.2	
• Height (NS 35/7.5 / NS 35/15) in mm	36.5 / 44	36.8 / 44		36.5 / 44	
Technical specifications acc. to IEC/ DIN VDE					
• Max. load current in A / cross-section in mm²	--	31 / 4	--	28 / 4	--
• Rated impulse withstand voltage in kV / pollution degree	6 / 3	8 / 3			
• Overvoltage category / molded plastic group	III / I				
Connection capacities					
• Flexible with end sleeve, with plastic sleeve in mm²	0.25 ... 1.5	0.25 ... 2.5			
• Flexible with end sleeve, without plastic sleeve in mm²	0.25 ... 1.5	0.25 ... 2.5			
• Flexible with two-wire connection end sleeve, with plastic sleeve in mm²	0.5				
Stripped length in mm	10				
Plug gauge (IEC 60947-1)	A1	A3			
Molded plastic type	PA				
• Flammability Class acc. to UL 94	V0				
Approval data (UL/cUL and CSA)					
• Rated voltage / rated current / conductor sizes					
- UL/cUL: in V / A / AWG	-- / -- / 26 ... 14	300 / 20 / 26 ... 12	-- / -- / 26 ... 12	600 / 20 / 26 ... 12	-- / -- / 26 ... 12
- CSA: in V / A / AWG	-- / -- / 26 ... 14	--			
Support rails/protective conductor busbars	See Catalog LV 52, Chapter 1, section "Support rails"	--	See Catalog LV 52, Chapter 1, section "Support rails"	--	See Catalog LV 52, Chapter 1, section "Support rails"

	8WH2004-0AF00 8WH2004-0AF01	8WH2004-0CF07	8WH2000-0AG0.	8WH2003-0AG00 8WH2003-0AG01	8WH2004-0AG00 8WH2004-0AG01
Dimensions					
• Width/length/cover width in mm	5.2 / 72 / 2.2		6.2 / 56 / 2.2	6.2 / 71.5 / 2.2	6.2 / 87 / 2.2
• Height (NS 35/7.5 / NS 35/15) in mm	36.5 / 44		36.8 / 44	36.5 / 44	
Technical specifications acc. to IEC/ DIN VDE					
• Max. load current in A / cross-section in mm²	28 / 4	--	40 / 6		
• Rated impulse withstand voltage in kV / pollution degree	8 / 3				
• Overvoltage category / molded plastic group	III / I				
Connection capacities					
• Flexible with end sleeve, with plastic sleeve in mm²	0.25 ... 2.5		0.25 ... 4		
• Flexible with end sleeve, without plastic sleeve in mm²	0.25 ... 2.5		0.25 ... 4		
• Flexible with two-wire connection end sleeve, with plastic sleeve in mm²	0.5		0.5 ... 1		
Stripped length in mm	10				
Plug gauge (IEC 60947-1)	A3		A4		
Molded plastic type	PA				
• Flammability Class acc. to UL 94	V0				
Approval data (UL/cUL and CSA)					
• Rated voltage / rated current / conductor sizes					
- UL/cUL: in V / A / AWG	600 / 20 / 26 ... 12	-- / -- / 26 ... 12	600 / 30 / 20 ... 10		
- CSA: in V / A / AWG	--				
Support rails/protective conductor busbars	--	See Catalog LV 52, Chapter 1, section "Support rails"	--	--	--

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	8WH2000-0CG07	8WH2003-0CG07	8WH2004-0CG07	8WH2000-0AH00 8WH2000-0AH01	8WH2003-0AH00 8WH2003-0AH01
Dimensions • Width/length/cover width in mm • Height (NS 35/7.5 / NS 35/15) in mm	 6.2 / 56 / 2.2 36.8 / 44	 6.2 / 71.5 / 2.2 36.5 / 44	 6.2 / 87 / 2.2	 8.2 / 69.5 / 2.2 43.5 / 51	 8.2 / 90.5 / 2.2
Technical specifications acc. to IEC/ DIN VDE • Max. load current in A / cross-section in mm² • Rated impulse withstand voltage in kV / pollution degree • Overvoltage category / molded plastic group	 -- 8 / 3 III / I			 52 / 10	
Connection capacities • Flexible with end sleeve, with plastic sleeve in mm² • Flexible with end sleeve, without plastic sleeve in mm² • Flexible with two-wire connection end sleeve, with plastic sleeve in mm²	 0.25 ... 4 0.25 ... 4 0.5 ... 1			 0.25 ... 6 0.25 ... 6 0.5 ... 1.5	
Stripped length in mm	10			12	
Plug gauge (IEC 60947-1)	A4			A5	
Molded plastic type • Flammability Class acc. to UL 94	PA V0				
Approval data (UL/cUL and CSA) • Rated voltage / rated current / conductor sizes - UL/cUL: in V / A / AWG - CSA: in V / A / AWG	 -- / -- / 20 ... 10 --			 600 / 50 / 20 ... 8	
Support rails/protective conductor busbars	See Catalog LV 52, Chapter 1, section "Support rails"	See Catalog LV 52, Chapter 1, section "Support rails"	See Catalog LV 52, Chapter 1, section "Support rails"	--	--

	8WH2000-0CH07	8WH2003-0CH07	8WH2000-0AJ00 8WH2000-0AJ01	8WH2000-0CJ07
Dimensions • Width/length/cover width in mm • Height (NS 35/7.5 / NS 35/15) in mm	 8.2 / 69.5 / 2.2 43.5 / 51	 8.2 / 90.5 / 2.2	 10 / 71.5 / 2.2 50.5 / 58	
Technical specifications acc. to IEC/ DIN VDE • Max. load current in A / cross-section in mm² • Rated impulse withstand voltage in kV / pollution degree • Overvoltage category / molded plastic group	 -- 8 / 3 III / I		 65 / 16	
Connection capacities • Flexible with end sleeve, with plastic sleeve in mm² • Flexible with end sleeve, without plastic sleeve in mm² • Flexible with two-wire connection end sleeve, with plastic sleeve in mm²	 0.25 ... 6 0.25 ... 6 0.5 ... 1.5		 0.25 ... 10 0.25 ... 10 1.5 ... 2.5	
Stripped length in mm	12		18	
Plug gauge (IEC 60947-1)	A5		A6	
Molded plastic type • Flammability Class acc. to UL 94	PA V0			
Approval data (UL/cUL and CSA) • Rated voltage / rated current / conductor sizes - UL/cUL: in V / A / AWG - CSA: in V / A / AWG	 -- / -- / 20 ... 8 --		 600 / 65 / 16 ... 6	 -- / -- / 16 ... 6
Support rails/protective conductor busbars	See Catalog LV 52, Chapter 1, section "Support rails"	See Catalog LV 52, Chapter 1, section "Support rails"	--	See Catalog LV 52, Chapter 1, section "Support rails"

	8WH2000-0AK00 8WH2000-0AK01	8WH2000-0CK07	8WH2000-0AM00 8WH2000-0AM01	8WH2000-0CM07
Dimensions • Width/length/cover width in mm • Height (NS 35/7.5 / NS 35/15) in mm	 12 / 80 / 2.2 51 / 58.5		 16 / 100 / -- 59 / 66.5	
Technical specifications acc. to IEC/ DIN VDE • Max. load current in A / cross-section in mm² • Rated impulse withstand voltage in kV / pollution degree • Overvoltage category / molded plastic group	 90 / 25 8 / 3 III / I		 125 / 35	
Connection capacities • Flexible with end sleeve, with plastic sleeve in mm² • Flexible with end sleeve, without plastic sleeve in mm² • Flexible with two-wire connection end sleeve, with plastic sleeve in mm²	 0.25... 16 0.25 ... 16 1.5 ... 4		 2.5 ... 35 2.5 ... 35 2.5 ... 10	
Stripped length in mm	18		25	
Plug gauge (IEC 60947-1)	A7		A8	
Molded plastic type • Flammability Class acc. to UL 94	PA V0			
Approval data (UL/cUL and CSA) • Rated voltage / rated current / conductor sizes - UL/cUL: in V / A / AWG - CSA: in V / A / AWG	 600 / 85 / 16 ... 4 --	 -- / -- / 16 ... 4	 600 / 115 / 14 ... 2 600 / 115 / 14 ... 2	 -- / -- / 14 ... 2 -- / -- / 14 ... 2
Support rails/protective conductor busbars	--	See Catalog LV 52, Chapter 1, section "Support rails"	--	See Catalog LV 52, Chapter 1, section "Support rails"

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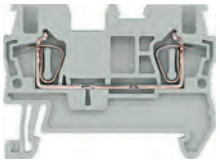
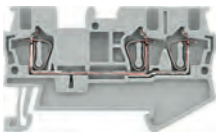
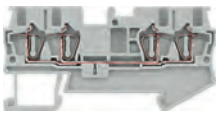
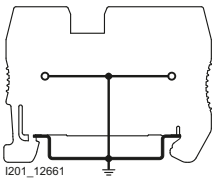
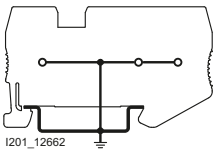
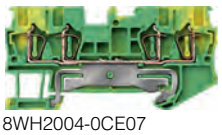
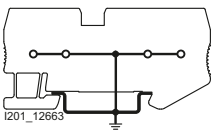
Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Terminal size 1.5 mm²							
 8WH2000-0AE00	**Through-type terminals, terminal size 1.5 mm²** • Terminal width 4.2 mm, c UL us • IEC 60947-7-1 - Rigid 0.08 ... 1.5 mm² - Flexible 0.08 ... 1.5 mm² - AWG 28-16 - I = 17.5 A - The total current through all connected conductors must not exceed the max. load current - U = 500 V						
 8WH2003-0AE00	Versions						
 8WH2004-0AE00	• Two clamping points						
	- Gray		8WH2000-0AE00		1	50 units	1BT
	- Blue		8WH2000-0AE01		1	50 units	1BT
	- Orange		8WH2000-0AE04		1	50 units	1BT
	- Red		8WH2000-0AE02		1	50 units	1BT
	- Black		8WH2000-0AE08		1	50 units	1BT
	- Green		8WH2000-0AE03		1	50 units	1BT
	- White		8WH2000-0AE05		1	50 units	1BT
	- Yellow		8WH2000-0AE06		1	50 units	1BT
	• Three clamping points						
	- Gray,		8WH2003-0AE00		1	50 units	1BT
	- Blue		8WH2003-0AE01		1	50 units	1BT
	- Orange		8WH2003-0AF04		1	50 units	1BT
	• Four clamping points						
	- Gray,		8WH2004-0AE00		1	50 units	1BT
	- Blue		8WH2004-0AE01		1	50 units	1BT
	- Orange		8WH2004-0AF04		1	50 units	1BT
8WH2000-0CE07	**PE through-type terminals, terminal size 1.5 mm²** • Terminal width 4.2 mm, c UL us • IEC 60947-7-1 - Rigid 0.08 ... 1.5 mm² - Flexible 0.08 ... 1.5 mm² - AWG 28-16 • Green/yellow						
	Versions						
 I201_12661 8WH2000-0CE07	• Two clamping points,		8WH2000-0CE07		1	50 units	1BT
	• Three clamping points		8WH2003-0CE07		1	50 units	1BT
	• Four clamping points,		8WH2004-0CE07		1	50 units	1BT
8WH2003-0CE07							
 I201_12662 8WH2003-0CE07							
 8WH2004-0CE07							
 I201_12663 8WH2004-0CE07							

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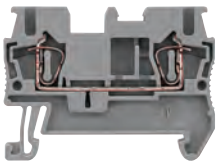
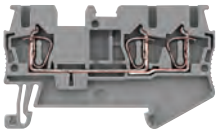
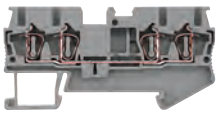
	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Terminal size 2.5 mm²							
 8WH2000-0AF00	**Through-type terminals, terminal size 2.5 mm², two clamping points** • Terminal width 5.2 mm, c UL us • IEC 60947-7-1 - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 - I = 31 A - U = 800 V						
	Versions						
	• Gray		**8WH2000-0AF00**		1	50 units	1BT
	• Blue		**8WH2000-0AF01**		1	50 units	1BT
	• Orange		**8WH2000-0AF04**		1	50 units	1BT
	• Red		**8WH2000-0AF02**		1	50 units	1BT
	• Black		**8WH2000-0AF08**		1	50 units	1BT
	• Green		**8WH2000-0AF03**		1	50 units	1BT
	• White		**8WH2000-0AF05**		1	50 units	1BT
	• Yellow		**8WH2000-0AF06**		1	50 units	1BT
 8WH2003-0AF00	**Through-type terminals, terminal size 2.5 mm², three clamping points** • Terminal width 5.2 mm, c UL us • IEC 60947-7-1 - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 - I = 28 A - The total current through all connected conductors must not exceed the max. load current - U = 800 V						
	Versions						
	• Gray		**8WH2003-0AF00**		1	50 units	1BT
	• Blue		**8WH2003-0AF01**		1	50 units	1BT
	• Orange		**8WH2003-0AF04**		1	50 units	1BT
 8WH2004-0AF00	**Through-type terminals, terminal size 2.5 mm², four clamping points** • Terminal width 5.2 mm, c UL us • IEC 60947-7-1 - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 - I = 28 A - The total current through all connected conductors must not exceed the max. load current - U = 800 V						
	Versions						
	• Gray		**8WH2004-0AF00**		1	50 units	1BT
	• Blue		**8WH2004-0AF01**		1	50 units	1BT
	• Orange		**8WH2004-0AF04**		1	50 units	1BT

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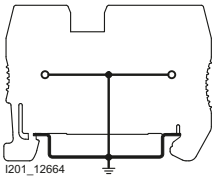
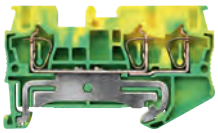
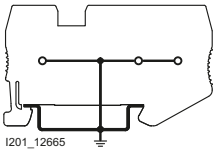
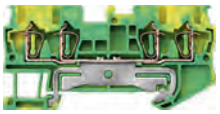
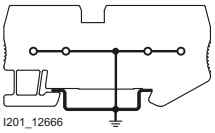
8WH through-type terminals

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8WH2000-0CF07	**PE through-type terminals, terminal size 2.5 mm²** • Terminal width 5.2 mm • c UL us • IEC 60947-7-2 - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 • Green/yellow						
	Versions						
 I201_12664 8WH2000-0CF07	• Two clamping points		**8WH2000-0CF07**		1	50 units	1BT
 8WH2003-0CF07	• Three clamping points		**8WH2003-0CF07**		1	50 units	1BT
 I201_12665 8WH2003-0CF07	• Four clamping points		**8WH2004-0CF07**		1	50 units	1BT
 8WH2004-0CF07							
 I201_12666 8WH2004-0CF07							

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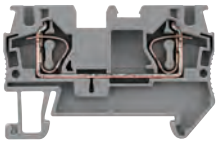
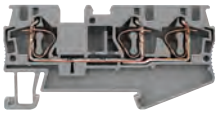
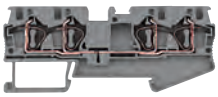
	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Terminal size 4 mm²							
 8WH2000-0AG00	**Through-type terminals, terminal size 4 mm², two clamping points** • Terminal width 6.2 mm • c UL us • IEC 60947-7-1 - Rigid 0.08 ... 6 mm², flexible 0.08 ... 4 mm², AWG 28-10 - I = 40 A, U = 800 V						
	Versions						
	• Gray		8WH2000-0AG00		1	50 units	1BT
	• Blue		8WH2000-0AG01		1	50 units	1BT
	• Orange		8WH2000-0AG04		1	50 units	1BT
	• Red		8WH2000-0AG02		1	50 units	1BT
	• Black		8WH2000-0AG08		1	50 units	1BT
	• Green		8WH2000-0AG03		1	50 units	1BT
	• White		8WH2000-0AG05		1	50 units	1BT
	• Yellow		8WH2000-0AG06		1	50 units	1BT
 8WH2003-0AG00	**Through-type terminals, terminal size 4 mm², three clamping points** • Terminal width 6.2 mm • c UL us • IEC 60947-7-1 - Rigid 0.08 ... 6 mm², flexible 0.08 ... 4 mm², AWG 28-10 - I = 40 A, the total current through all connected conductors must not exceed the max. load current - U = 800 V						
	Versions						
	• Gray		8WH2003-0AG00		1	50 units	1BT
	• Blue		8WH2003-0AG01		1	50 units	1BT
 8WH2004-0AG00	**Through-type terminals, terminal size 4 mm², four clamping points** • Terminal width 6.2 mm • c UL us • IEC 60947-7-1 - Rigid 0.08 ... 6 mm², flexible 0.08 ... 4 mm², AWG 28-10 - I = 40 A, the total current through all connected conductors must not exceed the max. load current - U = 800 V						
	Versions						
	• Gray		8WH2004-0AG00		1	50 units	1BT
	• Blue		8WH2004-0AG01		1	50 units	1BT

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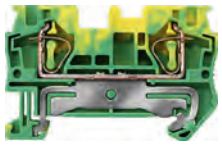
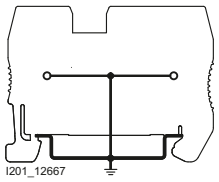
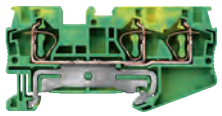
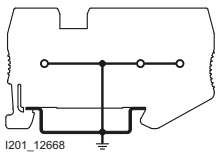
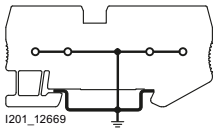
8WH through-type terminals

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
 8WH2000-0CG07	**PE through-type terminals, terminal size 4 mm²** • Terminal width 6.2 mm • c UL us • IEC 60947-7-2 - Rigid 0.08 ... 6 mm² - Flexible 0.08 ... 4 mm² - AWG 28-10 • Green/yellow						
	Versions						
 I201_12667 8WH2000-0CE07	• Two clamping points		**8WH2000-0CG07**		1	50 units	1BT
 8WH2003-0CG07	• Three clamping points		**8WH2003-0CG07**		1	50 units	1BT
 I201_12668 8WH2003-0CG07	• Four clamping points		**8WH2004-0CG07**		1	50 units	1BT
8WH2004-0CG07							
 I201_12669 8WH2004-0CG07							

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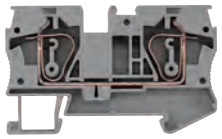
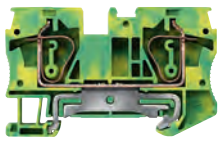
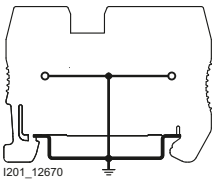
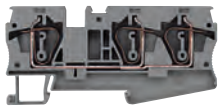
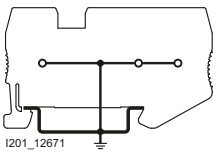
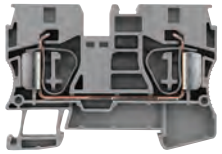
	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Terminal size 6 mm²							
 8WH2000-0AH00	**Through-type terminals, terminal size 6 mm², two clamping points** • Terminal width 8.2 mm • c UL us • IEC 60947-7-1 - Rigid 0.2 ... 10 mm² - Flexible 0.2 ... 6 mm² - AWG 24 ... 8 - I = 52 A - U = 1000 V						
	Versions						
	• Gray		8WH2000-0AH00		1	50 units	1BT
	• Blue		8WH2000-0AH01		1	50 units	1BT
 8WH2000-0CH07	**PE through-type terminals, terminal size 6 mm², two clamping points** • Terminal width 8.2 mm • c UL us • IEC 60947-7-2 - Rigid 0.2 ... 10 mm² - Flexible 0.2 ... 6 mm² - AWG 24 ... 8 • Green/yellow		8WH2000-0CH07		1	50 units	1BT
 8WH2000-0CE07							
 8WH2003-0AH00	**Through-type terminals, terminal size 6 mm², three clamping points** • Terminal width 8.2 mm • c UL us • IEC 60947-7-1 - Rigid 0.2 ... 10 mm² - Flexible 0.2 ... 6 mm² - AWG 24 ... 8 - I = 52 A - The total current through all connected conductors must not exceed the max. load current - U = 1000 V						
	Versions						
	• Gray		8WH2003-0AH00		1	50 units	1BT
	• Blue		8WH2003-0AH01		1	50 units	1BT
8WH2003-0CH07	**PE through-type terminals, terminal size 6 mm², three clamping points** • Terminal width 8.2 mm • c UL us • IEC 60947-7-2 - Rigid 0.2 ... 10 mm² - Flexible 0.2 ... 6 mm² - AWG 24 ... 8 • Green/yellow		8WH2003-0CH07		1	50 units	1BT
 8WH2003-0CE07							
Terminal size 10 mm²							
 8WH2000-0AJ00	**Through-type terminals, terminal size 10 mm²** • Terminal width 10.2 mm • c UL us • IEC 60947-7-1 - Rigid 1.5 ... 16 mm² - Flexible 1.5 ... 10 mm² - AWG 24-6 - I = 65 A - U = 1000 V						
	Versions						
	• Gray		8WH2000-0AJ00		1	50 units	1BT
	• Blue		8WH2000-0AJ01		1	50 units	1BT

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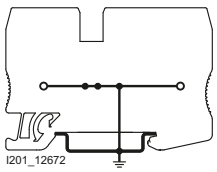
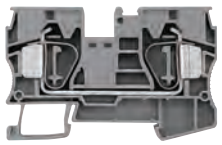
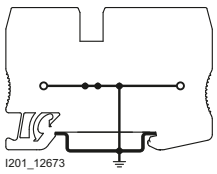
8WH through-type terminals

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8WH2000-0CJ07  8WH2000-0CJ07	**PE through-type terminals, terminal size 10 mm²** • Terminal width 10.2 mm • c UL us • IEC 60947-7-2 - Rigid 1.5 ... 16 mm² - Flexible 1.5 ... 10 mm² - AWG 24-6 - I = 65 A • Green/yellow		**8WH2000-0CJ07**		1	50 units	1BT
Terminal size 16 mm²							
 8WH2000-0AK00	**Through-type terminals, terminal size 16 mm²** • Terminal width 12 mm • c UL us • IEC 60947-7-1 - Rigid 1.5 ... 25 mm² - Flexible 1.5 ... 16 mm² - AWG 24-4 - I = 90 A - U = 1000 V						
	Versions						
	• Gray		**8WH2000-0AK00**		1	50 units	1BT
	• Blue		**8WH2000-0AK01**		1	50 units	1BT
8WH2000-0CK07  8WH2000-0CK07	**PE through-type terminals, terminal size 16 mm²** • Terminal width 12 mm • c UL us • IEC 60947-7-2 - Rigid 1.5 ... 25 mm² - Flexible 1.5 ... 16 mm² - AWG 24-4 - I = 90 A • Green/yellow		**8WH2000-0CK07**		1	25 units	1BT

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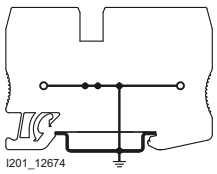
	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Terminal size 35 mm²							
8WH2000-0AM00	**Through-type terminals, terminal size 35 mm²** • Terminal width 16 mm • c UL us • IEC 60947-7-1 - Rigid 2.5 ... 35 mm² - Flexible 2.5 ... 35 mm² - AWG 14 ... 2 - I = 125 A - U = 1000 V • Enclosed at both ends						
	Versions						
	• Gray,		8WH2000-0AM00		1	10 units	1BT
	• Blue		8WH2000-0AM01		1	10 units	1BT
8WH2000-0CM07	**PE through-type terminals, terminal size 35 mm²** • Terminal width 16 mm • c UL us, • IEC 60947-7-2 - Rigid 2.5 ... 35 mm² - Flexible 2.5 ... 35 mm² - AWG 14 ... 2 - I = 125 A • Enclosed at both ends • Green/yellow		8WH2000-0CM07		1	10 units	1BT
 I201_12674 8WH2000-0CM07							
Accessories							
8WH9070-0AA00	**Compartment partitions** • For visual and electrical separation of terminal groups • 2 mm thick						
	Versions						
	• For terminal size 1.5 up to 4 mm² and two clamping points		8WH9070-0AA00		100	50 units	1BT
	• For terminal size 1.5 up to 4 mm² and three clamping points		8WH9070-0GA00		100	50 units	1BT
	• For terminal size 1.5 up to 4 mm² and four clamping points		8WH9070-0HA00		100	50 units	1BT
	• For terminal size 6 mm²		8WH9070-0DA00		100	50 units	1BT
8WH9000-1GA00	**Covers** Gray						
	Versions						
	• For terminal size 1.5 up to 2.5 mm² and two clamping points		8WH9000-1GA00		100	50 units	1BT
	• For terminal size 1.5 up to 2.5 mm² and three clamping points		8WH9000-2GA00		100	50 units	1BT
	• For terminal size 1.5 up to 2.5 mm² and four clamping points		8WH9000-4GA00		100	50 units	1BT
	• For terminal size 4 mm² and two clamping points		8WH9003-1GA00		100	50 units	1BT
	• For terminal size 4 mm² and three clamping points		8WH9003-2GA00		100	50 units	1BT
	• For terminal size 4 mm² and four clamping points		8WH9003-4GA00		100	50 units	1BT
	• For terminal size 6 mm² and two clamping points		8WH9004-1GA00		100	50 units	1BT
	• For terminal size 6 mm² and three clamping points		8WH9004-2GA00		100	50 units	1BT
	• For terminal size 10 mm²		8WH9005-1GA00		100	50 units	1BT
	• For terminal size 16 mm²		8WH9006-1GA00		100	50 units	1BT
8WH9000-0GA00	**Cover segments** • Gray • For covering multi-wire terminals when mounting two-wire terminals side-by-side						
	Versions						
	• For terminal size 1.5 up to 2.5 mm²		8WH9000-0GA00		100	10 units	1BT
	• For terminal size 4 mm²		8WH9003-0GA00		100	10 units	1BT
8WH9061-5AA06	**Warning covers** Note: For the operating shafts of 8WH2 through-type terminals						
	Versions						
	• For terminal size 1.5 mm²		8WH9061-5AA06		100	50 units	1BT
	• For terminal size 2.5 mm²		8WH9060-5AA06		100	50 units	1BT
	• For terminal size 4 mm²		8WH9063-5AA06		100	50 units	1BT
	• For terminal size 6 mm²		8WH9064-5AA06		100	10 units	1BT
	• For terminal size 10 mm²		8WH9065-5AA06		100	25 units	1BT
	• For terminal size 16 mm²		8WH9066-5AA06		100	25 units	1BT
	• For terminal size 35 mm²		8WH9067-5AA06		100	10 units	1BT

For general accessories for 8WH terminal blocks, see page 19/41

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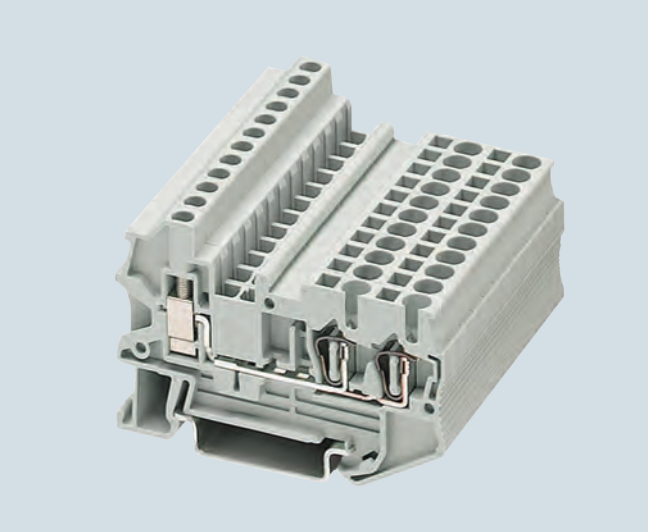
8WH hybrid through-type terminals

Overview



The terminal connection compartment, on the spring-loaded side as well as on the screw side, enables connection to a nominal cross-section of 2.5 mm² or 4 mm², with or without end sleeves. The advantages of the different connection types are due to the fact that the spring-loaded terminal of the hybrid through-type terminal is used inside the control cabinet and the universal screw terminal is used at the end-user's side. A PE terminal with the same contour is available for the three-wire terminal. Contact is made by simply snapping the terminal onto the support rail.

This meets the following requirements of IEC 60947-7-2:

- Low contact resistance
- Stainless clamping points
- Green-yellow enclosure
- Additional inscription options

A label can be snapped on to the middle of each terminal at the front. Further labels can also be mounted flat on the side of the terminals.

Technical specifications

	8WH2103-2BF00 8WH2103-2BF01	8WH2103-3BF07	8WH2103-2BG00 8WH2103-2BG01	8WH2103-3BG07
Dimensions • Width/length/cover width in mm • Height (NS 35/7.5 / NS 35/15) in mm	 5.2 / 65.3 / 2.2 42.8 / 50.3		 6.2 / 74.4 / 2.2	
Technical specifications acc. to IEC/ DIN VDE • Max. load current in A / cross-section in mm² • Rated impulse withstand voltage in kV / pollution degree • Overvoltage category / molded plastic group	 28 / 4 8 / 3 III / I	 --	 32 / 6	 --
Connection capacities • Flexible with end sleeve, with plastic sleeve in mm² • Flexible with end sleeve, without plastic sleeve in mm² • Flexible with two-wire connection end sleeve, with plastic sleeve in mm²	 0.25 ... 2.5 0.25 ... 2.5 0.5 ... 1		 0.25 ... 4 0.25 ... 4	
Stripped length in mm	10			
Plug gauge (IEC 60947-1)	A3		A4	
Connection capacity of screw terminal • Flexible with end sleeves with/without plastic sleeve in mm²	 0.25 ... 2.5 / 0.25 ... 2.5		 0.25 ... 4 / 0.25 ... 4	
Multi-conductor connection (two conductors of same cross-section) • Rigid / flexible in mm² • Flexible with end sleeve, without plastic sleeve in mm² • Flexible with two-wire connection end sleeve, with plastic sleeve in mm²	 0.14 ... 1.5 / 0.14 ... 1.5 0.25 ... 1.5 0.5 ... 1.5		 0.5 ... 2.5	
Stripped length in mm	9			
Plug gauge (IEC 60947-1)	A3		A4	
Tightening torque in Nm	0.6 ... 0.8		0.6 ... 0.8	
Molded plastic type • Flammability Class acc. to UL 94	PA V0			
Approval data (UL/cUL and CSA) • Rated voltage / rated current / conductor sizes - UL/cUL: in V / A / AWG - CSA: in V / A / AWG	 Applied for Applied for			
Support rails/protective conductor busbars	--	See Catalog LV 52, Chapter 1, section "Support rails"	--	See Catalog LV 52, Chapter 1, section "Support rails"

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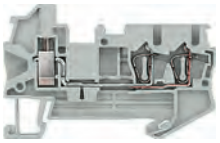
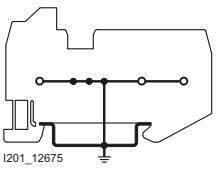
Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Terminal size 2.5 mm²							
 8WH2103-2BF00	**Hybrid through-type terminals, terminal size 2.5 mm²** • Terminal width 5.2 mm • IEC 60947-7-1 • Spring - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 - I = 28 A - The total current through all connected conductors must not exceed the max. load current - U = 800 V • Screw - Rigid 0.14 ... 4 mm² - Flexible 0.14 ... 2.5 mm² - AWG 26 ... 14 - I = 28 A - U = 800 V						
	Versions						
	• Gray		**8WH2103-2BF00**		1	50 units	1BT
	• Blue		**8WH2103-2BF01**		1	50 units	1BT
8WH2103-3BF07	**PE hybrid through-type terminals, terminal size 2.5 mm²** • Terminal width 5.2 mm • IEC 60947-7-2 • Spring - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 • Screw - Rigid 0.14 ... 4 mm² - Flexible 0.14 ... 2.5 mm² - AWG 26 ... 14		**8WH2103-3BF07**		1	50 units	1BT
 I201_12675 8WH2103-3BF07							

* You can order this quantity or a multiple thereof.

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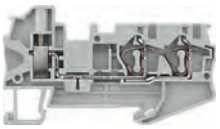
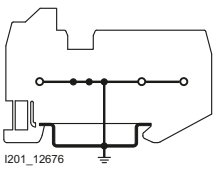
8WH hybrid through-type terminals

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Terminal size 4 mm²							
 8WH2103-2BG00	**Hybrid through-type terminals, terminal size 4 mm²** • Terminal width 6.2 mm • IEC 60947-7-1 • Spring - Rigid 0.08 ... 6 mm² - Flexible 0.08 ... 4 mm² - AWG 28-10 - I = 32 A - The total current through all connected conductors must not exceed the max. load current - U = 800 V • Screw - Rigid 0.14 ... 6 mm² - Flexible 0.14 ... 4 mm² - AWG 26 ... 10 - I = 32 A - U = 800 V						
	Versions						
	• Gray		**8WH2103-2BG00**		1	50 units	1BT
	• Blue		**8WH2103-2BG01**		1	50 units	1BT
8WH2103-3BG07	**PE hybrid through-type terminals, terminal size 4 mm²** • Terminal width 6.2 mm • IEC 60947-7-2 • Spring - Rigid 0.08 ... 6 mm² - Flexible 0.08 ... 4 mm² - AWG 28-10 • Screw - Rigid 0.14 ... 6 mm² - Flexible 0.14 ... 4 mm² - AWG 26 ... 10		**8WH2103-3BG07**		1	50 units	1BT
 8WH2103-3BG07							
Accessories							
8WH9000-2HA00	**Covers** Gray						
	Versions						
	• For terminal size 2.5 mm² and three clamping points		**8WH9000-2HA00**		100	50 units	1BT
	• For terminal size 4 mm² and three clamping points		**8WH9003-2HA00**		100	50 units	1BT

For general accessories for 8WH terminal blocks,
see page 19/41

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Overview

Fuse terminals for blade-type fuses

The fuse terminals for blade-type fuses accommodate blade-type fuses according to ISO/DIS 8820 / DIN 72581-3. Terminals with LED display are available for fast fault diagnosis "at a glance".

Fuse terminals for G fuse links

Fuse terminals perform two important tasks in connected electrical systems. Firstly, they act as a fuse carrier and, secondly, as a potential distributor.

The full-length bridge shaft enables uninterrupted bridging between the through-type terminals and the fuse terminals.

Fuse terminals for G fuse links are available for standardized electrical fuse formats 5 × 20 mm and 6.3 × 32 mm (inch fuse) – and are optionally available with LED display to signal a blown fuse.

A label can be snapped on to the middle of the terminal at the front. Further labels can also be mounted flat on the side of the terminals.

Technical specifications

	8WH2000-1AG08 8WH2000-1BG28 8WH2000-1BG38	**8WH2000-1GG08 8WH2000-1JG38 8WH2000-1JG68 8WH2000-1MG08**	**8WH2000-1HG08 8WH2000-1NG38 8WH2000-1NG68 8WH2000-1RG08**
Dimensions			
• Width/length in mm	8.2 / 86.5	6.2 / 61.5	8.2 / 76.5
• Height (NS 35/7.5 / NS 35/15) in mm	43.5 / 51	62.5 / 70	69 / 76.5
Technical specifications acc. to IEC/ DIN VDE			
• Fuse type ISO/DIS 8820 / DIN 72581-3 / dimensions / in mm	C	G / 5 × 20	G / 6.3 × 32
• Maximum current for single arrangement in A	30	3.3	10
Max. power loss at 23 °C acc. to IEC 60647-7-3 in W[1)]			
• *U* in V	--	250	400
• Overload protection			
- Individually in W	--	1.6	
- As group in W	--	1.6	
• Only short-circuit protection			
- Individually in W	--	4	
- As group in W	--	2.5	
• I_{max} in A	--	6.3	10
• Rated impulse withstand voltage in kV / pollution degree	6 / 3	4 / 3	6 / 3
• Overvoltage category / molded plastic group	III / I		
Connection capacities			
• Flexible with end sleeve without/with plastic sleeve in mm²	0.25 ... 4 / 0.25 ... 4		
• Flexible with two-wire connection end sleeve, with plastic sleeve in mm²	0.5		
Stripped length in mm	10		
Plug gauge (IEC 60947-1)	A4	A3	A4
Molded plastic type	PA		
• Flammability Class acc. to UL 94	V0		
Approval data (UL/cUL and CSA)			
• Rated voltage / rated current / conductor sizes			
- UL/cUL: in V / A / AWG	600 / 30 / 24 ... 10	300 / 6.3 / 24 ... 10	300 / 10 / 24 ... 10
- CSA: in V / A / AWG	--		

1) Please note: The G fuse holders must be selected according to the maximum power loss (heat dissipation) of the G fuse links. Depending on the application and method of installation, the heat rise conditions in closed fuse holders must be tested. Higher ambient temperatures represent an additional load for the fuse links. A shift in rated current should therefore be taken into account in such applications. When selecting G fuse links, make sure that they do not exceed the specified maximum power loss. For specification details, contact the fuse manufacturer.

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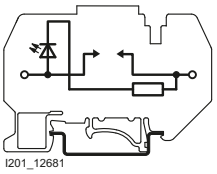
Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Terminal size 4 mm²							
8WH2000-1AG08 8WH2000-1BG28  I201_12681 8WH2000-1BG28	**Fuse terminals, terminal size 4 mm², for blade-type fuses acc. to ISO/DIS8820/DIN72581-3** • Terminal width 8.2 mm • c UL us • Connection data - Rigid 0.08 ... 6 mm² - Flexible 0.08 ... 4 mm² - AWG 28-10 - I = 30 A - U = 400 V • Enclosed at both ends						
	Versions						
	• Without LED display		8WH2000-1AG08		1	50 units	1BT
	• LED display 12 V		8WH2000-1BG28		1	50 units	1BT
	• LED display 24 V		8WH2000-1BG38		1	50 units	1BT
8WH2000-1GG08 8WH2000-1JG38	**Fuse terminals, terminal size 4 mm², for 5 x 20 mm G fuse links** • Terminal width 6.2 mm • c UL us • IEC 60947-7-3 • With fuse - Rigid 0.08 ... 6 mm², flexible 0.08 ... 4 mm², AWG 28-10 - I_{max} = 6.3 A, only short-circuit protection, single 4 W, group 2.5 W - U = 250 V, overload protection, single 4 W, group 1.6 W • As isolating terminal - Rigid 0.08 ... 6 mm², flexible 0.08 ... 4 mm², AWG 28-10 - I = 6.3 A, U = 250 V • Enclosed at both ends						
	Versions						
	• Without LED display		8WH2000-1GG08		1	50 units	1BT
	• LED display 15 ... 30 V		8WH2000-1JG38		1	50 units	1BT
	• LED display 30 ... 60 V		8WH2000-1JG68		1	50 units	1BT
	• LED display 110 ... 250 V		8WH2000-1MG08		1	50 units	1BT
8WH2000-1HG08	**Fuse terminals, terminal size 4 mm², for G fuse links 6.3 x 32 mm (inch fuses)** • Terminal width 8.2 mm • c UL us • IEC 60947-7-3 • With fuse - Rigid 0.08 ... 6 mm², flexible 0.08 ... 4 mm², AWG 28-10 - I = 10 A - U = 400 V - Current and voltage are determined by the fitted fuse or the selected LED display • As isolating terminal - Rigid 0.08 ... 6 mm², flexible 0.08 ... 4 mm², AWG 28-10 - I = 10 A, U = 400 V • Enclosed at both ends						
	Versions						
	• Without LED display		8WH2000-1HG08		1	50 units	1BT
	• With LED display 100 ... 250 V		8WH2000-1RG08		1	50 units	1BT
Accessories							
8WH9070-0AA00	**Compartment partitions, for terminal sizes 1.5 and 4 mm²**						
	Versions						
	• Two clamping points		8WH9070-0AA00		100	50 units	1BT
	• Three clamping points (inch fuse)		8WH9070-0KA00		100	50 units	1BT

For general accessories for 8WH terminal blocks, see page 19/41

* You can order this quantity or a multiple thereof.

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Overview

Through-type terminals with isolating blade capability are the most commonly used terminal types in measuring and control technology.

The isolating blade terminals with nominal cross-section of 2.5 mm² are characterized in particular by their slim design of 5.2 mm and their high current-carrying capacity of 16 A. In addition the terminals provide a test tap parallel to the isolation point for 2.3 mm ∅ test plugs. Potential distributors can be conveniently assembled using connecting combs.

Terminals with three and four clamping points are available for multi-conductor connection. With their compact design these terminals can also be used in small terminal boxes and their front connection arrangement enables user-friendly wiring.

The isolating blade is secured to the terminal so that it cannot be lost.

A label can be snapped on to the middle of the terminal at the front. Further labels can also be mounted flat on the side of the terminals.

Technical specifications

	8WH2000-6CF00	8WH2500-6CF00	8WH2003-6CF00	8WH2004-6CF00	8WH2000-6CG00
Dimensions					
• Width/length/cover width in mm	5.2 / 60.5 / 2.2	5.2 / 51 / 2.2	5.2 / 72 / 2.2	5.2 / 84 / 2.2	6.2 / 61.5 / --
• Height (NS 35/7.5 / NS 35/15) in mm	36.5 / 44	43 / 50.5	36.5 / 44		
Technical specifications acc. to IEC/ DIN VDE					
• Max. load current in A / cross-section in mm²	16 / 4				16 / 6
• Maximum data / rated data in A / mm²	--				
• Rated impulse withstand voltage in kV / pollution degree	6 / 3				
• Overvoltage category / molded plastic group	III / I				
Connection capacities					
• Flexible with end sleeve, with plastic sleeve in mm²	0.25... 2.5				0.25 ... 4
• Flexible with end sleeve, without plastic sleeve in mm²	0.25 ... 2.5				0.25 ... 4
• Flexible with two-wire connection end sleeve, with plastic sleeve in mm²	0.5				
Stripped length in mm	10				
Plug gauge (IEC 60947-1)	A4	A3	A4	A3	
Molded plastic type	PA				
• Flammability Class acc. to UL 94	V0				
Approval data (UL/cUL and CSA)					
• Rated voltage / rated current / conductor sizes					
- UL/cUL: in V / A / AWG	600 / 16 / 26 ... 12	600 / 16 / 24 ... 12	600 / 16 / 26 ... 12		300 / 6.3 / 24 ... 10
- CSA: in V / A / AWG	--				

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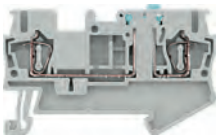
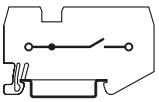
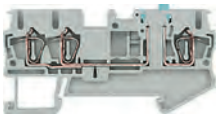
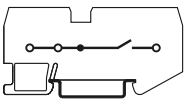
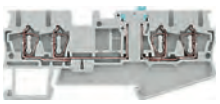
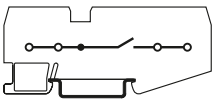
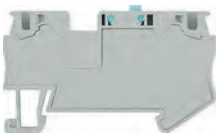
Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Terminal size 2.5 mm²							
 8WH2000-6CF00  I201_12684 8WH2000-6CF00	**Isolating blade terminals, terminal size 2.5 mm²** • Terminal width 5.2 mm • c UL us • IEC 60947-7-1 - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 - I = 16 A - U = 400 V • For 3 and 4 clamping points: - Rigid 0.14 ... 4 mm² - Flexible 0.14 ... 2.5 mm² - AWG 26 ... 14 Versions • Gray - Two clamping points - Three clamping points - Four clamping points Note On terminals with three and four clamping points, the total current through all connected conductors must not exceed the max. load current.		**8WH2000-6CF00** **8WH2003-6CF00** **8WH2004-6CF00**		1 1 1	50 units 50 units 50 units	1BT 1BT 1BT
 8WH2003-6CF00  I201_12685 8WH2003-6CF00							
 8WH2004-6CF00  I201_12686 8WH2004-6CF00							
 8WH2000-6CG00	**Isolating blade terminals, size 4 mm², two clamping points** • Gray • Terminal width 6.2 mm • c UL us • IEC 60947-7-1 - Rigid 0.08 ... 6 mm², flexible 0.08 ... 4 mm², AWG 28-10 - I = 16 A, U = 400 V • Enclosed at both ends		**8WH2000-6CG00**		1	50 units	1BT
Accessories							
8WH9070-0AA00	**Compartment partitions, for terminal size 1.5 ... 4 mm²** Versions • Two clamping points • Three clamping points • Four clamping points		**8WH9070-0AA00** **8WH9070-0GA00** **8WH9070-0HA00**		100 100 100	50 units 50 units 50 units	1BT 1BT 1BT
88WH9000-2GA00	**Covers, for terminal size 1.5 ... 2.5 mm²** Versions • For two clamping points • For three clamping points • For four clamping points		**8WH9000-2GA00** **8WH9000-4GA00** **8WH9000-5GA00**		100 100 100	50 units 50 units 50 units	1BT 1BT 1BT
8WH9000-0GA00	**Cover segments, for terminal size 2.5 mm² and three or four clamping points**		**8WH9000-0GA00**		100	10 units	1BT

For general accessories for 8WH terminal blocks, see page 19/41

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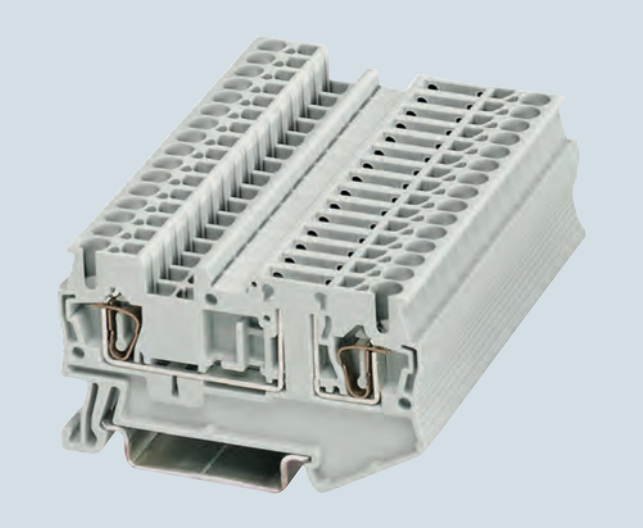
Overview



The isolating terminals are available with the same contour as the isolating blade terminals. The terminals excel with their narrow width of only 5.2 mm and their high current load rating of 16 A.

There is a test option for 2.3 mm ⌀ test plugs at both ends of the isolating point.

The 6.2 mm wide isolating terminal with terminal size 4 mm^2 is a base terminal for accommodating:

- Isolating plugs
- Through-type connectors
- Fused connectors and
- Component connectors

A label can be snapped on to the middle of the terminal at the front. Further labels can also be mounted flat on the side of the terminals.

Technical specifications

	8WH2000-6AF00	8WH2500-6AF00	8WH2003-6AF00	8WH2004-6AF00	8WH2000-6AG00
Dimensions					
• Width/length/cover width in mm	5.2 / 60.5 / 2.2	5.2 / 51 / 2.2	5.2 / 72 / 2.2	5.5 / 84 / 2.2	6.2 / 61.5 / --
• Height (NS 35/7.5 / NS 35/15) in mm	36.5 / 44	43 / 50.5	36.5 / 44		
Technical specifications acc. to IEC/ DIN VDE					
• Max. load current in A / cross-section in mm^2	16 / 4				16 / 6
• Rated impulse withstand voltage in kV / pollution degree	6 / 3				
• Overvoltage category / molded plastic group	III / I				
Connection capacities					
• Flexible with end sleeve, with plastic sleeve in mm^2	0.25 ... 2.5				0.25 ... 4
• Flexible with end sleeve, without plastic sleeve in mm^2	0.25 ... 2.5				0.25 ... 4
• Flexible with two-wire connection end sleeve, with plastic sleeve in mm^2	0.5				
Stripped length in mm	10				
Plug gauge (IEC 60947-1)	A3				A4
Molded plastic type	PA				
• Flammability Class acc. to UL 94	V0				
Approval data (UL/cUL and CSA)					
• Rated voltage / rated current / conductor sizes					
- UL/cUL: in V / A / AWG	300 / 16 / 26 ... 12	300 / 16 / 24 ... 12	300 / 16 / 26 ... 12		300 / 6.3 / 24 ... 10
- CSA: in V / A / AWG	--				

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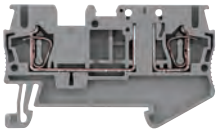
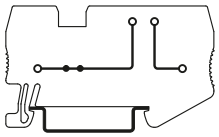
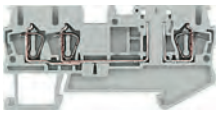
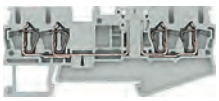
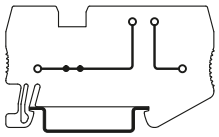
8WH isolating terminals

Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Terminal size 2.5 mm²							
 8WH2000-6AF00	**Isolating terminals, terminal size 2.5 mm²** • Gray • Terminal width 5.2 mm • c UL us • IEC 60947-7-1 - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 - Current and voltage are determined by the fitted plug - I = 16 A - U = 400 V						
 I201_12682 8WH2000-6AF00	Versions						
	• Two clamping points		8WH2000-6AF00		1	50 units	1BT
	• Three clamping points		8WH2003-6AF00		1	50 units	1BT
	• Four clamping points		8WH2004-6AF00		1	50 units	1BT
 8WH2003-6AF00							
 8WH2004-6AF00							
Terminal size 4 mm²							
8WH2000-6AG00	**Isolating terminals, terminal size 4 mm², two clamping points** • Gray • Terminal width 6.2 mm • c UL us • IEC 60947-7-1 - Rigid 0.08 ... 6 mm² - Flexible 0.08 ... 4 mm² - AWG 28-10 - Current and voltage are determined by the fitted plug - I = 16 A - U = 400 V • Enclosed at both ends		8WH2000-6AG00		1	50 units	1BT
 I201_12682 8WH2000-6AG00							
Accessories							
8WH9070-0GA00	**Compartment partitions**						
	Versions						
	• For terminal size 2.5 mm²						
	- For three clamping points		8WH9070-0GA00		100	50 units	1BT
	- For four clamping points		8WH9070-0HA00		100	50 units	1BT
	• For terminal size 4 mm²						
	- For two clamping points		8WH9070-0AA00		100	50 units	1BT
8WH9000-2GA00	**Covers** Gray						
	Versions						
	• For terminal size 1.5 up to 2.5 mm² and two clamping points		8WH9000-2GA00		100	50 units	1BT
	• For terminal size 2.5 mm² and three clamping points		8WH9000-4GA00		100	50 units	1BT
	• For terminal size 2.5 mm² and four clamping points		8WH9000-5GA00		100	50 units	1BT
8WH9000-0GA00	**Cover segments, for terminal sizes 1.5 mm² and 2.5 mm² and three or four clamping points** Gray		8WH9000-0GA00		100	10 units	1BT

For general accessories for 8WH terminal blocks, see page 19/41

* You can order this quantity or a multiple thereof.

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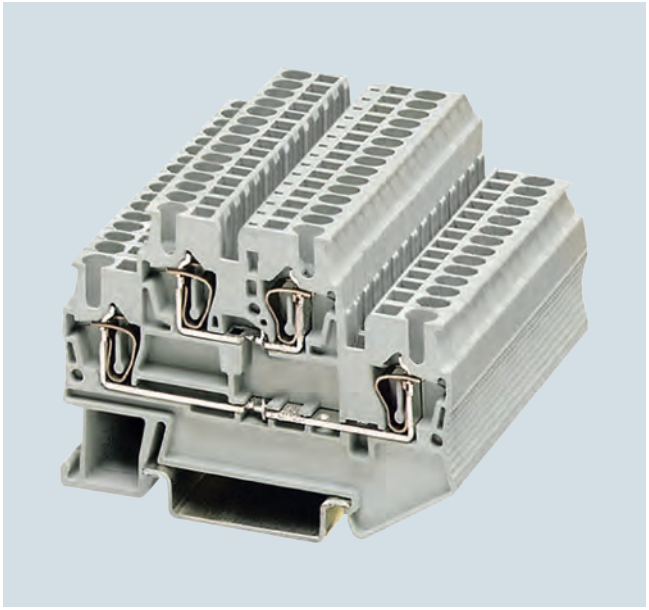
Overview



Standard two-tier terminals

With the two voltage levels routed through two separate tiers, the two-tier terminals require 50 % less space than equivalent single-tier terminals. To implement a wide range of wiring tasks, connecting combs can be fitted to both tiers of the spring-loaded terminal series. Facilities for inscription are provided at each clamping point.

PE/ground conductor function

Perfect mechanical and electrical contact with the support rail is provided by simply snapping the terminals onto the rail.

The PE two-tier terminals meet all the requirements of IEC 60947-7-2:

- Low contact resistance
- Stainless clamping points
- Green-yellow enclosure
- Additional inscription options

PE/L and PE/N types

The PE/L and PE/N types provide a PE/ground contact to the support rail in the lower tier. The upper tier is designed as a through-type tier. Color coding of the PE and neutral tiers enables clear and unambiguous distribution of the potential.

The clamping points of two-tier terminals can be inscribed with flat labels.

Technical specifications

	8WH2020-0AE00 8WH2020-0AE01 8WH2025-0AE00	8WH0020-0CE07	8WH2020-0AF00 8WH2020-0AF01 8WH2025-0AF00	8WH2023-0AF00 8WH2023-0AF01 8WH2022-0AF00	8WH2020-0CF07
Dimensions • Width/length/cover width in mm • Height (NS 35/7.5 / NS 35/15) in mm	4.2 / 67.5 / 2.2 47.5 / 55		5.2 / 67.5 / 2.2	5.2 / 91.5 / 2.2	5.2 / 67.5 / 2.2
Technical specifications acc. to IEC/ DIN VDE • Max. load current in A / cross-section in mm² • Maximum data / rated data in A / mm² • Rated impulse withstand voltage in kV / pollution degree • Overvoltage category / molded plastic group	17.5 / 1.5 -- 6 / 3 III / I	--	26 / 4	-- 26 / 4 // 22 / 2.5	-- --
Connection capacities • Flexible with end sleeve, with plastic sleeve in mm² • Flexible with end sleeve, without plastic sleeve in mm² • Flexible with two-wire connection end sleeve, with plastic sleeve in mm²	0.25 ... 1.5 0.25 ... 1.5 0.5		0.25 ... 2.5 0.25 ... 2.5		
Stripped length in mm	10				
Plug gauge (IEC 60947-1)	A1		A3		
Molded plastic type • Flammability Class acc. to UL 94	PA V0				
Approval data (UL/cUL and CSA) • Rated voltage / rated current / conductor sizes - UL/cUL: in V / A / AWG - CSA: in V / A / AWG	 300 / 15 / 26 ... 14 300 / 15 / 26 ... 14	 -- / -- / 26 ... 14 -- / -- / 26 ... 14	 600 / 20 / 26 ... 12 --	 300 / 20 / 26 ... 12	 -- / -- / 26 ... 12 -- / -- / 26 ... 12
Support rails/protective conductor busbars	--	See Catalog LV 52, Chapter 1, section "Support rails"	--		See Catalog LV 52, Chapter 1, section "Support rails"

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8WH two-tier terminals

	8WH2023-0CF07	8WH2020-4AF00	8WH2020-4BF00
Dimensions			
• Width/length/cover width in mm	5.2 / 91.5 / 2.2	5.2 / 67.5 / 2.2	
• Height (NS 35/7.5 / NS 35/15) in mm	47.5 / 55		
Technical specifications acc. to IEC/ DIN VDE			
• Max. load current in A / cross-section in mm²	--	32 / 4	
• Rated impulse withstand voltage in kV / pollution degree	6 / 3		
• Overvoltage category / molded plastic group	III / I		
Connection capacities			
• Flexible with end sleeve, with plastic sleeve in mm²	0.25 ... 2.5		
• Flexible with end sleeve, without plastic sleeve in mm²	0.25 ... 2.5		
• Flexible with two-wire connection end sleeve, with plastic sleeve in mm²	0.5		
Stripped length in mm	10		
Plug gauge (IEC 60947-1)	A3		
Molded plastic type	PA		
• Flammability Class acc. to UL 94	V0		
Approval data (UL/cUL and CSA)			
• Rated voltage / rated current / conductor sizes			
- UL/cUL: in V / A / AWG	-- / -- / 26 ... 12	300 / 20 / 26 ... 12	--
- CSA: in V / A / AWG	-- / -- / 26 ... 12	--	
Support rails/protective conductor busbars	See Catalog LV 52, Chapter 1, section "Support rails"	--	

	8WH2020-4CF00	8WH2020-0AG00 8WH2020-0AG01 8WH2025-0AG00	8WH2020-0CG07
Dimensions			
• Width/length/cover width in mm	5.2 / 67.5 / 2.2	6.2 / 83.5 / 2.2	6.2 / 83.5 / 2.2
• Height (NS 35/7.5 / NS 35/15) in mm	47.5 / 55		
Technical specifications acc. to IEC/ DIN VDE			
• Max. load current in A / cross-section in mm²	26 / 4	32 / 6	--
• Rated impulse withstand voltage in kV / pollution degree	6 / 3		
• Overvoltage category / molded plastic group	III / I		
Connection capacities			
• Flexible with end sleeve, with plastic sleeve in mm²	0.25 ... 2.5	0.25 ... 4	0.25 ... 4
• Flexible with end sleeve, without plastic sleeve in mm²	0.25 ... 2.5	0.25 ... 4	0.25 ... 4
• Flexible with two-wire connection end sleeve, with plastic sleeve in mm²	0.5	0.5 ... 1	0.5 ... 1
Stripped length in mm	10		
Plug gauge (IEC 60947-1)	A3	A4	
Molded plastic type	PA		
• Flammability Class acc. to UL 94	V0		
Approval data (UL/cUL and CSA)			
• Rated voltage / rated current / conductor sizes			
- UL/cUL: in AWG	300 / 20 / 26 ... 12	300 / 30 / 20 ... 10	20 ... 10
- CSA: in AWG	-- / -- / 26 ... 12		20 ... 10
Support rails/protective conductor busbars	--		See Catalog LV 52, Chapter 1, section "Support rails"

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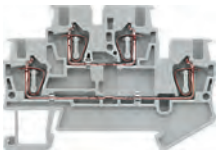
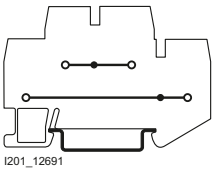
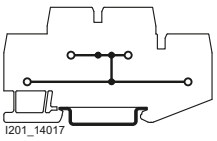
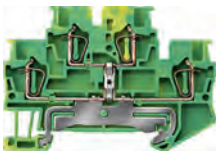
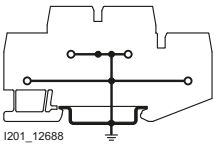
Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Terminal size 1.5 mm²							
 8WH2020-0AE00	**Two-tier terminals, terminal size 1.5 mm²** • Terminal width 4.2 mm • c UL us, CSA • IEC 60947-7-1 - Rigid 0.08 ... 1.5 mm² - Flexible 0.08 ... 1.5 mm² - AWG 28-16 - I = 17.5 A - The total current through all connected conductors must not exceed the max. load current - U = 500 V						
 I201_12691 8WH2020-0AE00	Versions • Gray - Without equipotential bonding, 2-pole, CSA - With equipotential bonding, 1-pole • Blue, 2-pole		**8WH2020-0AE00** **8WH2025-0AE00** **8WH2020-0AE01**		1 1 1	50 units 50 units 50 units	1BT 1BT 1BT
 I201_14017 8WH2025-0AE00							
 8WH2020-0CE07	**PE two-tier terminals, terminal size 1.5 mm²** • Terminal width 4.2 mm • c UL us, CSA • IEC 60947-7-1 - Rigid 0.08 ... 1.5 mm² - Flexible 0.08 ... 1.5 mm² - AWG 28-16 • Green/yellow		**8WH2020-0CE07**		1	50 units	1BT
 I201_12688 8WH2020-0CE07							

* You can order this quantity or a multiple thereof.

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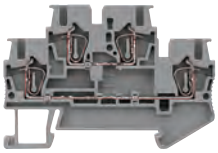
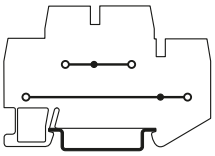
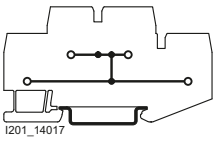
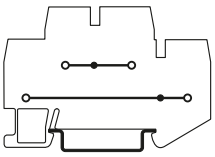
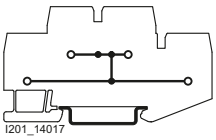
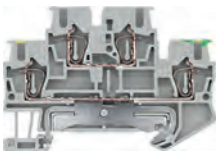
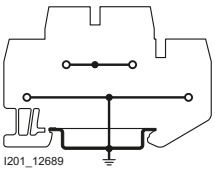
8WH two-tier terminals

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Terminal size 2.5 mm²							
 8WH2020-0AF00	**Two-tier terminals, terminal size 2.5 mm²** • Terminal width 5.2 mm • c UL us • IEC 60947-7-1 - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 - I = 26 A - The total current through all connected conductors must not exceed the max. load current - U = 500 V						
 I201_12691 8WH2020-0AF00	Versions • Gray - Without equipotential bonding, 2-pole - With equipotential bonding, 1-pole • Blue - Without equipotential bonding, 2-pole - With equipotential bonding, 1-pole		**8WH2020-0AF00** **8WH2025-0AF00** **8WH2020-0AF01** **8WH2025-0AF01**		1 1 1 1	50 units 50 units 50 units 50 units	1BT 1BT 1BT 1BT
 I201_14017 8WH2025-0AF00							
8WH2023-0AF00	**Two-tier terminals, terminal size 2.5 mm², three clamping points on one level** • Terminal width 5.2 mm • c UL us • IEC 60947-7-1 - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 - I = 26 A - The total current through all connected conductors must not exceed the max. load current - U = 500 V						
 I201_12691 8WH2023-0AF00	Versions • Gray - Without equipotential bonding, 2-pole - With equipotential bonding, 1-pole • Blue, 2-pole		**8WH2023-0AF00** **8WH2022-0AF00** **8WH2023-0AF01**		1 1 1	50 units 50 units 50 units	1BT 1BT 1BT
 I201_14017 8WH2022-0AF00							
 8WH2020-4AF00	**Two-tier terminals, terminal size 2.5 mm², L at top and PE at bottom** • Gray • Terminal width 5.2 mm • c UL us • DIN VDE 0611 and IEC 60947-7-2 - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 - I = 32 A - U = 500 V		**8WH2020-4AF00**		1	50 units	1BT
 I201_12689 8WH2020-4AF00							

* You can order this quantity or a multiple thereof.

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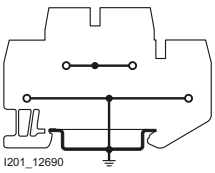
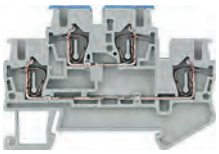
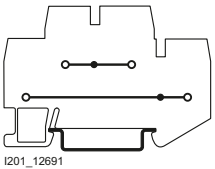
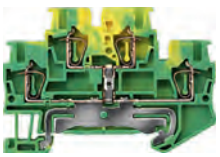
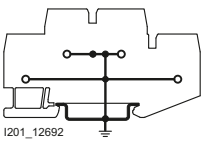
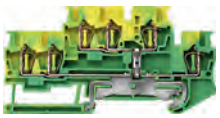
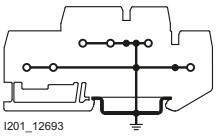
	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8WH2020-4BF00  8WH2020-4BF00	**Two-tier terminals, terminal size 2.5 mm², N at top and PE at bottom** • Gray • Terminal width 5.2 mm • DIN VDE 0611 and IEC 60947-7-2 - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 - I = 32 A - U = 500 V		8WH2020-4BF00		1	50 units	1BT
 8WH2020-4CF00  8WH2020-4CF00	**Two-tier terminals, terminal size 2.5 mm², N at top and L at bottom** • Gray • Terminal width 5.2 mm • c UL us • IEC 60947-7-1 - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 - I = 26 A - U = 500 V		8WH2020-4CF00		1	50 units	1BT
 8WH2020-0CF07  8WH2020-0CF07	**PE two-tier terminals, terminal size 2.5 mm², two clamping points on one level** • Terminal width 5.2 mm • c UL us • IEC 60947-7-2 - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 • Green/yellow		8WH2020-0CF07		1	50 units	1BT
 8WH2023-0CF07  8WH2023-0CF07	**PE two-tier terminals, terminal size 2.5 mm², three clamping points on one level** • Terminal width 5.2 mm • c UL us • IEC 60947-7-2 - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 • Green/yellow		8WH2023-0CF07		1	50 units	1BT

* You can order this quantity or a multiple thereof.

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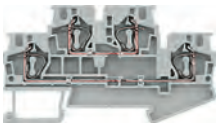
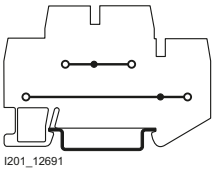
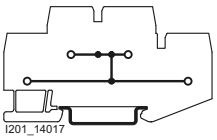
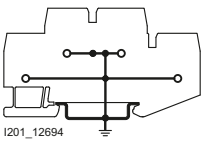
8WH two-tier terminals

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Terminal size 4 mm²							
 8WH2020-0AG00	**Two-tier terminals, terminal size 4 mm²** • Terminal width 6.2 mm • c UL us • IEC 60947-7-1 - Rigid 0.08 ... 6 mm² - Flexible 0.08 ... 4 mm² - AWG 28-10 - I = 32 A - The total current through all connected conductors must not exceed the max. load current - U = 500 V						
 I201_12691 8WH2020-0AG00	Versions						
	• Gray - Without equipotential bonding, 2-pole		**8WH2020-0AG00**		1	50 units	1BT
	- With equipotential bonding, 1-pole		**8WH2025-0AG00**		1	50 units	1BT
	• Blue, 2-pole		**8WH2020-0AG01**		1	50 units	1BT
 I201_14017 8WH2025-0AG00							
8WH2020-0CG07	**PE two-tier terminals, terminal size 4 mm²** • Terminal width 6.2 mm • c UL us • IEC 60947-7-2 - Rigid 0.08 ... 6 mm² - Flexible 0.08 ... 4 mm² - AWG 28-10 • Green/yellow		**8WH2020-0CG07**		1	50 units	1BT
 I201_12694 8WH2020-0CG07							
Accessories							
8WH9070-0BA00	**Compartment partitions, for terminal size 1.5 ... 4 mm²** • For visual and electrical separation of terminal groups • 2 mm thick		**8WH9070-0BA00**		100	50 units	1BT
8WH9000-1VA00	**Covers** Gray						
	Versions						
	• For terminal size 1.5 up to 2.5 mm²		**8WH9000-1VA00**		100	50 units	1BT
	• For terminal size 2.5 mm² and three clamping points		**8WH9000-2VA00**		100	50 units	1BT
	• For terminal size 4 mm²		**8WH9003-1VA00**		100	50 units	1BT

For general accessories for 8WH terminal blocks, see page 19/41

* You can order this quantity or a multiple thereof.

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Overview

Our three-tier terminals offer three feed-through levels in a slim 5.2 mm terminal enclosure. They enable high wiring density – ideal for switchboards where space is at a premium.

With one bridge shaft per tier, these terminal blocks are ideal for use as compact potential distributors or initiator terminals. All six clamping points are interconnected on the equipotential bonding versions.

The three-tier terminal range is rounded off with a PE terminal with the same contour.

Inscription

Each tier of three-tier terminals can be inscribed with flat labels. If a label holder is used, the labels can be inserted at the front.

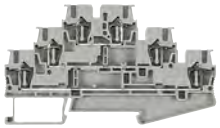
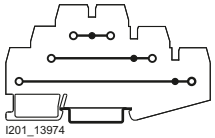
Benefits

- Three feed-through levels with minimum footprint
- Comprehensive range of inscription options
- Matching accessories for 8WH terminal range
- One bridge shaft per tier
- Label holder is inserted

Technical specifications

	8WH2030-0AF00 8WH2030-0AF01 8WH2035-0AF00	8WH2035-0CF07	8WH2030-4EF00 8WH2030-4HF00
Dimensions			
• Width/length in mm	5.2 / 99.5	5.2 / 99.5	5.2 / 99.5
• Height (TS 35/7.5 / TS 35/15 / TS 32) in mm	58 / 65.5	58 / 65.5	58 / 65.5
Technical specifications acc. to IEC/ DIN VDE			
• Max. load current in A / cross-section in mm²	28 / 4	--	28 / 4
• Rated impulse withstand voltage in kV / pollution degree	6 / 3	6 / 3	6 / 3
• Overvoltage category / molded plastic group	III / I	III / I	III / I
Connection capacities			
• Flexible with end sleeve without / with plastic sleeve in mm²	0.25 ... 2.5	0.25 ... 2.5	0.25 ... 2.5
• Flexible with end sleeve, without plastic sleeve in mm²	0.25 ... 2.5	0.25 ... 2.5	0.25 ... 2.5
• Flexible with TWIN end sleeve with plastic sleeve in mm²	0.5	0.5	0.5
Stripped length in mm	10	10	10
Plug gauge (IEC 60947-1)	A3	A3	A3
Molded plastic type	PA	PA	PA
• Flammability Class acc. to UL 94	V0	V0	V0
Approval data (UL/CUR and CSA)			
• Rated voltage / rated current / conductor sizes			
- UL/CUR: V / A / AWG	600 / 20 / 26 ... 12	-- / -- / 24 ... 12	300 / 20 / 26 ... 12
- CSA: V / A / AWG	--	--	--

Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS/ P. unit	PG
Terminal size 2.5 mm²							
 8WH2030-0AF00  I201_13974 8WH2030-0AF00	**Three-tier terminals, terminal size 2.5 mm²** • Enclosed at both ends • Terminal width 5.2 mm • c UL us • IEC 60947-7-1 - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 - I = 28 A - U = 500 V						
	Versions						
	• Gray		**8WH2030-0AF00**		1	50 units	1BT
	• Blue		**8WH2030-0AF01**		1	50 units	1BT

*** You can order this quantity or a multiple thereof.**

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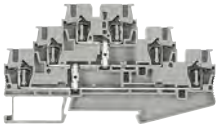
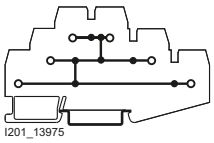
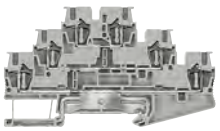
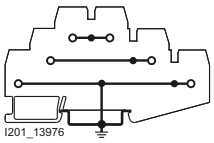
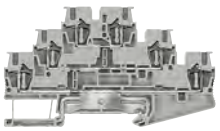
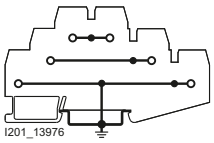
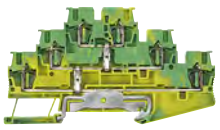
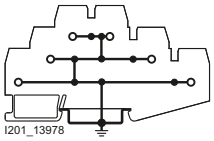
8WH three-tier terminals

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS/ P. unit	PG
 8WH2035-0AF00  8WH2035-0AF00	**Three-tier terminals, with equipotential bonding, terminal size 2.5 mm²** • Enclosed at both ends • Terminal width 5.2 mm • c UL us • IEC 60947-7-1 - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 - *I* = 28 A - *U* = 500 V Note The total current through all connected conductors must not exceed the max. load current.		8WH2035-0AF00		1	50 units	1BT
 8WH2030-4EF00  8WH2030-4EF00	**Three-tier terminals, "PE/L/N", terminal size 2.5 mm²** • Enclosed at both ends • Terminal width 5.2 mm • c UL us • IEC 60947-7-1 + IEC 60947-7-2 - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12		8WH2030-4EF00		1	50 units	1BT
 8WH2030-4HF00  8WH2030-4HF00	**Three-tier terminals, "PE/L/L", terminal size 2.5 mm²** • Enclosed at both ends • Terminal width 5.2 mm • c UL us • IEC 60947-7-1 + IEC 60947-7-2 - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 - *I* = 28 A - *U* = 500 V		8WH2030-4HF00		1	50 units	1BT
 8WH2035-0CF07  8WH2035-0CF07	**PE three-tier terminals, terminal size 2.5 mm²** • Enclosed at both ends • Terminal width 5.2 mm • c UL us • IEC 60947-7-2 - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12		8WH2035-0CF07		1	50 units	1BT
Accessories							
8WH9000-1GD00	**Covers for three-tier terminals**		8WH9000-1GD00		100	50 units	1BT
8WH9060-4BA00	**Label holders, for three-tier terminals**		8WH9060-4BA00		100	100 units	1BT

For general accessories for 8WH terminal blocks, see page 19/41

* You can order this quantity or a multiple thereof.

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Overview

Terminal size 2.5 mm²

The four-tier motor terminals with terminal size 2.5 mm² are ideal for the compact wiring of AC loads. They have three through-levels and one PE connection which is contacted by simply snapping it onto the mounting rail.

No cross-bridging option.

Terminal size 4 mm²

Like the 2.5 mm² version, the four-tier motor terminal with 4 mm² also allows the wiring of three phases and the PE in a single terminal. This terminal is enclosed at both ends.

No cross-bridging option.

Integrated PE/ground conductor function

PE contact with the support rail is made by simply snapping the terminal onto the rail. This makes the four-tier motor terminals with terminal size 4 mm² ideal for the space-saving wiring of AC motors.

Inscription

Each clamping point has a facility for inscription and a test option for 2.3 mm ⌀ test plugs.

There is also sufficient space for labeling in the middle of the terminal on the front.

Labels can be mounted flat at the side of the terminals by simply snapping on.

Technical specifications

	8WH2040-4LF00	8WH2040-4LG00
Dimensions		
• Width/length/cover width in mm	5.2 / 98.5 / 2.2	6.2 / 101 / --
• Height (NS 35/7.5 / NS 35/15) in mm	73.5 / 81	83.5 / 91
Technical specifications acc. to IEC/ DIN VDE		
• Max. load current in A / cross-section in mm²	26 / 4	32 / 6
• Rated impulse withstand voltage in kV / pollution degree	8 / 3	
• Overvoltage category / molded plastic group	III / I	
Connection capacities		
• Flexible with end sleeve, with plastic sleeve in mm²	0.25 ... 2.5	0.25 ... 4
• Flexible with end sleeve, without plastic sleeve in mm²	0.25 ... 2.5	0.25 ... 4
• Flexible with two-wire connection end sleeve, with plastic sleeve in mm²	--	0.5 ... 1
Stripped length in mm	10	
Plug gauge (IEC 60947-1)	A3	A4
Molded plastic type	PA	
• Flammability Class acc. to UL 94	V0	
Approval data (UL/cUL and CSA)		
• Rated voltage / rated current / conductor sizes		
- UL/cUL: in V / A / AWG	-- / -- / 26 ... 12	--
- CSA: in V / A / AWG	--	600 / 30 / 28-10

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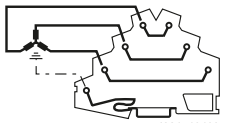
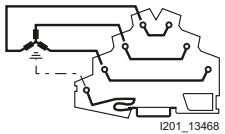
8WH four-tier motor terminals

Selection and ordering data

Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Terminal size 2.5 mm²						
8WH2040-4LF00  8WH2040-4LF00	**Four-tier motor terminals, terminal size 2.5 mm²** • Terminal width 5.2 mm • c UL us • IEC 60947-7-1 and IEC 60947-7-2 - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 - I = 26 A - U = 800 V	8WH2040-4LF00		1	50 units	1BT
Terminal size 4 mm²						
8WH2040-4LG00  8WH2040-4LG00	**Four-tier motor terminals, terminal size 4 mm²** • Terminal width 6.2 mm • c UL us • IEC 60947-7-1 and IEC 60947-7-2 - Rigid 0.08 ... 6 mm² - Flexible 0.08 ... 4 mm² - AWG 28-10 - I = 32 A - U = 800 V • Enclosed at both ends	8WH2040-4LG00		1	50 units	1BT
Accessories						
8WH2040-4LG00	**Covers** **For four-tier motor terminals, terminal size 2.5 mm²**	8WH9000-1GE00		100	50 units	1BT

For general accessories for 8WH terminal blocks, see page 19/41

* You can order this quantity or a multiple thereof.

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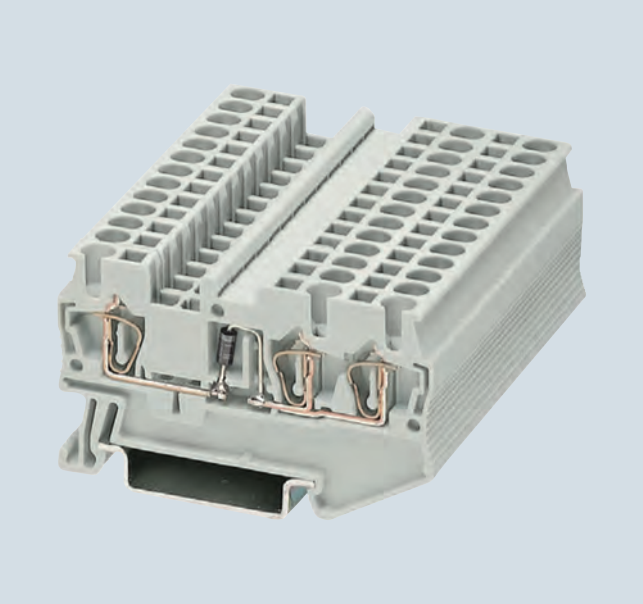
Overview



Diode terminals with a nominal cross-section of 2.5 mm² and a mounting width of just 5.2 mm can be used to implement many different wiring tasks. The diode is soldered in from left to right or vice versa as required.

A label can be snapped on to the middle of each terminal at the front. Further labels can also be mounted flat on the side of the terminals.

Technical specifications

	8WH2003-5DF00 **8WH2003-5CF00**
Dimensions	
• Width/length/cover width in mm	5.5 / 60.5 / 2.2
• Height HV-M ... (NS 35/7.5 / NS 35/15) in mm	36.5 / 44
Technical specifications acc. to IEC/ DIN VDE	
• Max. load current in A / cross-section in mm²	Determined by the diode / 4
• Rated impulse withstand voltage in kV / pollution degree	4 / 3
• Overvoltage category / molded plastic group	III / I
Connection capacities	
• Flexible with end sleeve, with plastic sleeve in mm²	0.25 ... 2.5
• Flexible with end sleeve, without plastic sleeve in mm²	0.25 ... 2.5
• Flexible with two-wire connection end sleeve, with plastic sleeve in mm²	0.5
Stripped length in mm	10
Plug gauge (IEC 60947-1)	A3
Molded plastic type	PA
• Flammability Class acc. to UL 94	V0
Approval data (UL/cUL and CSA)	
• Rated voltage / rated current / conductor sizes	
- UL/cUL: V/A/AWG	600 / 20 / 26 ... 12
- CSA: V/A/AWG	--

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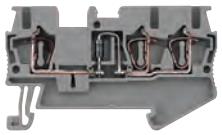
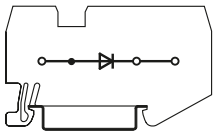
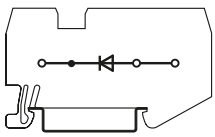
8WH diode terminals

Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Terminal size 2.5 mm²							
 8WH2003-5DF00	**Diode terminals, terminal size 2.5 mm², with three clamping points** • Uninterrupted limiting current: 0.5 A • Blocking voltage: 1300 V • Terminal width 5.2 mm • c UL us • Connection data - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 - I = the maximum current is determined by the diode - U = 500 V • With integrated diode • Integrated: diode 1N 4007						
 I201_12712 8WH2003-5DF00	Versions • Let-through from left to right		**8WH2003-5DF00**		1	50 units	1BT
 I201_12713 8WH2003-5CF00	• Let-through from right to left		**8WH2003-5CF00**		1	50 units	1BT
Accessories							
8WH9070-0GA00	**Compartment partitions, for terminal size 1.5 ... 4 mm² and three clamping points**		**8WH9070-0GA00**		100	50 units	1BT
8WH9000-4GA00	**Covers, for terminal size 1.5 ... 2.5 mm² and three clamping points**		**8WH9000-4GA00**		100	50 units	1BT
8WH9000-0GA00	**Cover segments, for terminal sizes 1.5 and 2.5 mm² and three clamping points**		**8WH9000-0GA00**		100	10 units	1BT

For general accessories for 8WH terminal blocks, see page 19/41

* You can order this quantity or a multiple thereof.

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Overview

Two-tier diode terminals can be used together with different versions to implement many different wiring tasks.

The following circuits are possible in the tightest spaces:

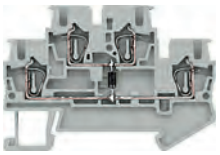
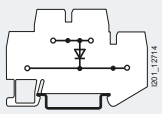
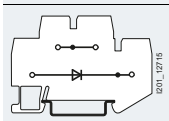
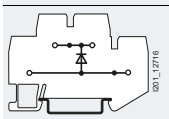
- Freewheel diode circuits
- Lamp test circuits
- Signaling and fault signaling circuits

The clamping points of two-tier terminals can be inscribed with flat labels.

Technical specifications

8WH2020-	5AF00, 5DF00, 5BF00	5HF00, 5FF00, 5KF00 5EF00, 5GF00	5JF30, 5JF80
Dimensions			
• Width/length/cover width in mm	5.2 / 67.5 / 2.2		
• Height (NS 35/7.5 / NS 35/15) in mm	47.5 / 55		
Technical specifications acc. to IEC/ DIN VDE			
• Max. load current in A (not via diodes) / cross-section in mm²	26 / 4		
• Rated impulse withstand voltage in kV / pollution degree	4 / 3		
• Overvoltage category / molded plastic group	III / I		
Connection capacities			
• Flexible with end sleeve, with plastic sleeve in mm²	0.25 ... 2.5		
• Flexible with end sleeve, without plastic sleeve in mm²	0.25 ... 2.5		
• Flexible with two-wire connection end sleeve, with plastic sleeve in mm²	0.5		
Stripped length in mm	10		
Plug gauge (IEC 60947-1)	A3		
Molded plastic type	PA		
• Flammability Class acc. to UL 94	V0		
Approval data (UL/cUL and CSA)			
• Rated voltage / rated current / conductor sizes			
- UL/cUL: in V / A / AWG	300 / 20 / 26 ... 12		
- CSA: in V / A / AWG	300 / 20 / 26 ... 12		

Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
	General data cULus						
Terminal size 2.5 mm²							
 8WH2020-5AF00	**Two-tier diode terminals, size 2.5 mm², with one diode** • Terminal width 5.2 mm • Connection data - Rigid 0.08 ... 4 mm², flexible 0.08 ... 2.5 mm², AWG 28-12 - I = 26 A, U = 500 V • Maximum current determined by diode • Integrated: diode 1N 4007 - Blocking voltage: 1300 V, uninterrupted limiting current: 0.5 A						
	Circuit diagram / Versions						
	 Let-through from top to bottom		8WH2020-5AF00		1	50 units	1BT
	 Let-through from bottom left to top right		8WH2020-5DF00		1	50 units	1BT
	 Let-through from bottom to top		8WH2020-5BF00		1	50 units	1BT

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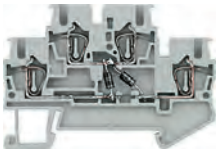
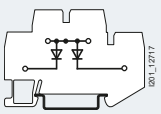
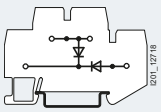
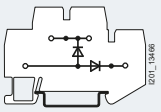
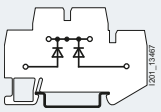
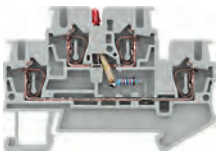
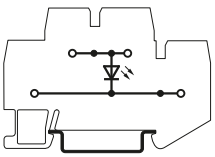
8WH two-tier diode terminals

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
 8WH2020-5HF00	**Two-tier-diode terminals, terminal size 2.5 mm², with two diodes** • Terminal width 5.2 mm • Connection data - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 - I = 26 A, U = 500 V • Maximum current determined by diode • Integrated: diode 1N 4007 - Blocking voltage: 1300 V - Uninterrupted limiting current: 0.5 A						
	Circuit diagram: 		Versions: Let-through from top to bottom left and from top to bottom right		**8WH2020-5HF00**	1	50 units 1BT
			Let-through from top to bottom left and from bottom right to bottom left		**8WH2020-5KF00**	1	50 units 1BT
			Let-through from bottom left to top and from bottom left to bottom right		**8WH2020-5EF00**	1	50 units 1BT
			Let-through from bottom left to top and from bottom right to top		**8WH2020-5GF00**	1	50 units 1BT
 8WH2020-5JF30	**Two-tier diode terminals, terminal size 2.5 mm², with LED** • Terminal width 5.2 mm • Connection data - Rigid 0.08 ... 4 mm² - Flexible 0.08 ... 2.5 mm² - AWG 28-12 - I = 26 A - U = 500 V						
	Versions						
	• 15 ... 30 V DC / 2.5 ... 7.5 A				**8WH2020-5JF30**	1	50 units 1BT
 8WH2020-5JF30	• 110 ... 230 V AC/DC / 0.5 ... 1.0 A (glow lamp)				**8WH2020-5JF80**	1	50 units 1BT
Accessories							
8WH9070-0BA00	**Compartment partitions, for terminal size 1.5 ... 4 mm²**				**8WH9070-0BA00**	100	50 units 1BT
8WH9000-1VA00	**Covers, for terminal sizes 1.5 and 2.5 mm²**				**8WH9000-1VA00**	100	50 units 1BT

For general accessories for 8WH terminal blocks, see page 19/41

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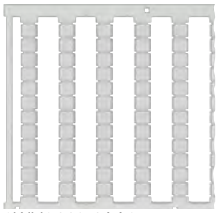
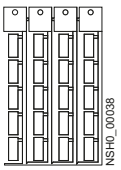
Selection and ordering data

Labeling system for individual inscription

Labeling systems for
- Terminal blocks
- Modular installation devices
- Circuit breakers
- Switch disconnector

Available from:
Murrplastik Systemtechnik GmbH
Postfach 1143
D-71570 Oppenweiler, Germany
Telephone: + 49 (0) 7191-482-0
e-mail: info@murrplastik.de

Accessories for labeling system

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
 8WH8113-1AA05	**Blank labels for 8WH8 terminal blocks**						
	Versions						
	• Front						
	- For 4.2 mm terminal width (WIN 97)		**8WH8112-1AA05**		100	1024 units	1BT
	- For 5.2 and 6.2 mm terminal width (WIN 88)		**8WH8112-2AA05**		100	1400 units	1BT
	- For 8.2, 10, 12 and 16 mm terminal width (WIN 40)		**8WH8112-4AA05**		100	1000 units	1BT
	• Flat						
	- For terminal width of 4.2 mm (WIN 180), 5.2 mm (WIN 182), 6.2 mm (WIN 184), 8.2 mm (WIN 186) and 10 mm (WIN 188)		**8WH8113-1AA05**		100	2000 units	1BT
	- For 12 and 16 mm terminal width (WIN 46Z)		**8WH8113-6AA05**		100	1080 units	1BT
	**Snap-on device labels**						
	For identification of, e.g. • Circuit breakers • Contactors • Control systems						
	Versions						
	• 20 x 7 mm, white, snap-on hooks at side (WIN 95)		**8WH8210-0AA55**		100	340 units	1BT
	• 20 x 7 mm, turquoise, snap-on hooks at side (WIN 95)		**8WH8210-0AA56**		100	340 units	1BT
	Adhesive device labels						
	For identification of, e.g. • Modular installation devices • Switch disconnectors						
	Versions						
	• 15 x 6 mm, white (WIN 098)		**8WH8210-0AA35**		100	3740 units	1BT
	• 15 x 6 mm, yellow (WIN 099)		**8WH8210-0AA36**		100	3740 units	1BT
	• 19 x 8 mm, white (WIN 088)		**8WH8210-0AA45**		100	2700 units	1BT
	• 19 x 8 mm, yellow (WIN 082)		**8WH8210-0AA46**		100	2700 units	1BT

Note:

The inscription labels can be inscribed with Murrplastik labeling systems or by hand.

The WIN designation facilitates assignment in the inscription software.

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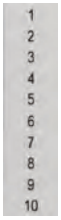
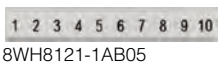
Standard labeling system

Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8WH8120-1AB05	**Labels, front, for terminal width 4.2 mm and terminal size 1.5 mm² (excluding 8WH3), horizontal labeling**						
	Versions						
	• Consecutive numbering		**8WH8120-1A□□□**		100	100 units	1BT
	- 1 ... 10 (10×)		**B05**				
	- 11 ... 20 (10×)		**B15**				
	- 21 ... 30 (10×)		**B25**				
	- 31 ... 40 (10×)		**B35**				
	- 41 ... 50 (10×)		**B45**				
	- 51 ... 60 (10×)		**B55**				
	- 61 ... 70 (10×)		**B65**				
	- 71 ... 80 (10×)		**B75**				
	- 81 ... 90 (10×)		**B85**				
	- 91 ... 100 (10×)		**C05**				
	• Custom inscription		**8WH8120-1XA05**		100	100 units	1BT
 8WH8140-1AB05	**Labels, front, for terminal width 4.2 mm and terminal size 1.5 mm² (excluding 8WH3), vertical labeling**						
	Versions						
	• Consecutive numbering		**8WH8140-1A□□□**		100	100 units	1BT
	- 1 ... 10 (10×)		**B05**				
	- 11 ... 20 (10×)		**B15**				
	- 21 ... 30 (10×)		**B25**				
	- 31 ... 40 (10×)		**B35**				
	• Custom inscription		**8WH8140-1XA05**		100	100 units	1BT
8WH8110-1AA05	**Labels, front, for terminal width 4.2 mm and terminal size 1.5 mm² (excluding 8WH3), blank**		**8WH8110-1AA05**		100	100 units	1BT
 8WH8121-1AB05	**Labels, flat, for terminal width 4.2 mm and terminal size 1.5 mm² (excluding 8WH3), horizontal labeling**						
	Versions						
	• Consecutive numbering		**8WH8121-1A□□□**		100	100 units	1BT
	- 1 ... 10 (10×)		**B05**				
	- 11 ... 20 (10×)		**B15**				
	- 21 ... 30 (10×)		**B25**				
	- 31 ... 40 (10×)		**B35**				
	- 41 ... 50 (10×)		**B45**				
	- 51 ... 60 (10×)		**B55**				
	- 61 ... 70 (10×)		**B65**				
	- 71 ... 80 (10×)		**B75**				
	- 81 ... 90 (10×)		**B85**				
	- 91 ... 100 (10×)		**C05**				
	• Custom inscription		**8WH8121-1XA05**		100	100 units	1BT
8WH8141-1AB05	**Labels, flat, for terminal width 4.2 mm and terminal size 1.5 mm² (excluding 8WH3), vertical labeling**						
	Versions						
	• Consecutive numbering		**8WH8141-1A□□□**		100	100 units	1BT
	- 1 ... 10 (10×)		**B05**				
	- 11 ... 20 (10×)		**B15**				
	- 21 ... 30 (10×)		**B25**				
	- 31 ... 40 (10×)		**B35**				
	- 41 ... 50 (10×)		**B45**				
	• Custom inscription		**8WH8141-1XA05**		100	100 units	1BT
8WH8111-1AA05	**Labels, flat, for terminal width 4.2 mm and terminal size 1.5 mm² (excluding 8WH3), blank**		**8WH8111-1AA05**		100	100 units	1BT

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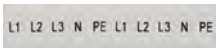
	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8WH8120-2AB05	**Labels, front, for terminal width 5.2 mm and terminal size 2.5 mm² (8WH3: 1.5 mm²), with horizontal inscription**						
	Versions						
	• Consecutive numbering		**8WH8120-2A□□□** ▲▲▲		100	100 units	1BT
	- 1 ... 10 (10×)		**B05**				
	- 11 ... 20 (10×)		**B15**				
	- 21 ... 30 (10×)		**B25**				
	- 31 ... 40 (10×)		**B35**				
	- 41 ... 50 (10×)		**B45**				
	- 51 ... 60 (10×)		**B55**				
	- 61 ... 70 (10×)		**B65**				
	- 71 ... 80 (10×)		**B75**				
	- 81 ... 90 (10×)		**B85**				
	- 91 ... 100 (10×)		**C05**				
 8WH8120-2AA15	• L1/L2/L3/N/PE		**A15**				
	• Custom inscription		**8WH8120-2XA05**		100	100 units	1BT
8WH8140-2AB05	**Labels, front, for terminal width 5.2 mm and terminal size 2.5 mm² (8WH3: 1.5 mm²), with vertical inscription**						
	Versions						
	• Consecutive numbering		**8WH8140-2A□□□** ▲▲▲		100	100 units	1BT
	- 1 ... 10 (10×)		**B05**				
	- 11 ... 20 (10×)		**B15**				
	- 21 ... 30 (10×)		**B25**				
	- 31 ... 40 (10×)		**B35**				
	- 41 ... 50 (10×)		**B45**				
	- 51 ... 60 (10×)		**B55**				
	- 61 ... 70 (10×)		**B65**				
	- 71 ... 80 (10×)		**B75**				
	- 81 ... 90 (10×)		**B85**				
	- 91 ... 100 (10×)		**C05**				
	• Custom inscription		**8WH8140-2XA05**		100	100 units	1BT
8WH8110-2AA05	**Labels, front, for terminal width 5.2 mm and terminal size 2.5 mm² (8WH3: 1.5 mm²), blank**		**8WH8110-2AA05**		100	100 units	1BT
8WH8121-2AB15	**Labels, flat, for terminal width 5.2 mm and terminal size 2.5 mm² (8WH3: 1.5 mm²), with horizontal inscription**						
	Versions						
	• Consecutive numbering		**8WH8121-2A□□□** ▲▲▲		100	100 units	1BT
	- 1 ... 10 (10×)		**B05**				
	- 11 ... 20 (10×)		**B15**				
	- 21 ... 30 (10×)		**B25**				
	- 31 ... 40 (10×)		**B35**				
	- 41 ... 50 (10×)		**B45**				
	- 51 ... 60 (10×)		**B55**				
	- 61 ... 70 (10×)		**B65**				
	- 71 ... 80 (10×)		**B75**				
	- 81 ... 90 (10×)		**B85**				
	- 91 ... 100 (10×)		**C05**				
	• Custom inscription		**8WH8121-2XA05**		100	100 units	1BT
8WH8141-2AB15	**Labels, flat, for terminal width 5.2 mm and terminal size 2.5 mm² (8WH3: 1.5 mm²), with vertical inscription**						
	Versions						
	• Consecutive numbering		**8WH8141-2A□□□** ▲▲▲		100	100 units	1BT
	- 1 ... 10 (10×)		**B05**				
	- 11 ... 20 (10×)		**B15**				
	- 21 ... 30 (10×)		**B25**				
	- 31 ... 40 (10×)		**B35**				
	- 41 ... 50 (10×)		**B45**				
	- 51 ... 60 (10×)		**B55**				
	- 61 ... 70 (10×)		**B65**				
	- 71 ... 80 (10×)		**B75**				
	- 81 ... 90 (10×)		**B85**				
	- 91 ... 100 (10×)		**C05**				
	• Custom inscription		**8WH8141-2XA05**		100	100 units	1BT
8WH8111-2AA05	**Labels, flat, for terminal width 5.2 mm and terminal size 2.5 mm² (8WH3: 1.5 mm²), blank**		**8WH8111-2AA05**		100	100 units	1BT

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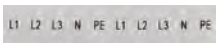
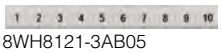
Standard labeling system

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8WH8120-3AB05	**Labels, front, for terminal width 6.2 mm and terminal size 4 mm² (8WH3: 2.5 mm²), with horizontal inscription**						
	Versions						
	• Consecutive numbering		**8WH8120-3A□□□**		100	100 units	1BT
	- 1 ... 10 (10×)		**B05**				
	- 11 ... 20 (10×)		**B15**				
	- 21 ... 30 (10×)		**B25**				
	- 31 ... 40 (10×)		**B35**				
	- 41 ... 50 (10×)		**B45**				
	- 51 ... 60 (10×)		**B55**				
	- 61 ... 70 (10×)		**B65**				
	- 71 ... 80 (10×)		**B75**				
	- 81 ... 90 (10×)		**B85**				
	- 91 ... 100 (10×)		**C05**				
 8WH8120-3AA15	• L1/L2/L3/N/PE		**A15**				
8WH8120-3AA25	• U/V/W/N/grounding		**A25**				
	• Custom inscription		**8WH8120-3XA05**		100	100 units	1BT
8WH8140-3AB05	**Labels, front, for terminal width 6.2 mm and terminal size 4 mm² (8WH3: 2.5 mm²), with vertical inscription**						
	Versions						
	• Consecutive numbering		**8WH8140-3A□□□**		100	100 units	1BT
	- 1 ... 10 (10×)		**B05**				
	- 11 ... 20 (10×)		**B15**				
	- 21 ... 30 (10×)		**B25**				
	- 31 ... 40 (10×)		**B35**				
	- 41 ... 50 (10×)		**B45**				
	- 51 ... 60 (10×)		**B55**				
	- 61 ... 70 (10×)		**B65**				
	- 71 ... 80 (10×)		**B75**				
	- 81 ... 90 (10×)		**B85**				
	- 91 ... 100 (10×)		**C05**				
	• Custom inscription		**8WH8140-3XA05**		100	100 units	1BT
8WH8110-3AA05	**Labels, front, for terminal width 6.2 mm and terminal size 4 mm² (8WH3: 2.5 mm²), blank**		**8WH8110-3AA05**		100	100 units	1BT
 8WH8121-3AB05	**Labels, flat, for terminal width 6.2 mm and terminal size 4 mm² (8WH3: 2.5 mm²), with horizontal inscription**						
	Versions						
	• Consecutive numbering		**8WH8121-3A□□□**		100	100 units	1BT
	- 1 ... 10 (10×)		**B05**				
	- 11 ... 20 (10×)		**B15**				
	- 21 ... 30 (10×)		**B25**				
	- 31 ... 40 (10×)		**B35**				
	- 41 ... 50 (10×)		**B45**				
	- 51 ... 60 (10×)		**B55**				
	- 61 ... 70 (10×)		**B65**				
	- 71 ... 80 (10×)		**B75**				
	- 81 ... 90 (10×)		**B85**				
	- 91 ... 100 (10×)		**C05**				
	• Custom inscription		**8WH8121-3XA05**		100	100 units	1BT
8WH8141-3AB05	**Labels, flat, for terminal width 6.2 mm and terminal size 4 mm² (8WH3: 2.5 mm²), with vertical inscription**						
	Versions						
	• Consecutive numbering - 1 ... 10 (10×)		**8WH8141-3AB05**		100	100 units	1BT
	• Custom inscription		**8WH8141-3XA05**		100	100 units	1BT
8WH8111-3AA05	**Labels, flat, for terminal width 6.2 mm and terminal size 4 mm² (8WH3: 2.5 mm²), blank**		**8WH8111-3AA05**		100	100 units	1BT

* You can order this quantity or a multiple thereof.

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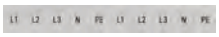
	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8WH8120-4AB05	**Labels, front, for terminal width 8.2 mm and terminal size 6 mm², with horizontal inscription**						
	Versions						
 8WH8120-4AA15	• Consecutive numbering		**8WH8120-4A□□□**		100	100 units	1BT
	- 1 ... 10 (10×)		**B05**				
	- 11 ... 20 (10×)		**B15**				
	- 21 ... 30 (10×)		**B25**				
	- 31 ... 40 (10×)		**B35**				
	- 41 ... 50 (10×)		**B45**				
	- 51 ... 60 (10×)		**B55**				
	- 61 ... 70 (10×)		**B65**				
	- 71 ... 80 (10×)		**B75**				
	- 81 ... 90 (10×)		**B85**				
	- 91 ... 100 (10×)		**C05**				
	• L1/L2/L3/N/PE		**A15**				
	• Custom inscription		**8WH8120-4XA05**		100	100 units	1BT
8WH8140-4AB05	**Labels, front, for terminal width 8.2 mm and terminal size 6 mm², with vertical inscription**						
	Versions						
	• Consecutive numbering		**8WH8140-4A□□□**		100	100 units	1BT
	- 1 ... 10 (10×)		**B05**				
	- 11 ... 20 (10×)		**B15**				
	- 21 ... 30 (10×)		**B25**				
	• Custom inscription		**8WH8140-4XA05**		100	100 units	1BT
8WH8110-4AA05	**Labels, front, for terminal width 8.2 mm and terminal size 6 mm², blank**		**8WH8110-4AA05**		100	100 units	1BT
8WH8121-4AB05	**Labels, flat, for terminal width 8.2 mm and terminal size 6 mm², with horizontal inscription**						
	Versions						
	• Consecutive numbering		**8WH8121-4A□□□**		100	100 units	1BT
	- 1 ... 10 (10×)		**B05**				
	- 11 ... 20 (10×)		**B15**				
	- 21 ... 30 (10×)		**B25**				
	• Custom inscription		**8WH8121-4XA05**		100	100 units	1BT
	Labels, flat, for terminal width 8.2 mm and terminal size 6 mm², with vertical inscription						
	Versions						
	• Consecutive numbering		**8WH8141-4A□□□**		100	100 units	1BT
	- 1 ... 10 (10×)		**B05**				
	- 11 ... 20 (10×)		**B15**				
	- 21 ... 30 (10×)		**B25**				
	• Custom inscription		**8WH8141-4XA05**		100	100 units	1BT
8WH8111-4AA05	**Labels, flat, for terminal width 8.2 mm and terminal size 6 mm², blank**		**8WH8111-4AA05**		100	100 units	1BT

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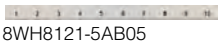
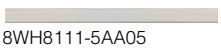
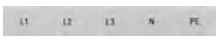
Standard labeling system

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8WH8120-5AB05	**Labels, front, for terminal width 10 and 12 mm and terminal sizes 10 and 16 mm², with horizontal inscription**						
	Versions						
8WH8120-5AA15	• Consecutive numbering		**8WH8120-5A□□□** ▲▲▲		100	100 units	1BT
	- 1 ... 10 (10×)		**B05**				
	- 11 ... 20 (10×)		**B15**				
8WH8120-5AA25	- 21 ... 30 (10×)		**B25**				
	- 31 ... 40 (10×)		**B35**				
	• L1/L2/L3/N/PE		**A15**				
	• U/V/W/N/grounding		**A25**				
	• Custom inscription		**8WH8120-5XA05**		100	100 units	1BT
8WH8140-5AB05	**Labels, front, for terminal width 10 and 12 mm and terminal sizes 10 and 16 mm², with vertical inscription**						
	Versions						
	• Consecutive numbering		**8WH8140-5A□□□** ▲▲▲		100	100 units	1BT
	- 1 ... 10 (10×)		**B05**				
	- 11 ... 20 (10×)		**B15**				
	- 21 ... 30 (10×)		**B25**				
	- 31 ... 40 (10×)		**B35**				
	• Custom inscription		**8WH8140-5XA05**		100	100 units	1BT
8WH8110-5AA05	**Labels, front, for terminal width 10 and 12 mm and terminal sizes 10 and 16 mm², blank**		**8WH8110-5AA05**		100	100 units	1BT
 8WH8121-5AB05	**Labels, flat, for terminal width 10 and 12 mm and terminal sizes 10 and 16 mm², with horizontal inscription**						
	Versions						
	• Consecutive numbering		**8WH8121-5A□□□** ▲▲▲		100	100 units	1BT
	- 1 ... 10 (10×)		**B05**				
	- 11 ... 20 (10×)		**B15**				
	- 21 ... 30 (10×)		**B25**				
	• Custom inscription		**8WH8121-5XA05**		100	100 units	1BT
8WH8141-5AB05	**Labels, flat, for terminal width 10 and 12 mm and terminal sizes 10 and 16 mm², with vertical inscription**						
	Versions						
	• Consecutive numbering						
	- 1 ... 10 (10×)		**8WH8141-5AB05**		100	100 units	1BT
	• Custom inscription		**8WH8141-5XA05**		100	100 units	1BT
 8WH8111-5AA05	**Labels, flat, for terminal width 10 and 12 mm and terminal sizes 10 and 16 mm², blank**		**8WH8111-5AA05**		100	100 units	1BT
 8WH8120-7AA15	**Labels, front, for terminal width 16 mm and terminal size 35 mm², with horizontal inscription**						
	Versions						
	• L1/L2/L3/N/PE		**8WH8120-7AA15**		100	100 units	1BT
	• Custom inscription		**8WH8120-7XA05**		100	100 units	1BT
	Labels, front, for terminal width 16 mm and terminal size 35 mm², with vertical custom inscription		**8WH8140-7XA05**		100	100 units	1BT
8WH8110-7AA05	**Labels, front, for terminal width 16 mm and terminal size 35 mm², blank**		**8WH8110-7AA05**		100	100 units	1BT
	Labels, flat, for terminal width 16 mm and terminal size 35 mm², blank		**8WH8111-7AA05**		100	100 units	1BT

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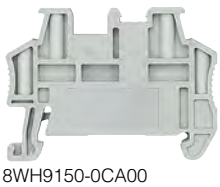
Selection and ordering data

	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
8WH9010-0DB02	**Lateral mounting test plugs** For individual assembly of test plug connectors Versions • For terminal width 5.2 mm and terminal size 2.5 mm² 1) • For terminal width 6.2 mm and terminal size 6 mm² 1) 1) Except 8WH3		**8WH9010-0EB02** **8WH9010-0FB02**		1 1	10 units 10 units	1BT 1BT
8WH9010-2AA02	**Spacer plates** For skipping single terminals for individual test adapter assembly Versions • For terminal width 5.2 mm and terminal size 2.5 mm² 1) • For terminal width 6.2 mm and terminal size 6 mm² 1) 1) Except 8WH3		**8WH9010-2BA02** **8WH9010-2CA02**		1 1	10 units 10 units	1BT 1BT
8WH9150-1CA00	**Terminal strip markers, for end retainers** • Height-adjustable • For quick-fit end retainers • Inscription possible with terminal strip marker or two labels, front, for terminal width 10.2 mm • Labeling field size: 20 x 8 mm		**8WH9150-1CA00**		1	100 units	1BT
8WH9010-0JB00	**Test adapters** • For 4 mm ∅ PS test plugs and 4 mm ∅ safety test plugs • Makes contact in the bridge slot		**8WH9010-0JB00**		1	10 units	1BT
8WH9020-0FC10	**Reducing combs** Versions • For bridging of a through-type terminal, terminal size 2.5 or 4 mm² - For a through-type terminal, terminal size 1.5 mm² - For a through-type terminal, terminal size 6 mm² - For a through-type terminal, terminal size 10 mm² - For a through-type terminal, terminal size 16 mm² - For a through-type terminal, terminal size 35 mm² • For bridging of a through-type terminal, terminal size 16 mm² - For a through-type terminal, terminal size 35 mm² Note Not for 8WH1 through-type terminals and 8WH3 insulation displacement terminals.		**8WH9020-0CC10** **8WH9020-0FC10** **8WH9020-0AC10** **8WH9020-0BC10** **8WH9020-0EC10** **8WH9020-0DC10**		1 1 1 1 1 1	10 units 10 units 10 units 10 units 10 units 10 units	1BT 1BT 1BT 1BT 1BT 1BT
 8WH9150-0CA00	**Quick-fit end retainers** For inscription with front labels, for terminal width 5.2 mm and terminal strip markers		**8WH9150-0CA00**		1	50 units	1BT

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Mounting accessories

8WH9200-0AA00

8WH9020-6AC10

Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
Screwdrivers For actuating the tension spring						
Versions						
• 0.4 × 2.5 mm		8WH9200-0AA00		1	10 units	1BT
• 0.6 × 3.5 mm		8WH9200-0AB00		1	10 units	1BT
• 0.8 × 4.0 mm		8WH9200-0AC00		1	10 units	1BT
• 1.0 × 5.5 mm		8WH9200-0AD00		1	10 units	1BT
Connecting combs						
Versions	Max. load current I_{max}					
• For terminal width 4.2 mm and terminal size 1.5 mm² (excluding 8WH3)	17.5 A					
- 2-pole		8WH9020-6AC10		1	50 units	1BT
- 3-pole		8WH9020-6AD10		1	50 units	1BT
- 4-pole		8WH9020-6AE10		1	50 units	1BT
- 5-pole		8WH9020-6AF10		1	50 units	1BT
- 10-pole		8WH9020-6AL10		1	10 units	1BT
- 20-pole		8WH9020-6AS10		1	10 units	1BT
• For terminal width 5.2 mm and terminal size 2.5 mm² (for 8WH3: 1.5 mm²)	24 A					
- 2-pole		8WH9020-6BC10		1	50 units	1BT
- 3-pole		8WH9020-6BD10		1	50 units	1BT
- 4-pole		8WH9020-6BE10		1	50 units	1BT
- 5-pole		8WH9020-6BF10		1	50 units	1BT
- 10-pole		8WH9020-6BL10		1	10 units	1BT
- 20-pole		8WH9020-6BS10		1	10 units	1BT
- 50-pole		8WH9020-6BT10		1	10 units	1BT
• For terminal width 6.2 mm and terminal size 4 mm² (for 8WH3: 2.5 mm²)	32 A					
- 2-pole		8WH9020-6CC10		1	50 units	1BT
- 3-pole		8WH9020-6CD10		1	50 units	1BT
- 4-pole		8WH9020-6CE10		1	50 units	1BT
- 5-pole		8WH9020-6CF10		1	50 units	1BT
- 10-pole		8WH9020-6CL10		1	10 units	1BT
- 20-pole		8WH9020-6CS10		1	10 units	1BT
- 50-pole		8WH9020-6CT10		1	10 units	1BT
• For terminal width 8.2 mm and terminal size 6 mm²	41 A					
- 2-pole		8WH9020-6DC10		1	10 units	1BT
- 3-pole		8WH9020-6DD10		1	10 units	1BT
- 4-pole		8WH9020-6DE10		1	10 units	1BT
- 5-pole		8WH9020-6DF10		1	10 units	1BT
- 10-pole		8WH9020-6DL10		1	10 units	1BT
• For terminal width 10 mm and terminal size 10 mm², 2-pole,	57 A	8WH9020-6EC10		1	10 units	1BT
• For terminal width 12 mm and terminal size 16 mm², 2-pole	76 A	8WH9020-6FC10		1	10 units	1BT
• For terminal width 16 mm and terminal size 35 mm², 2-pole	101 A	8WH9020-6GC10		1	10 units	1BT

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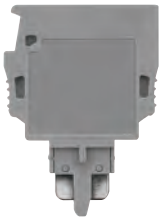
	Version	DT	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG
	Plug-in zone connectors, for isolating terminals						
	Versions						
8WH9040-0DB04	• Isolating plugs - Orange		**8WH9040-0DB04**		1	50 units	1BT
8WH9020-8AB00	• Through-type connectors - Gray - I_{max}: 16 A		**8WH9020-8AB00**		1	50 units	1BT
8WH9040-3AB08	• Fused connectors - Black - I_{max}: 6.3 A - For inscription with labels, flat, for terminal width 6.2 mm - G fuses 5 x 20 mm						
	Versions						
	- With LED display for 12 to 30 V, 1 ... 2.5 mA		**8WH9040-3AB08**		1	10 units	1BT
	- With LED display for 110 to 250 V, 0.5 ... 2.5 mA		**8WH9040-3CB08**		1	10 units	1BT
	- Without LED display		**8WH9040-3DB08**		1	10 units	1BT
	Note						
	• The G fuse holders must be selected according to the maximum power loss (heat dissipation) of the G fuse links. Depending on the application and method of installation, the heat rise conditions in closed fuse holders must be tested. • Higher ambient temperatures represent an additional load for the fuse links. Hence in such cases of application it is necessary to allow in addition for adjustment of the rated current.						
 8WH9040-0BB00	• Component connectors - I_{max}: 6 A, depending on the power loss of the components, max. 1 W for stand-alone arrangement - For inscription with labels, flat, for terminal width 5.2 mm		**8WH9040-0BB00**		1	10 units	1BT

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Notes

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20/12	**Standards and approvals**
20/14	**Siemens contacts**
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Catalog notes

Overview

Trademarks

All product designations may be registered trademarks or product names of
Siemens AG or supplier companies whose use by third parties for their own purposes may violate the rights of the owner.

Amendments

Unless stated otherwise on the individual pages of this catalog, we reserve the right to make changes, in particular to the specified values, measurements and weights.

Dimensions

All dimensions are in mm.

Illustrations

The illustrations are not binding.

Technical data

The technical specifications are for general information purposes only. Always heed the operating instructions and notices on individual products during assembly, operation and maintenance.

Further technical information is available at
www.siemens.com/lowvoltage/product-support

- under "Entry type":
  - Application example
  - Certificate
  - Characteristic
  - Download
  - FAQ
  - Manual
  - Product note
  - Software archive
  - Technical data

Configurators can be found under
www.siemens.com/lowvoltage/configurators

Assembly, operation and maintenance

Always heed the operating instructions and notices on individual products during assembly, operation and maintenance.

Symbols

In the table below, you will find all symbols concerning connections that can occur in this catalog. In combination with orange highlighting, these identify special selection criteria.

Connections	
	Screw connection
	Ring cable lug connection
	Spring-loaded terminals

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Logistics

General

With regard to delivery service, communications and environmental protection, our logistics service ensures "quality from the moment of ordering right through to delivery". By designing our infrastructure according to customer requirements and implementing electronic order processing, we have successfully optimized our logistics processes.

We are proud of our personal consulting service, on-time deliveries and 1-day transport within Germany.

To this end, we supply preferred types marked with ► ex works.

We regard the DIN ISO 9001 certification and consistent quality checks as an integral part of our services.

Electronic order processing is fast, cost-efficient and error-free. Please contact us if you want to benefit from these advantages.

Packaging, packing units

The packaging in which our equipment is dispatched provides protection against dust and mechanical damage during transport, thus ensuring that all our products arrive in perfect condition.

We select our packaging for maximum environmental compatibility and reusability (e.g. crumpled paper for protection during transport in packages up to 32 kg) and, in particular, with a view to reducing waste.

With our multi-unit and reusable packaging, we offer you specific types of packaging that are both kind to the environment and tailored to your requirements:

Your advantages at a glance:

- Lower ordering costs.
- Cost savings through same-material type packaging: Low/no disposal costs.
- Reduced time and cost thanks to short unpacking times.
- "Just-in-time" delivery directly to the production line helps reduce stock: Cost savings through reduction of storage areas.
- Fast assembly thanks to supply in sets.
- Standard Euro boxes - corresponding to the Euro pallet modular system - suitable for most conveyor systems.
- Active contribution to environmental protection.

Unless stated otherwise in the "Selection and ordering data" of this catalog, our products are supplied individually packed.

For small parts/accessories, we offer you cost-effective packaging units as standard packs containing more than one item, e.g. 5, 10, 50 or 100 units. It is essential that whole number multiples of these quantities be ordered to ensure satisfactory quality of the products and problem-free order processing.

The products are delivered in a neutral carton. The label includes warning notices, the CE marking, and device descriptions in English and German.

In addition to the Article No. (MLFB) and the number of items in the packaging, the operating instructions order number (Instr.-Order-No.) is also specified. They can be obtained from your local Siemens representative (you will find a list at www.siemens.com/automation/partner).

Most device Article No.'s can be obtained by means of the EAN barcode to simplify ordering and storage logistics.

The associated master data, too, is available from your local Siemens representative.

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Ordering notes

Overview

Ordering special versions

When ordering products that differ from the standard versions listed in the catalog, **"–Z"** must be added to the Article No. indicated and the required features must be specified using alphanumeric order codes or plain text.

Ordering very small quantities

When very small orders are placed, the costs associated with order processing are greater than the order value. We therefore recommend that you combine several small orders. Where this is not possible, we regret that we are obliged to make a small processing charge: for orders with a net goods value of less than € 250 we charge an € 20 supplement to cover our order processing and invoicing costs.

Explanations of Selection and Ordering Data

Delivery time class (DT)

DT	Meaning
►	Preferred type
A	Two working days
B	One week
C	Three weeks
D	Six weeks
X	On request

Preferred types are device types that can be delivered immediately ex works, i.e. they are dispatched within 24 hours.

If ordered in normal quantities, the products are usually delivered within the specified delivery times, calculated from the date we receive your order.

In exceptional cases, delivery times may vary from those specified.

The delivery times are valid ex works from Siemens AG (products ready for dispatch).

Shipping times depend on the destination and the method of shipping. The standard shipping time for Germany is one day.

The specified delivery times are correct at the time of going to print and are subject to constant optimization. Up-to-date information can be found at www.siemens.com/industrymall.

Price units (PU)

The price unit defines the number of units, sets or meters to which the specified price and weight apply.

PS/P. unit (packaging size/packaging unit)

The packaging size/packaging unit defines the number, e.g. of units, sets or meters, contained within outer packaging:

- The **first digit** in the PS/P. unit column (packaging size/packaging unit) indicates the minimum order quantity. You can only order this specified quantity or a multiple thereof.
- The **second digit** in the PS/P. unit column (packaging size/packaging unit) specifies the number of units contained within the outer packaging (e.g. in a carton). You must order this quantity or a multiple thereof if you want the items to be delivered in discrete packaging quantities.

Examples:

PS/P. unit	Meaning
1 unit	You can order one item or a multiple thereof.
5 units	Five units are packed in a bag, for example. Because the bags cannot be opened, you can only order a multiple of the quantity contained in the bag: 5, 10, 15, 20 etc.
5/100 units	One carton contains (for example) 20 bags, each containing 5 units, i.e. a total of 100 units. If only cartons are available for delivery, you need to order a multiple of the carton quantity: 100, 200, 300, etc. Ordering a quantity of 220 units would result in the following delivery: two cartons, each containing 100 units (= 200 units) and 4 bags, each containing 5 units (= 20 units).
1 set	A set comprises a defined number of different parts.

Price group (PG)

Each product is allocated to a price group.

Weight

The defined weight is the net weight in kg and refers to the price unit (PU).

Examples

DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS/ P. unit	PG	Weight per PU approx. kg
►	**3NW7013**		1	1/12 units	1BM	0.076

DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS/ P. unit	PG
	3VA1196-3ED26-0AA0		1	1 unit	1CB

DT: Preferred type
PU: One unit (on which price is based)
PS/P. unit: 1 = minimum order quantity / 12 = quantity per carton
PG: 1BM
Weight per PU: 76 g, always given in kg

PU: One unit (on which price is based)
PS/P. unit: 1 = minimum order quantity
PG: 1CB

Note:

The article numbers shown here are examples only. They are not necessarily included in this catalog, nor is it essential that their specifications regarding selection and ordering data be up to date. When ordering, always use the selection and ordering data.

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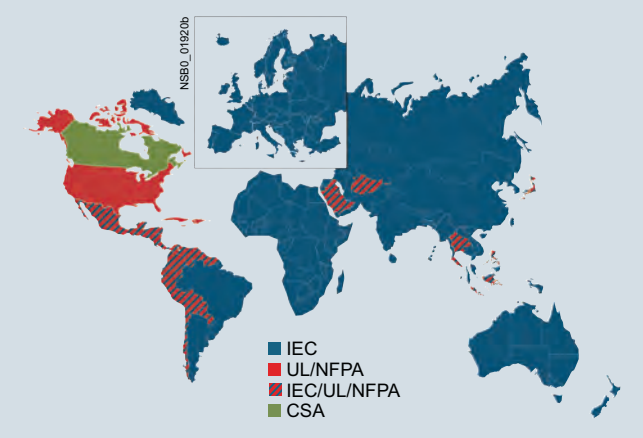
Low-voltage power distribution and electrical installation technology. The secrets of UL. You have our support.



Application range

We support you where UL is concerned

Product liability laws in the USA are significantly stricter than in Europe. Anybody wishing to export their products to North America is strongly advised to have them certified to UL standards, particularly where electrical equipment is concerned. We can help you with our comprehensive know-how and broad portfolio of UL-certified low-voltage controls.

Who or what is UL?

UL (Underwriters Laboratories Inc.®) is one of the world's leading organizations involved in product safety testing and certification. This independent, non-profit making US-based organization was founded in 1894 by American fire insurance groups, with the intention of investigating the fire hazards presented by electrical devices.

Today, UL checks and certifies the operational safety of all kinds of materials, components and end products, particularly with regard to the possibility of personal injury and the development of fires. There are branches in numerous European countries. You can obtain more detailed information about this US organization, as well as options for contacting the numerous branches throughout Europe, on the Internet at www.ul.com.

Differences between UL and IEC

The IEC standards for the IEC market merely define the minimum safety requirements for a device or system. The technical details relating to how safety requirements are to be implemented in practice remain a matter for the manufacturer.

By contrast, the guidelines for the US market are much more specific. Depending on the standard, the entire process may require monitoring – from product design and manufacture, to application and installation, right through to operation.

NFPA79 is the electrical standard for industrial machinery outside the control cabinet. As such it differs from and is the counterpart to the control cabinet standard UL 508A.

A UL partner since 1969

Enlisting the expertise of a competent partner such as Siemens is a wise option for anyone who wishes to avoid unnecessary aggravation and save both time and money.

At our electronics plant in Amberg, Germany, which develops and manufactures the entire range of low-voltage controls, we have been collaborating closely with Underwriters Laboratories Inc. since 1969.

Right from the product development stage, we take not only IEC guidelines, but also UL standards, into account. This has resulted in a wide-ranging portfolio of UL-certified low-voltage switchgear, controlgear and protection circuit technology.

We therefore offer comprehensive know-how on the subject of UL certification, ranging from production down to control panel wiring according to UL standards, which we will be pleased to explain to you within the scope of our application consulting service.

Our range of low-voltage controls enables you to play safe where UL is concerned, and allows you to assemble UL-compliant control cabinets quickly and easily.

Cost-effectiveness in the building and operation of switchgear and control cabinets for North America

- Stay flexible for the widest range of solutions and expansions with our comprehensive, coordinated product portfolio, from the infeed of the machine control system to the smallest actuator in the machine.
- Reap the benefits of efficient stock keeping thanks to the universal usability of the products (IEC-UL/CSA).
- Implement a uniform operating and maintenance concept thanks to our standard system.
- Save space and costs with coordinated product interfaces and compact designs.
- Experience easy, efficient local operation thanks to user-friendliness.

UL-certified products

UL-certified products to be found in this catalog include, for example:

- SENTRON protection, switching, measuring and monitoring devices
- SIVACON 8MR system air-conditioning
- ALPHA FIX terminal blocks

In catalog LV 16, you will also find a comprehensive selection of controls and components for applications according to UL.

On the Internet, you will find information on topics including UL standards, UL classifications and a number of technical particularities of UL.

Under "Information Material" → "Standards and Approvals" we have summarized the available products and product groups. A table lists the UL standards to which the products conform and refers to the corresponding UL reports.

For more information see www.siemens.com/applicationconsulting/ul

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ATEX explosion protection

Overview

In many industries the production, processing, transport and storage of combustible substances are prone to the escape of gases, vapors or spray which then find their way into the environment. Other processes produce combustible dust. Together with the oxygen in the air, the result can be a potentially explosive atmosphere which will explode if ignited.

Serious injury to persons and damage to property can result, particularly in the chemical and petrochemical industries, mineral oil and natural gas production, mining, mills (e.g. grain, bulk solids) and many other industrial sectors.

To ensure the maximum possible safety in these areas, legislators in most countries have drawn up requirements in the form of laws, regulations and standards. In the course of globalization, great progress has been made with regard to uniform directives for explosion protection.

With Directive 94/9/EC, the European Union laid the foundations for complete harmonization by requiring that all new devices as from July 1st, 2003 have to be approved in accordance with this directive.

In this catalog, special attention is drawn to devices which comply with the ATEX Directive. However, it does not replace the need for intensive study of the relevant fundamentals and directives when planning and installing electrical systems.

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Low-voltage power distribution and electrical installation technology on the WWW

We regard product support to be just as important as the products and systems themselves.

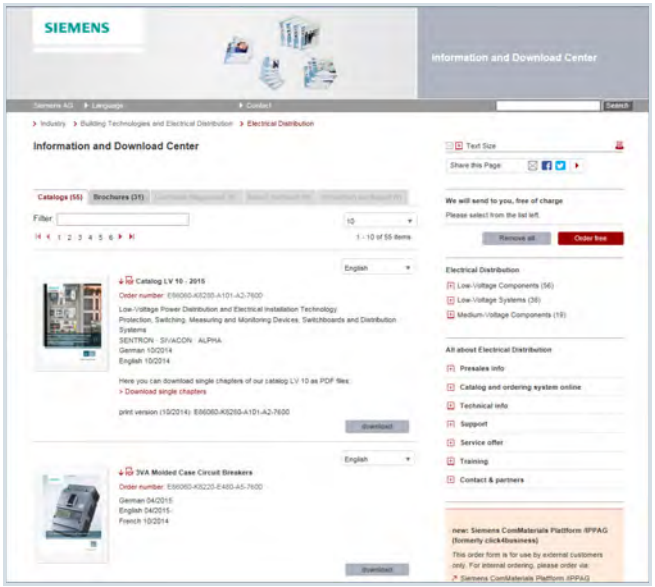
Visit our website for a comprehensive offering of support for low-voltage power distribution and electrical installation products, such as:

- Overview of the entire product portfolio
- Keeping up to date via newsletters, podcasts, blogs and Twitter
- Access to interesting videos on YouTube
- Contact with partners around the world
- Operating instructions and manuals for direct download

and much more - all conveniently and easily accessible.

www.siemens.com/lowvoltage

Information and Download Center



You will find regularly updated information material such as catalogs, customer magazines, brochures and trial versions of software for low-voltage power distribution and electrical installations on the Internet at

www.siemens.com/lowvoltage/infomaterial

Here you can order your copy of the available documentation or download it in common file formats (PDF, ZIP).

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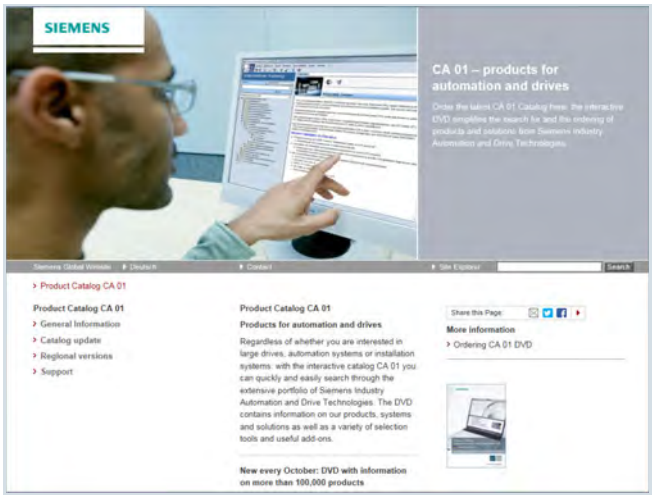
Further documentation

Product selection using the interactive catalog CA 01



Detailed information together with user-friendly interactive functions:

The interactive catalog CA 01 with more than 80,000 products provides a comprehensive overview of the product range from Siemens Industry.

You can find everything you need here for solving automation, switching, installation and drive technology tasks. All information is provided over a user interface that is both user-friendly and intuitive.

After selecting the product of your choice you can order at the press of a button, by fax or by online link.

Information about the interactive catalog CA 01 can be found on the Internet at:

www.siemens.com/automation/ca01

or on DVD.

Industry Mall

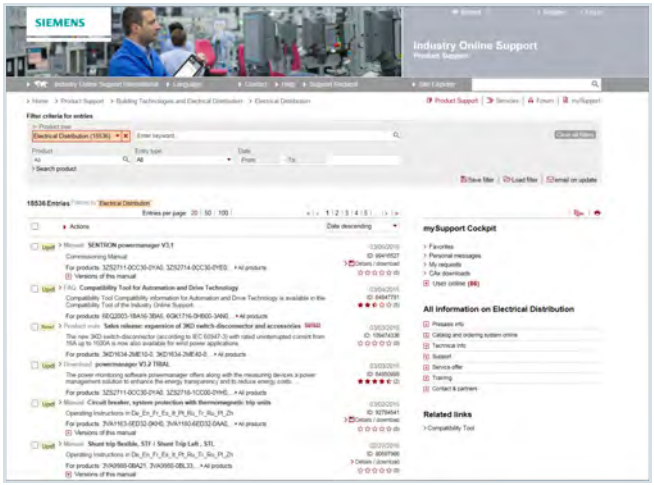
The Industry Mall – for online information, product selection and ordering:

- Detailed information including product data, illustrations, certificates and CAx data
- Simple configuring of systems
- Possible to request individualized quotations
- Availability check
- Online ordering facility
- Order tracking/order overview
- Fast access to relevant training offers and services

You can find the Industry Mall on the Internet at

www.siemens.com/industrymall

Industry Online Support



Comprehensive support – at any time, whatever your location

- FAQs, sample applications, information about successor products and product news
- Prompt assistance with technical queries
- Discussions and best practice sharing with other users in the forum
- Provision of high-quality product data for your planning programs
- Faster access to information – with helpful filter and folder functions in mySupport
- Automatic notification service to keep you up to date with the latest information about topics of interest to you

To find the link to Siemens Industry Online Support, go to

www.siemens.com/lowvoltage/product-support

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Industry Online Support App

Main functions at a glance

- Scanning of product codes (EAN/QR and data matrix codes) with direct display of all technical information on the product, including graphic data (CAx data).
- Delivery of product information or entries by e-mail, so that the information can immediately be processed at the workplace.
- Submission of queries to Technical Support (Support Requests). With photo function for transmitting detailed information.
- Contents and interfaces available in six languages (German, English, French, Italian, Spanish and Chinese) – including option of temporary switchover to English.
- Offline cache function for all favorites stored in "mySupport". These entries can also be retrieved without network reception.
- Import of PDF documents into a library (e.g. iBooks or similar).
- An overview of the main functions can be found at

www.siemens.com/lowvoltage/support-app

Android:

ANDROID APP ON Google play

Industry Online Support App ANDROID

Apple iOS:

Available on the App Store

Industry Online Support App iOS

Windows:

Download from Windows Phone Store

Industry Online Support App WINDOWS 8

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Further documentation

Product configurator

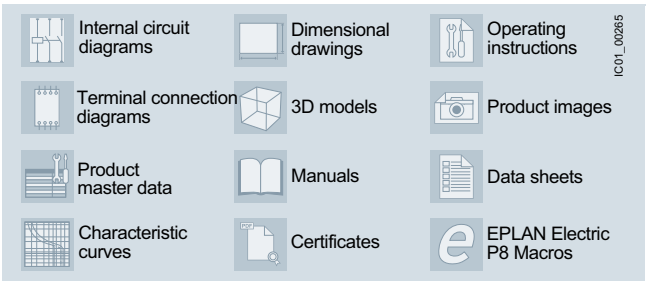
Finding the right product faster

- Complete selection of products and systems based on technical characteristics or application requirements
- Simple, intuitive operation
- Option to save the configuration and order lists in a file format of your choice (txt, pdf, xls, csv)
- Direct transfer of the order list into the shopping cart of the Siemens Industry Mall
- Fast access to product data, diagrams, certificates and CAx data for the selected product and system configuration
- Available in multiple languages for use by customers anywhere in the world

The configurators are available online in the Siemens Industry Mall and offline in Catalog CA 01.
You can find our configurators at the following website:

www.siemens.com/lowvoltage/configurators

CAx Download Manager



You can find the CAx Download Manager on the Internet at

www.siemens.com/lowvoltage/cax

Time savings of up to 80 % with universal product data for your CAE and CAD systems

The CAx Download Manager can supply you with all the necessary CAx file types for the products of your choice for use in all common CAE and CAD systems. The data contained in the files is continuously updated. The whole process involves only four selection steps and is free of charge. All your selected files are packed into a zip file which you can download for further use.

Siemens makes available up to 12 file types to support your mechanical (CAD) and electrical (CAE) planning processes for you to download at any time of the day.

- No manual data collection necessary
- Universal manufacturer data for all common CAE and CAD systems
- Standardized documentation is simple to generate
- Choice of different languages for system commissioning anywhere in the world

My Documentation Manager

In "mySupport" you can compile individual documentation for your project by dragging and dropping

* e.g. Low Voltage Directive 2006/95/EC and EC Machinery Directive 2006/42/EC

You can find My Documentation Manager on the Internet at

www.siemens.com/lowvoltage/mdm

User-friendly compilation of project-specific documentation

In accordance with directives*, the documentation is part of the plant and requires certification, thus giving the purchaser the right to full plant documentation.

To support you in this, a manual configurator has been developed with which you can put together individual and standard-compliant documentation – fully in accordance with the relevant project-specific requirements.

You can thus select the chapters relevant to the respective project from the available manuals of the installed Siemens components. FAQs, certificates, data sheets and your own content can also be incorporated.

- Compile and structure manuals, data sheets, FAQs and certificates simply by dragging and dropping
- Insert personalized content via the Notes function
- Further processing possible thanks to selectable export formats (pdf, xml, rtf)
- After generating the documentation, automatic translation into the desired language is possible
- Always up-to-the minute thanks to the Update function

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Overview

The quality management system of our "Low Voltage & Products" Business Unit in the "Energy Management" Division complies with the international EN ISO 9001 standard.

The products and systems listed in this catalog are developed and manufactured using a certified quality management system in accordance with EN ISO 9001:2008.

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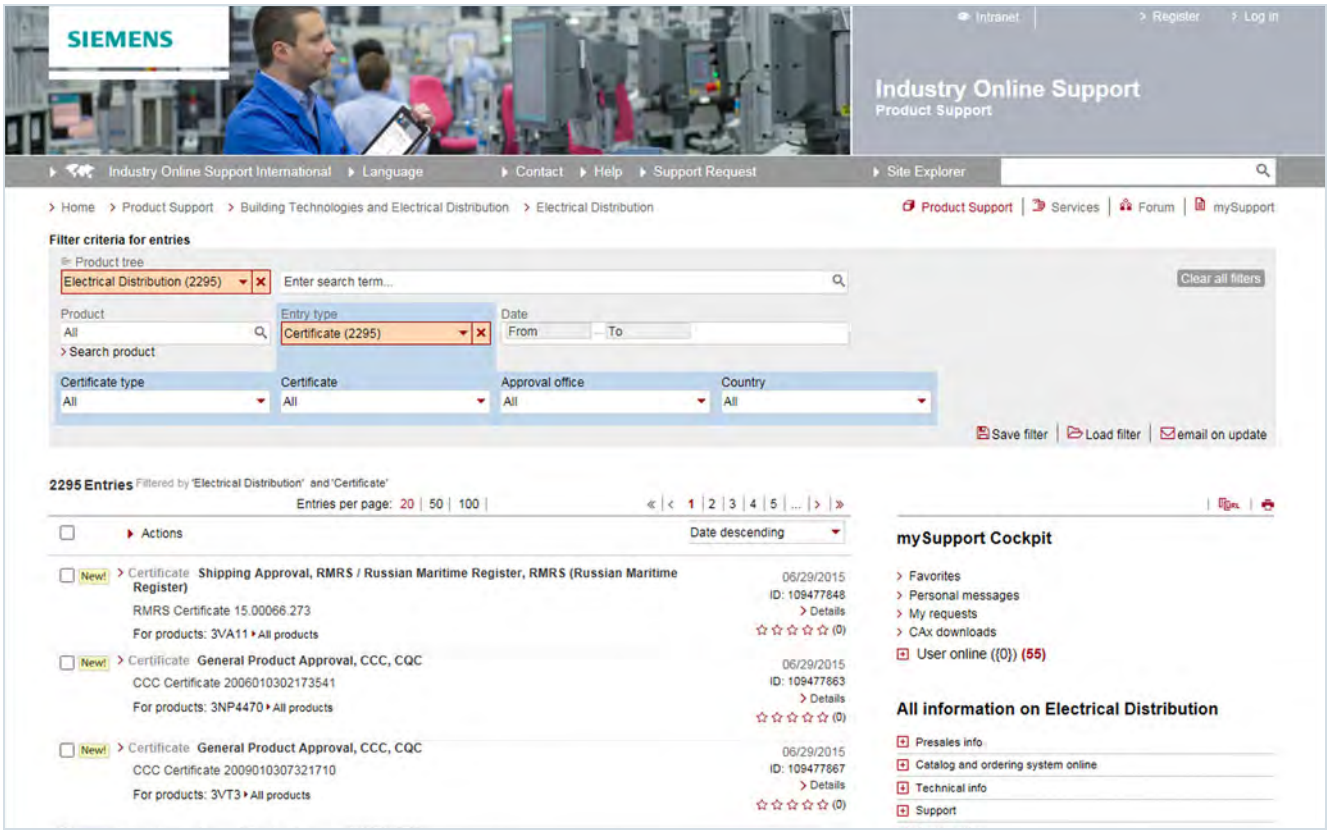
Overview

Certificates

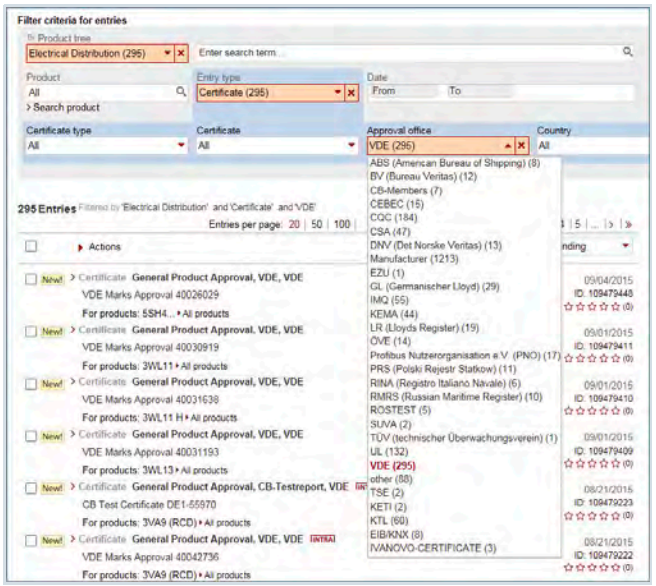
An overview, updated on a daily basis, of our products certified in accordance with CE, UL, CSA, FM, shipping authorizations etc. for low-voltage power distribution and electrical installation products can be found on the Internet at

www.siemens.com/lowvoltage/certificates



In the **Entry list** you can **filter the view** in order to quickly find comprehensive information on the following subjects:

- Product or search term
- Date
- Type of certificate (general product approval, test certificates, shipping approval, ...)
- Certificate (confirmations, UL, VDE,...)
- Approval office (TÜV, VDE, UL, ...)
- Country



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Approval requirements valid in different countries

Siemens low-voltage switchgear and controlgear are designed, manufactured and tested according to the relevant German standards (DIN and VDE), IEC publications and European standards (EN) as well as CSA and UL standards. You will find the standards assigned to the single devices in the relevant certificates at

www.siemens.com/lowvoltage/certificates

In addition to the pertinent VDE, EN and IEC standards, the requirements of the various regulations valid in other countries have also been taken into account in the design of the equipment in some cases, in order that the devices can be deployed globally as far as possible.

In some countries an approval is required for certain low-voltage switchgear and controlgear components. Depending on the market requirements, these devices have been submitted for approval to the authorized testing institutes.

In some cases, CSA for Canada and UL for the USA only approve special versions. Such special versions are listed separately from the standard versions in the relevant parts of this catalog.

For this equipment, there are sometimes limits with regard to the maximum permissible voltages, currents and rated outputs or special approvals and, in some cases, special identification may be required.

For use on board ship, the specifications of the marine classification societies must be observed. In some cases, they require type tests of the components to be approved.

If you have any questions concerning UL/CSA approvals, please contact Technical Support:
www.siemens.com/lowvoltage/contact

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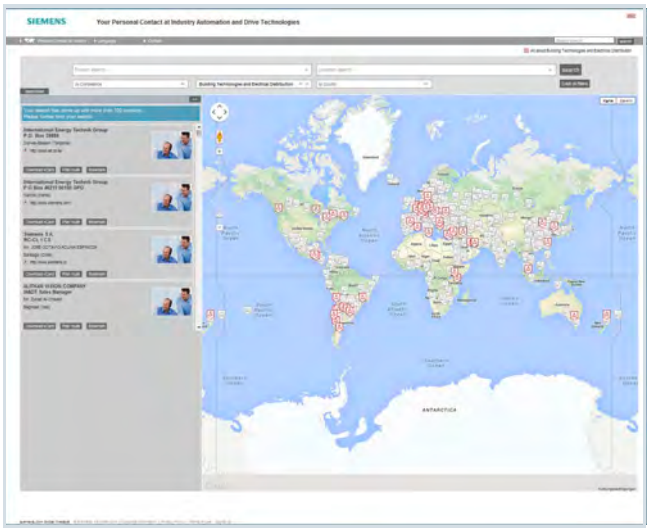
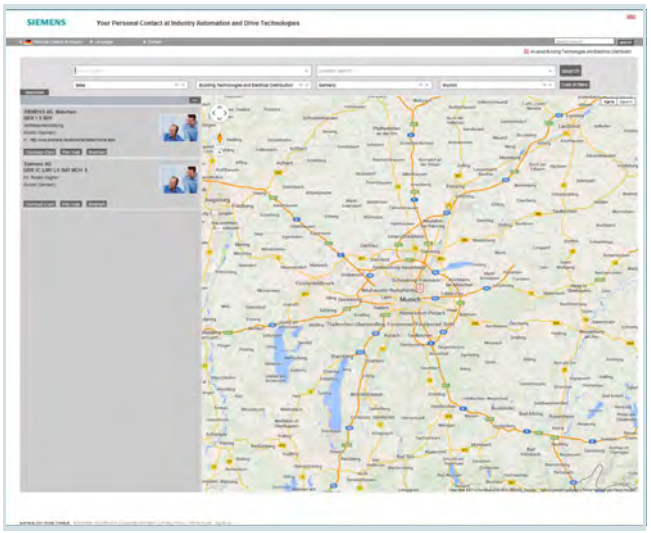
Siemens contacts

Contacts for low-voltage power distribution and electrical installation technology





With low-voltage power distribution and electrical installation technology we consistently pursue one goal:

Long-term improvement of your competitive ability.

We are committed to this goal. Thanks to our dedication, we are continually setting new standards. In all industries – worldwide.

At your service, locally, around the globe: Partners for consulting, sales, training, service, support, spare parts ... on the entire range of low-voltage power distribution and electrical installation technology.

Your personal contact can be found in our Contact Database at

www.siemens.com/lowvoltage/contact

You start by selecting a

- Competence
- Product or branch
- Country
- City.

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Unrivaled complete range of services over the entire life cycle

Online Support

Our comprehensive online information platform covers every aspect of our Service & Support and is available whenever, wherever.

More detailed information is available at
www.siemens.com/lowvoltage/product-support

Field Service

Siemens Field Service offers support with all aspects of maintenance – so that the availability of your machines and plants is assured whatever the case.

More detailed information is available at
www.siemens.com/lowvoltage/contact

Technical Support

The competent consulting service for technical issues with a broad range of customer-oriented services for all our products and systems.

More detailed information is available at
www.siemens.com/lowvoltage/contact

Spare Parts

Plants and systems in all industries worldwide are expected to meet ever higher levels of availability.

We can help you rule out unexpected stoppages: with a global network and optimum logistics chains.

More detailed information is available at
www.siemens.com/lowvoltage/contact

Training

Extend your lead – with practice-related know-how straight from the manufacturer.

More detailed information is available at
www.siemens.com/lowvoltage/training

Specification texts

You can obtain qualified, free support to help you produce specifications for technically equipping non-residential and industrial buildings at
www.siemens.com/specifications

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Comprehensive support from A to Z

Overview

Product information	
Website	Fast and targeted information on low-voltage power distribution and electrical installation technology: www.siemens.com/lowvoltage
Newsletter	Always up to date about our trend-setting products and systems: www.siemens.com/lowvoltage/newsletter
Product information/product & system selection	
Information and Download Center	Current catalogs, customer magazines, brochures, demo software and promotion packages: www.siemens.com/lowvoltage/infomaterial
Industry Mall	Comprehensive information and order platform for the Siemens Industry Basket: www.siemens.com/lowvoltage/mall
CA 01	The interactive catalog on DVD for automation and drive technology and low-voltage power distribution and electrical installation products
Product and system engineering	
SIMARIS software tools	Support in planning and configuring the electrical power distribution: www.siemens.com/simaris
SIMARIS ConFiguration Basic planning and configuration tool	Assists in generating offers and configuring products ranging from ALPHA distribution boards to the SIVACON S4 power distribution boards www.siemens.com/scfb
Product documentation	
Siemens Industry Online Support	Comprehensive technical information - from planning to configuration and operation: www.siemens.com/lowvoltage/product-support
Product configurator	Complete selection of products and systems based on technical characteristics or application requirements: www.siemens.com/lowvoltage/configurators
CAx Download Manager	Collation of CAx data types for standard CAE and CAD systems: www.siemens.com/lowvoltage/cax
My Documentation Manager	Compilation of project-specific documentation: www.siemens.com/lowvoltage/mdm
Image database	Collection of product photographs and graphics, such as dimensional drawings and internal circuit diagrams: www.siemens.com/lowvoltage/picturedb
Product training	
SITRAIN Portal	Comprehensive training program for our products, systems and engineering tools: www.siemens.com/lowvoltage/training
Product hotline	
Technical Support	Support in all technical queries about our products: www.siemens.com/lowvoltage/contact www.siemens.com/lowvoltage/technical-support

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Overview

Software types

Software requiring a license is categorized into types.
The following software types have been defined:

- Engineering software
- Runtime software

Engineering software

This includes all software products for creating (engineering) user software, e.g. for configuring, programming, parameterizing, testing, commissioning or servicing.

Data generated with engineering software and executable programs can be duplicated for your own use or for use by third-parties free-of-charge.

Runtime software

This includes all software products required for plant/machine operation, e.g. operating system, basic system, system expansions, drivers, etc.

The duplication of the runtime software and executable programs created with the runtime software for your own use or for use by third-parties is subject to a charge.

You can find information about license fees according to use in the ordering data (e.g. in the catalog). Examples of categories of use include per CPU, per installation, per channel, per instance, per axis, per control loop, per variable, etc.

Information about extended rights of use for parameterization/configuration tools supplied as integral components of the scope of delivery can be found in the readme file supplied with the relevant product(s).

License types

Siemens Industry Automation & Drive Technologies offers various types of software license:

- Floating license
- Single license
- Rental license
- Rental floating license
- Trial license
- Demo license
- Demo floating license

Floating license

The software may be installed for internal use on any number of devices by the licensee. Only the concurrent user is licensed. The concurrent user is the person using the program. Use begins when the software is started.
A license is required for each concurrent user.

Single license

Unlike the floating license, a single license permits only one installation of the software per license.

The type of use licensed is specified in the ordering data and in the Certificate of License (CoL). Types of use include for example per instance, per axis, per channel, etc.

One single license is required for each type of use defined.

Rental license

A rental license supports the "sporadic use" of engineering software. Once the license key has been installed, the software can be used for a specific period of time (the operating hours do not have to be consecutive).
One license is required for each installation of the software.

Rental floating license

The rental floating license corresponds to the rental license, except that a license is not required for each installation of the software. Rather, one license is required per object (for example, user or device).

Trial license

A trial license supports "short-term use" of the software in a non-productive context, e.g. for testing and evaluation purposes. It can be transferred to another license.

Demo license

The demo license support the "sporadic use" of engineering software in a non-productive context, for example, use for testing and evaluation purposes. It can be transferred to another license. After the installation of the license key, the software can be operated for a specific period of time, whereby usage can be interrupted as often as required.

One license is required per installation of the software.

Demo floating license

The demo floating license corresponds to the demo license, except that a license is not required for each installation of the software. Rather, one license is required per object (for example, user or device).

Certificate of license (CoL)

The CoL is the licensee's proof that the use of the software has been licensed by Siemens. A CoL is required for every type of use and must be kept in a safe place.

Downgrading

The licensee is permitted to use the software or an earlier version/release of the software, provided that the licensee owns such a version/release and its use is technically feasible.

Delivery versions

Software is constantly being updated.
The following delivery versions

- PowerPack
- Upgrade

can be used to access updates.

Existing bug fixes are supplied with the ServicePack version.

PowerPack

PowerPacks can be used to upgrade to more powerful software. The licensee receives a new license agreement and CoL (Certificate of License) with the PowerPack. This CoL, together with the CoL for the original product, proves that the new software is licensed.
A separate PowerPack must be purchased for each original license of the software to be replaced.

Upgrade

An upgrade permits the use of a new version of the software on the condition that a license for a previous version of the product is already held.
The licensee receives a new license agreement and CoL with the upgrade. This CoL, together with the CoL for the previous product, proves that the new version is licensed.
A separate upgrade must be purchased for each original license of the software to be upgraded.

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Software Licenses

Overview

ServicePack

ServicePacks are used to debug existing products. ServicePacks may be duplicated for use as prescribed according to the number of existing original licenses.

License key

Siemens Industry Automation & Drive Technologies supplies software products with and without license keys.

The license key serves as an electronic license stamp and is also the "switch" for activating the software (floating license, rental license, etc.).

The complete installation of software products requiring license keys includes the program to be licensed (the software) and the license key (which represents the license).

Software Update Service (SUS)

As part of the SUS contract, all software updates for the respective product are made available to you free of charge for a period of one year from the invoice date. The contract will automatically be extended for one year if it is not canceled three months before it expires.

The possession of the current version of the respective software is a basic condition for entering into an SUS contract.

You can download explanations concerning license conditions from www.siemens.com/automation/salesmaterial-as/catalog/en/terms_of_trade_en.pdf

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3LD2405-3	7/10	EAR99	N
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3NC102	5/64	N	N
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3NH7261	5/73	N	N
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3NP1923-1BF2	7/164	EAR99	N
3NP1923-1BF3	7/164	EAR99	N
3NP1923-1BF4	7/164	EAR99	N
3NP1923-1BF5	7/164	N	N
3NP1923-1BG	7/164	N	N
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3NP1933-1BB	7/166	N	N
3NP1933-1BC	7/166	N	N
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3NW8107	5/19	EAR99	N
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3VA2010-8K	2/53, 2/65	EAR99	N
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3VA2025-6K	2/53, 2/65	EAR99	N
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3VA2025-8K	2/53, 2/65	EAR99	N
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3VA2110-6K	2/53, 2/65	EAR99	N
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3VA2116-5K	2/52, 2/64	EAR99	N
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3VA2116-6K	2/53, 2/65	EAR99	N
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3VA2116-7J	2/51, 2/63	EAR99	N
3VA2116-7K	2/53, 2/65	EAR99	N
3VA2116-8H	2/43, 2/45, 2/49, 2/55, 2/57, 2/61	EAR99	N
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3VA2116-8K	2/53, 2/65	EAR99	N
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3VA2125-5K	2/52, 2/64	EAR99	N
3VA2125-5M	2/66	EAR99	N
3VA2125-6H	2/43, 2/45, 2/47, 2/49, 2/55, 2/57, 2/59, 2/61	EAR99	N
3VA2125-6J	2/51, 2/63	EAR99	N
3VA2125-6K	2/53, 2/65	EAR99	N
3VA2125-7H	2/43, 2/45, 2/47, 2/49, 2/55, 2/57, 2/59, 2/61	EAR99	N
3VA2125-7J	2/51, 2/63	EAR99	N
3VA2125-7K	2/53, 2/65	EAR99	N
3VA2125-7M	2/67	EAR99	N
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3VA2140-5M	2/66	EAR99	N
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3VA2140-6K	2/53, 2/65	EAR99	N
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3VA2140-7J	2/51, 2/63	EAR99	N
3VA2140-7K	2/53, 2/65	EAR99	N
3VA2140-7M	2/67	EAR99	N
3VA2140-8H	2/43, 2/45, 2/47, 2/49, 2/55, 2/57, 2/59, 2/61	EAR99	N
3VA2140-8J	2/51, 2/63	EAR99	N
3VA2140-8K	2/53, 2/65	EAR99	N
3VA2163-5H	2/42, 2/44, 2/46, 2/48, 2/54, 2/56, 2/58, 2/60	EAR99	N
3VA2163-5J	2/50, 2/62	EAR99	N

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3VA2163-5K	2/52, 2/64	EAR99	N
3VA2163-5M	2/66	EAR99	N
3VA2163-6H	2/43, 2/45, 2/47, 2/49, 2/55, 2/57, 2/59, 2/61	EAR99	N
3VA2163-6J	2/51, 2/63	EAR99	N
3VA2163-6K	2/53, 2/65	EAR99	N
3VA2163-7H	2/43, 2/45, 2/47, 2/49, 2/55, 2/57, 2/59, 2/61	EAR99	N
3VA2163-7J	2/51, 2/63	EAR99	N
3VA2163-7K	2/53, 2/65	EAR99	N
3VA2163-7M	2/67	EAR99	N
3VA2163-8H	2/43, 2/45, 2/47, 2/49, 2/55, 2/57, 2/59, 2/61	EAR99	N
3VA2163-8J	2/51, 2/63	EAR99	N
3VA2163-8K	2/53, 2/65	EAR99	N
3VA2216-5H	2/42, 2/44, 2/46, 2/48, 2/54, 2/56, 2/58, 2/60	EAR99	N
3VA2216-5J	2/50, 2/62	EAR99	N
3VA2216-5K	2/52, 2/64	EAR99	N
3VA2216-5M	2/66	EAR99	N
3VA2216-6H	2/43, 2/45, 2/47, 2/49, 2/55, 2/57, 2/59, 2/61	EAR99	N
3VA2216-6J	2/51, 2/63	EAR99	N
3VA2216-6K	2/53, 2/65	EAR99	N
3VA2216-7H	2/43, 2/45, 2/47, 2/49, 2/55, 2/57, 2/59, 2/61	EAR99	N
3VA2216-7J	2/51, 2/63	EAR99	N
3VA2216-7K	2/53, 2/65	EAR99	N
3VA2216-7M	2/67	EAR99	N
3VA2216-8H	2/43, 2/45, 2/47, 2/49, 2/55, 2/57, 2/59, 2/61	EAR99	N
3VA2216-8J	2/51, 2/63	EAR99	N
3VA2216-8K	2/53, 2/65	EAR99	N
3VA2220	2/66 ... 67	EAR99	N
3VA2225	2/42 ... 45, 2/48 ... 57, 2/60 ... 65	EAR99	N
3VA2325-5H	2/42, 2/44, 2/46, 2/48, 2/54, 2/56, 2/58, 2/60	EAR99	N
3VA2325-5J	2/50, 2/62	EAR99	N
3VA2325-5K	2/52, 2/64	EAR99	N
3VA2325-5M	2/66	EAR99	N
3VA2325-6H	2/43, 2/45, 2/47, 2/49, 2/55, 2/57, 2/59, 2/61	EAR99	N
3VA2325-6J	2/51, 2/63	EAR99	N
3VA2325-6K	2/53, 2/65	EAR99	N
3VA2325-7H	2/43, 2/45, 2/47, 2/49, 2/55, 2/57, 2/59, 2/61	EAR99	N
3VA2325-7J	2/51, 2/63	EAR99	N
3VA2325-7K	2/53, 2/65	EAR99	N
3VA2325-7M	2/67	EAR99	N
3VA2325-8H	2/43, 2/45, 2/47, 2/49, 2/55, 2/57, 2/59, 2/61	EAR99	N
3VA2325-8J	2/51, 2/63	EAR99	N
3VA2325-8K	2/53, 2/65	EAR99	N
3VA2340-5H	2/42, 2/44, 2/48, 2/54, 2/56, 2/60	EAR99	N
3VA2340-5J	2/50, 2/62	EAR99	N
3VA2340-5K	2/52, 2/64	EAR99	N
3VA2340-6H	2/43, 2/45, 2/49, 2/55, 2/57, 2/61	EAR99	N
3VA2340-6J	2/51, 2/63	EAR99	N
3VA2340-6K	2/53, 2/65	EAR99	N
3VA2340-7H	2/43, 2/45, 2/49, 2/55, 2/57, 2/61	EAR99	N
3VA2340-7J	2/51, 2/63	EAR99	N
3VA2340-7K	2/53, 2/65	EAR99	N
3VA2340-8H	2/43, 2/45, 2/49, 2/55, 2/57, 2/61	EAR99	N
3VA2340-8J	2/51, 2/63	EAR99	N
3VA2340-8K	2/53, 2/65	EAR99	N
3VA2440-5H	2/42, 2/44, 2/46, 2/48, 2/54, 2/56, 2/58, 2/60	EAR99	N
3VA2440-5J	2/50, 2/62	EAR99	N
3VA2440-5K	2/52, 2/64	EAR99	N
3VA2440-5M	2/66	EAR99	N
3VA2440-6H	2/43, 2/45, 2/47, 2/49, 2/55, 2/57, 2/59, 2/61	EAR99	N
3VA2440-6J	2/51, 2/63	EAR99	N
3VA2440-6K	2/53, 2/65	EAR99	N
3VA2440-7H	2/43, 2/45, 2/47, 2/49, 2/55, 2/57, 2/59, 2/61	EAR99	N
3VA2440-7J	2/51, 2/63	EAR99	N
3VA2440-7K	2/53, 2/65	EAR99	N
3VA2440-7M	2/67	EAR99	N
3VA2440-8H	2/43, 2/45, 2/47, 2/49, 2/55, 2/57, 2/59, 2/61	EAR99	N
3VA2440-8J	2/51, 2/63	EAR99	N
3VA2440-8K	2/53, 2/65	EAR99	N
3VA2450-5	2/46, 2/50, 2/52, 2/58, 2/62, 2/64, 2/66	EAR99	N
3VA2450-6	2/47, 2/51, 2/53, 2/59, 2/63, 2/65	EAR99	N
3VA2450-7	2/47, 2/51, 2/53, 2/59, 2/63, 2/65, 2/67	EAR99	N
3VA2450-8	2/47, 2/59	EAR99	N
3VA2463-5H	2/42, 2/44, 2/46, 2/48, 2/54, 2/56, 2/58, 2/60	EAR99	N
3VA2463-5J	2/50, 2/62	EAR99	N
3VA2463-5K	2/52, 2/64	EAR99	N
3VA2463-6H	2/43, 2/45, 2/47, 2/49, 2/55, 2/57, 2/59, 2/61	EAR99	N
3VA2463-6J	2/51, 2/63	EAR99	N
3VA2463-6K	2/53, 2/65	EAR99	N
3VA2463-7H	2/43, 2/45, 2/47, 2/49, 2/55, 2/57, 2/59, 2/61	EAR99	N
3VA2463-7J	2/51, 2/63	EAR99	N
3VA2463-7K	2/53, 2/65	EAR99	N
3VA2463-8H	2/43, 2/45, 2/47, 2/49, 2/55, 2/57, 2/59, 2/61	EAR99	N
3VA2463-8J	2/51, 2/63	EAR99	N

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3VA2463-8K	2/53, 2/65	EAR99	N
3VA90	2/79, 2/108, 2/112 ... 114	EAR99	N
3VA910	2/84, 2/108	EAR99	N
3VA9110	2/92	EAR99	N
3VA9111-0Q	2/86 ... 87	N	N
3VA9111-0S	2/115	EAR99	N
3VA9111-0WD	2/90	N	N
3VA9111-0WF	2/90 ... 91	EAR99	N
3VA9111-0WG	2/91	EAR99	N
3VA9111-0WJ	2/91	EAR99	N
3VA9111-0WK	2/92	EAR99	N
3VA9112-0JC	2/88	EAR99	N
3VA9112-0JF	2/89	N	N
3VA9112-0JJ	2/88	EAR99	N
3VA9112-0S	2/92	EAR99	N
3VA9113-0JB	2/84	N	N
3VA9113-0JC	2/89	EAR99	N
3VA9113-0JF	2/90	EAR99	N
3VA9113-0JG	2/84	N	N
3VA9113-0JJ	2/88	N	N
3VA9113-0K	2/93, 2/97	EAR99	N
3VA9113-0QA	2/84	EAR99	N
3VA9113-0QE	2/86	N	N
3VA9113-0QF	2/87	N	N
3VA9113-0QG	2/86	EAR99	N
3VA9113-0R	2/102	N	N
3VA9113-0S	2/92	EAR99	N
3VA9114-0JB	2/84	N	N
3VA9114-0JC	2/89	EAR99	N
3VA9114-0JF	2/90	EAR99	N
3VA9114-0JG	2/84	N	N
3VA9114-0JJ	2/88	N	N
3VA9114-0K	2/93, 2/97	EAR99	N
3VA9114-0QA	2/84	EAR99	N
3VA9114-0QE	2/86	N	N
3VA9114-0QF	2/87	N	N
3VA9114-0QG	2/86	EAR99	N
3VA9114-0RL1	2/102	N	N
3VA9114-0RL2	2/102	EAR99	N
3VA9114-0RS	2/102	EAR99	N
3VA9114-0S	2/92, 2/115	EAR99	N
3VA9116	2/115	EAR99	N
3VA9117	2/80	EAR99	N
3VA912	2/93, 2/97 ... 98, 2/103, 2/115	EAR99	N
3VA9150	2/95	N	N
3VA9151	2/88	N	N
3VA9152-0Q	2/88	On req.	On req.
3VA9152-0W	2/87	EAR99	N
3VA9153-0JA	2/84	N	N
3VA9153-0JC	2/94	EAR99	N
3VA9153-0JF	2/95	EAR99	N
3VA9153-0KB03	2/93	EAR99	N
3VA9153-0KB04	2/93	N	N
3VA9153-0KB05	2/94	N	N
3VA9153-0Q	2/85	EAR99	N
3VA9154-0JA	2/84	N	N
3VA9154-0JC	2/94	EAR99	N
3VA9154-0JF	2/95	EAR99	N
3VA9154-0KB03	2/93	EAR99	N
3VA9154-0KB04	2/93	N	N
3VA9154-0KB05	2/94	N	N
3VA9154-0Q	2/85	EAR99	N
3VA9157-0EK11	2/76	EAR99	N
3VA9157-0EK13	2/76	N	N
3VA9157-0EK15	2/76	EAR99	N
3VA9157-0EK17	2/76	N	N
3VA9157-0EK21	2/76	EAR99	N
3VA9157-0EK23	2/76	N	N
3VA9157-0EK25	2/76	EAR99	N
3VA9157-0EK27	2/76	N	N
3VA9157-0FK21	2/77	EAR99	N
3VA9157-0FK23	2/77	N	N
3VA9157-0FK25	2/77	EAR99	N
3VA9157-0FK27	2/77	N	N
3VA9157-0G	2/76	EAR99	N
3VA9157-0H	2/80	EAR99	N
3VA9157-0K	2/99	EAR99	N
3VA9157-0L	2/112	EAR99	N
3VA9157-0PK11	2/78	EAR99	N
3VA9157-0PK13	2/78	N	N
3VA9157-0PK15	2/78	EAR99	N
3VA9157-0PK17	2/78	N	N
3VA9157-0PK51	2/78	EAR99	N
3VA9157-0PK53	2/78	N	N
3VA9157-0PK55	2/78	EAR99	N
3VA9157-0PK57	2/78	N	N
3VA9157-0V	2/112	EAR99	N
3VA9158-0VF2	2/79, 2/113	On req.	On req.
3VA9158-0VF3	2/112	EAR99	N
3VA9158-0VK	2/113	EAR99	N
3VA916	2/84, 2/93 ... 94, 2/99, 2/112, 2/114	EAR99	N
3VA918	2/107, 2/115	EAR99	N
3VA920	2/84, 2/86 ... 87, 2/92	EAR99	N
3VA921	2/84, 2/86 ... 93, 2/97 ... 98, 2/102	EAR99	N
3VA922	2/86, 2/88 ... 92, 2/103	EAR99	N
3VA9252	2/87	EAR99	N
3VA9253	2/84 ... 85, 2/93 ... 95, 2/114	EAR99	N

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3VA9254	2/84 ... 85, 2/93 ... 95, 2/114	EAR99	N
3VA9257	2/76 ... 78, 2/80, 2/99, 2/112, 2/114	EAR99	N
3VA9258-0VF2	2/79, 2/113	On req.	On req.
3VA9258-0VF3	2/112	EAR99	N
3VA9258-0VK	2/113	EAR99	N
3VA9262	2/87	EAR99	N
3VA9263	2/84 ... 85, 2/94 ... 95	EAR99	N
3VA9264	2/84 ... 85, 2/94 ... 95	EAR99	N
3VA9267	2/76 ... 78, 2/80	EAR99	N
3VA9268-0VF	2/79, 2/113	On req.	On req.
3VA9268-0VK	2/113	EAR99	N
3VA928	2/77, 2/95	EAR99	N
3VA9303	2/90, 2/114	EAR99	N
3VA9304	2/90, 2/114	EAR99	N
3VA9307	2/108	N	N
3VA9323-0K	2/97 ... 98	EAR99	N
3VA9323-0R	2/103	N	N
3VA9324-0K	2/97 ... 98	EAR99	N
3VA9324-0R	2/103	N	N
3VA9328	2/115	EAR99	N
3VA9353-0KB01	2/93	EAR99	N
3VA9353-0KB03	2/93	N	N
3VA9353-0KB04	2/93	N	N
3VA9353-0KB05	2/94	N	N
3VA9353-0S	2/114	EAR99	N
3VA9354-0KB01	2/93	EAR99	N
3VA9354-0KB03	2/93	N	N
3VA9354-0KB04	2/93	N	N
3VA9354-0KB05	2/94	N	N
3VA9363	2/114	EAR99	N
3VA9364	2/114	EAR99	N
3VA9367-0K	2/99	EAR99	N
3VA9367-0L	2/112	N	N
3VA9367-0V	2/112	EAR99	N
3VA9368	2/112	EAR99	N
3VA9383-0JB	2/84	N	N
3VA9383-0JF	2/95	EAR99	N
3VA9383-0JG	2/84	N	N
3VA9383-0S	2/114	EAR99	N
3VA9384-0JB	2/84	N	N
3VA9384-0JF	2/95	EAR99	N
3VA9384-0JG	2/84	N	N
3VA9384-0S	2/114	EAR99	N
3VA9387	2/107, 2/114	EAR99	N
3VA9388	2/112	EAR99	N
3VA9401	2/86 ... 87, 2/91	EAR99	N
3VA9403-0JC	2/89	EAR99	N
3VA9403-0JJ	2/89	N	N
3VA9403-0Q	2/84, 2/86 ... 87	EAR99	N
3VA9404-0JC	2/89	EAR99	N
3VA9404-0JJ	2/89	N	N
3VA9404-0Q	2/84, 2/86 ... 87	EAR99	N
3VA942	2/103	N	N
3VA9467-0EK11	2/76	EAR99	N
3VA9467-0EK13	2/76	N	N
3VA9467-0EK15	2/76	EAR99	N
3VA9467-0EK17	2/76	N	N
3VA9467-0EK21	2/76	EAR99	N
3VA9467-0EK23	2/76	N	N
3VA9467-0EK25	2/76	EAR99	N
3VA9467-0EK27	2/76	N	N
3VA9467-0FK21	2/77	EAR99	N
3VA9467-0FK23	2/77	N	N
3VA9467-0FK25	2/77	EAR99	N
3VA9467-0FK27	2/77	N	N
3VA9467-0G	2/76	EAR99	N
3VA9467-0H	2/80	EAR99	N
3VA9467-0PK11	2/78	EAR99	N
3VA9467-0PK13	2/78	N	N
3VA9467-0PK15	2/78	EAR99	N
3VA9467-0PK17	2/78	N	N
3VA9468-0VF	2/79, 2/113	On req.	On req.
3VA9468-0VK	2/113	EAR99	N
3VA9480	2/92, 2/95	EAR99	N
3VA9481-0WD	2/90	N	N
3VA9481-0WF	2/91	EAR99	N
3VA9481-0WJ	2/91	EAR99	N
3VA9481-0WK	2/92	EAR99	N
3VA9482	2/87	EAR99	N
3VA9483-0JA	2/84	N	N
3VA9483-0JC	2/95	EAR99	N
3VA9483-0Q	2/85	EAR99	N
3VA9484-0JA	2/84	N	N
3VA9484-0JC	2/95	EAR99	N
3VA9484-0Q	2/85	EAR99	N
3VA9487-0GA	2/77	EAR99	N
3VA9487-0GB	2/77	EAR99	N
3VA9487-0GC0	2/77	EAR99	N
3VA9487-0GC1	2/77	N	N
3VA990	2/73 ... 74, 2/108	EAR99	N
3VA9980	2/79, 2/100, 2/112 ... 113	EAR99	N
3VA9987-0G	2/78	EAR99	N
3VA9987-0K	2/100	EAR99	N
3VA9987-0M	2/109	EAR99	N
3VA9987-0TA1	2/107	EAR99	N
3VA9987-0TA2	2/107	N	N
3VA9987-0TC	2/108	EAR99	N
3VA9987-0TD	2/108	EAR99	N

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3VA9987-0TE	2/108	EAR99	N
3VA9987-0TF	2/108	N	N
3VA9987-0TG	2/108	EAR99	N
3VA9987-0UA	2/108	EAR99	N
3VA9987-0UB1	2/108	EAR99	N
3VA9987-0UB2	2/108	EAR99	N
3VA9987-0UB3	2/108	N	N
3VA9987-0UC	2/108	EAR99	N
3VA9988	2/73 ... 74	EAR99	N
3VL			
3VL11	2/220 ... 223	EAR99	N
3VL17	2/126 ... 127, 2/146 ... 147, 2/150 ... 153, 2/168 ... 169	EAR99	N
3VL2505	2/220 ... 221	EAR99	N
3VL2506	2/220 ... 221, 2/224 ... 235	EAR99	N
3VL2507	2/220 ... 221	EAR99	N
3VL2508	2/220 ... 221	EAR99	N
3VL2510-1	2/220, 2/224, 2/226, 2/228, 2/230, 2/232, 2/234	EAR99	N
3VL2510-2	2/221, 2/225, 2/227, 2/229, 2/231, 2/233, 2/235	EAR99	N
3VL2510-3	2/221, 2/225, 2/227, 2/229, 2/231, 2/233, 2/235	EAR99	N
3VL2511	2/220 ... 221	EAR99	N
3VL2512	2/220 ... 221	EAR99	N
3VL2515	2/220 ... 221, 2/223 ... 235	EAR99	N
3VL259	2/220 ... 221	EAR99	N
3VL2705	2/128 ... 129, 2/150 ... 151, 2/154 ... 155	EAR99	N
3VL2706	2/128 ... 129, 2/136 ... 137, 2/140 ... 141, 2/144 ... 147, 2/150 ... 151, 2/154 ... 155, 2/160 ... 163	EAR99	N
3VL2708	2/128 ... 129, 2/150 ... 151, 2/154 ... 155	EAR99	N
3VL2710-1	2/128, 2/136, 2/140, 2/144, 2/146, 2/150, 2/154, 2/160, 2/162, 2/168	EAR99	N
3VL2710-2	2/129, 2/137, 2/141, 2/145, 2/147, 2/151, 2/155, 2/161, 2/163, 2/169	EAR99	N
3VL2710-3	2/129, 2/137, 2/141, 2/145, 2/147, 2/151, 2/155, 2/161, 2/163, 2/169	EAR99	N
3VL2712	2/128 ... 129, 2/150 ... 151, 2/154 ... 155	EAR99	N
3VL2716	2/128 ... 129, 2/136 ... 137, 2/140 ... 141, 2/144 ... 147, 2/150 ... 151, 2/154 ... 155, 2/160 ... 163, 2/168 ... 169	EAR99	N
3VL3510-1	2/220, 2/224, 2/226, 2/228, 2/230, 2/232, 2/234	EAR99	N
3VL3510-2	2/221, 2/225, 2/227, 2/229, 2/231, 2/233, 2/235	EAR99	N
3VL3510-3	2/221, 2/225, 2/227, 2/229, 2/231, 2/233, 2/235	EAR99	N
3VL3511	2/220 ... 221	EAR99	N
3VL3512	2/220 ... 221	EAR99	N
3VL3515	2/220 ... 221, 2/224 ... 235	EAR99	N
3VL3517	2/220 ... 221	EAR99	N
3VL3520	2/220 ... 221	EAR99	N
3VL3522	2/220 ... 221	EAR99	N
3VL3525	2/220 ... 221, 2/223 ... 235	EAR99	N
3VL3720-1	2/128, 2/136, 2/140, 2/144, 2/150, 2/154, 2/160, 2/162	EAR99	N
3VL3720-2	2/129, 2/137, 2/141, 2/145, 2/151, 2/155, 2/161, 2/163	EAR99	N
3VL3720-3	2/129, 2/137, 2/141, 2/145, 2/151, 2/155, 2/161, 2/163	EAR99	N
3VL3725-1	2/128, 2/136, 2/140, 2/144, 2/146, 2/150, 2/154, 2/160, 2/162, 2/168	EAR99	N
3VL3725-2	2/129, 2/137, 2/141, 2/145, 2/147, 2/151, 2/155, 2/161, 2/163, 2/169	EAR99	N
3VL3725-3	2/129, 2/137, 2/141, 2/145, 2/147, 2/151, 2/155, 2/161, 2/163, 2/169	EAR99	N
3VL4125-1	2/220, 2/224, 2/226, 2/228, 2/230, 2/232, 2/234	EAR99	N
3VL4125-2	2/221, 2/225, 2/227, 2/229, 2/231, 2/233, 2/235	EAR99	N
3VL4125-3	2/221, 2/225, 2/227, 2/229, 2/231, 2/233, 2/235	EAR99	N
3VL413	2/220 ... 221	EAR99	N
3VL414	2/220 ... 221, 2/223 ... 235	EAR99	N
3VL472	2/128 ... 129, 2/146 ... 147, 2/150 ... 151, 2/154 ... 155	EAR99	N
3VL473	2/128 ... 129, 2/136 ... 137, 2/140 ... 141, 2/144 ... 147, 2/150 ... 151, 2/154 ... 155, 2/160 ... 163	EAR99	N
3VL474	2/128 ... 129, 2/136 ... 137, 2/140 ... 141, 2/146 ... 147, 2/150 ... 151, 2/154 ... 155, 2/160 ... 163, 2/168 ... 169	EAR99	N
3VL4840-1	2/220, 2/224, 2/226, 2/228, 2/230, 2/232, 2/234	EAR99	N
3VL4840-2	2/221, 2/225, 2/227, 2/229, 2/231, 2/233, 2/235	EAR99	N
3VL4840-3	2/221, 2/225, 2/227, 2/229, 2/231, 2/233, 2/235	EAR99	N
3VL485	2/220 ... 221	EAR99	N
3VL486	2/220 ... 221, 2/223 ... 235	EAR99	N
3VL573	2/128 ... 129, 2/146 ... 147, 2/150 ... 151, 2/154 ... 155	EAR99	N
3VL574	2/128 ... 129, 2/150 ... 151, 2/154 ... 155	EAR99	N
3VL5750-1DC	2/128	EAR99	N
3VL5750-1DK	2/146	N	N
3VL5750-1E	2/150, 2/154	EAR99	N
3VL5750-1U	2/144	EAR99	N
3VL5750-2DC	2/129	EAR99	N
3VL5750-2DK	2/147	N	N
3VL5750-2E	2/151, 2/155	EAR99	N
3VL5750-2U	2/145	EAR99	N
3VL5750-3DC	2/129	EAR99	N
3VL5750-3DK	2/147	N	N
3VL5750-3E	2/151, 2/155	EAR99	N

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3VL5750-3U	2/145	EAR99	N
3VL5763-1	2/128, 2/136, 2/140, 2/146, 2/150, 2/154, 2/160, 2/162, 2/168	EAR99	N
3VL5763-2	2/129, 2/137, 2/141, 2/147, 2/151, 2/155, 2/161, 2/163, 2/169	EAR99	N
3VL5763-3	2/129, 2/137, 2/141, 2/147, 2/151, 2/155, 2/161, 2/163, 2/169	EAR99	N
3VL6160-1	2/220, 2/224, 2/226, 2/228, 2/230, 2/232, 2/234	EAR99	N
3VL6160-2	2/221, 2/225, 2/227, 2/229, 2/231, 2/233, 2/235	EAR99	N
3VL6160-3	2/221, 2/225, 2/227, 2/229, 2/231, 2/233, 2/235	EAR99	N
3VL617	2/220 ... 221	EAR99	N
3VL618	2/220 ... 221, 2/223 ... 235	EAR99	N
3VL6780-1	2/136, 2/140, 2/146, 2/160, 2/162, 2/168	EAR99	N
3VL6780-2	2/137, 2/141, 2/147, 2/161, 2/163, 2/169	EAR99	N
3VL6780-3	2/137, 2/141, 2/147, 2/161, 2/163, 2/169	EAR99	N
3VL7110-1	2/220, 2/224, 2/226, 2/228, 2/230, 2/232, 2/234	EAR99	N
3VL7110-2	2/221, 2/225, 2/227, 2/229, 2/231, 2/233, 2/235	EAR99	N
3VL7110-3	2/221, 2/225, 2/227, 2/229, 2/231, 2/233, 2/235	EAR99	N
3VL7112-1	2/220, 2/224, 2/226, 2/228, 2/230, 2/232, 2/234	EAR99	N
3VL7112-2	2/221, 2/223, 2/225, 2/227, 2/229, 2/231, 2/233, 2/235	EAR99	N
3VL7112-3	2/221, 2/223, 2/225, 2/227, 2/229, 2/231, 2/233, 2/235	EAR99	N
3VL7180-1	2/220, 2/224, 2/226, 2/228, 2/230, 2/232, 2/234	EAR99	N
3VL7180-2	2/221, 2/225, 2/227, 2/229, 2/231, 2/233, 2/235	EAR99	N
3VL7180-3	2/221, 2/225, 2/227, 2/229, 2/231, 2/233, 2/235	EAR99	N
3VL719	2/220 ... 221	EAR99	N
3VL7710	2/136 ... 137, 2/140 ... 141, 2/160 ... 163	EAR99	N
3VL7712	2/136 ... 137, 2/140 ... 141, 2/146 ... 147, 2/160 ... 163, 2/168 ... 169	EAR99	N
3VL8112-1	2/220, 2/224, 2/226, 2/228, 2/230, 2/232, 2/234	EAR99	N
3VL8112-2	2/221, 2/225, 2/227, 2/229, 2/231, 2/233, 2/235	EAR99	N
3VL8112-3	2/221, 2/225, 2/227, 2/229, 2/231, 2/233, 2/235	EAR99	N
3VL8114	2/220 ... 221	EAR99	N
3VL8116	2/220 ... 221, 2/223 ... 235	EAR99	N
3VL8716-1	2/136, 2/140, 2/146, 2/160, 2/162, 2/168	EAR99	N
3VL8716-2	2/137, 2/141, 2/147, 2/161, 2/163, 2/169	EAR99	N
3VL8716-3	2/137, 2/141, 2/147, 2/161, 2/163, 2/169	EAR99	N
3VL9000-4WL00	2/186 ... 191	EAR99	N
3VL9000-4WL01	2/251 ... 254	EAR99	N
3VL9000-8AP	2/200 ... 204, 2/263 ... 267	EAR99	N
3VL9000-8AQ	2/207	EAR99	N
3VL9000-8AU	2/207, 2/271	EAR99	N
3VL9000-8AV	2/207, 2/271	EAR99	N
3VL9000-8LH1	2/199 ... 201, 2/263 ... 264	EAR99	N
3VL9000-8LH20	2/199 ... 203	EAR99	N
3VL9000-8LH21	2/263 ... 266	N	N
3VL9000-8LH30	2/199 ... 204	EAR99	N
3VL9000-8LH31	2/263 ... 267	EAR99	N
3VL9100-3	2/182	N	N
3VL9100-4	2/186, 2/193, 2/251, 2/255	EAR99	N
3VL9112	2/192	EAR99H	N
3VL9115	2/193	EAR99	N
3VL9116	2/193	EAR99	N
3VL912	2/255	EAR99	N
3VL913	2/255	EAR99	N
3VL9200-3	2/193 ... 194	EAR99	N
3VL9200-4E	2/256	EAR99	N
3VL9200-4P	2/187, 2/252	EAR99	N
3VL9200-4R	2/194, 2/256	EAR99	N
3VL9200-4TA	2/258	N	N
3VL9200-4TB	2/258	N	N
3VL9200-4TC	2/194	EAR99	N
3VL9200-4TD	2/194	EAR99	N
3VL9200-4W	2/187, 2/252	EAR99	N
3VL9206	2/270	EAR99	N
3VL9210	2/206	N	N
3VL9215	2/194, 2/256	EAR99	N
3VL9216-4	2/193 ... 194	EAR99	N
3VL9216-5GC3	2/192	N	N
3VL9216-5GC4	2/192	EAR99H	N
3VL9216-5GD	2/192	EAR99H	N
3VL9216-8	2/206	N	N
3VL922	2/256, 2/258	EAR99	N
3VL923	2/256	EAR99	N
3VL928	2/206	N	N
3VL9300-2	2/248, 2/250	EAR99	N
3VL9300-3A	2/178, 2/242	EAR99	N
3VL9300-3H	2/178, 2/199 ... 201, 2/242, 2/263 ... 264	EAR99	N
3VL9300-3J	2/245, 2/248	EAR99	N
3VL9300-3MA	2/182	N	N
3VL9300-3MC	2/182	N	N
3VL9300-3MD	2/182	N	N
3VL9300-3ME	2/182	N	N
3VL9300-3MJ	2/182, 2/248	EAR99	N
3VL9300-3ML	2/182, 2/248	EAR99	N
3VL9300-3MN	2/182, 2/248	EAR99	N

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3VL9300-3MQ	2/182, 2/248	EAR99	N
3VL9300-3MS	2/182, 2/248	EAR99	N
3VL9300-3T	2/195	EAR99	N
3VL9300-4E	2/195, 2/257	EAR99	N
3VL9300-4P	2/186 ... 187, 2/251 ... 253	EAR99	N
3VL9300-4R	2/195, 2/257	EAR99	N
3VL9300-4TA	2/195, 2/259	N	N
3VL9300-4TB	2/259	N	N
3VL9300-4TC	2/195	EAR99	N
3VL9300-4TD	2/195	EAR99	N
3VL9300-4W	2/187, 2/253	EAR99	N
3VL9300-8A	2/271	EAR99	N
3VL9300-8B	2/199 ... 201, 2/208 ... 209, 2/263 ... 264, 2/268 ... 269	EAR99	N
3VL9300-8CA3	2/193 ... 195, 2/255, 2/258 ... 259	N	N
3VL9300-8CA4	2/193 ... 195	EAR99	N
3VL9300-8CB	2/193 ... 195, 2/255, 2/258 ... 259	EAR99	N
3VL9300-8CD	2/255, 2/258 ... 259	EAR99	N
3VL9300-8CE	2/193 ... 195, 2/255, 2/258 ... 259	N	N
3VL9300-8L	2/199 ... 201, 2/263 ... 264	EAR99	N
3VL9300-8SA	2/199 ... 201, 2/263 ... 264	EAR99	N
3VL9300-8SE	2/248	N	N
3VL931	2/270	EAR99	N
3VL9320	2/206	N	N
3VL9321	2/199 ... 201, 2/263 ... 264	EAR99	N
3VL9324	2/195	EAR99	N
3VL9325-5GE3	2/192	N	N
3VL9325-5GE4	2/192	EAR99H	N
3VL9325-5GF	2/192	EAR99H	N
3VL9325-8	2/206	N	N
3VL933	2/257, 2/259	EAR99	N
3VL9400-1S	2/175, 2/238	N	N
3VL9400-1UD00	2/175	EAR99	N
3VL9400-1UD01	2/238	N	N
3VL9400-1UG00	2/175	EAR99	N
3VL9400-1UG01	2/238	N	N
3VL9400-1UH	2/175, 2/238	EAR99	N
3VL9400-1UJ	2/175, 2/238	EAR99	N
3VL9400-1UK	2/175, 2/238	EAR99	N
3VL9400-1UL	2/175, 2/238	EAR99	N
3VL9400-1UM00	2/175	EAR99	N
3VL9400-1UM01	2/238	N	N
3VL9400-1UN	2/175, 2/238	EAR99	N
3VL9400-1UP	2/175, 2/238	EAR99	N
3VL9400-1UQ	2/175, 2/238	EAR99	N
3VL9400-1UR	2/175, 2/238	EAR99	N
3VL9400-1US	2/175, 2/238	N	N
3VL9400-1UU	2/175, 2/238	EAR99	N

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3VL9400-1UV	2/175, 2/238	EAR99	N
3VL9400-2	2/175, 2/177, 2/238, 2/240, 2/249	EAR99	N
3VL9400-3A	2/179, 2/243	EAR99	N
3VL9400-3H	2/179, 2/182, 2/201, 2/243, 2/249, 2/265	EAR99	N
3VL9400-3J	2/246, 2/249	EAR99	N
3VL9400-3MA	2/182	N	N
3VL9400-3MC	2/182	N	N
3VL9400-3MD	2/182	N	N
3VL9400-3ME	2/182	N	N
3VL9400-3MJ	2/182, 2/249	N	N
3VL9400-3ML	2/182, 2/249	EAR99	N
3VL9400-3MN	2/182, 2/249	EAR99	N
3VL9400-3MQ	2/182, 2/249	EAR99	N
3VL9400-3MS	2/182, 2/249	EAR99	N
3VL9400-3T	2/195 ... 197	EAR99	N
3VL9400-4E	2/195, 2/257	EAR99	N
3VL9400-4P	2/188, 2/253	EAR99	N
3VL9400-4R	2/195, 2/257	EAR99	N
3VL9400-4TA30	2/195	EAR99	N
3VL9400-4TA31	2/259	N	N
3VL9400-4TA4	2/195	EAR99	N
3VL9400-4TC	2/195	EAR99	N
3VL9400-4TD	2/195	EAR99	N
3VL9400-4TF	2/195	EAR99	N
3VL9400-4W	2/188, 2/253	EAR99	N
3VL9400-8A	2/271	EAR99	N
3VL9400-8B	2/201, 2/208, 2/265, 2/269	EAR99	N
3VL9400-8CA	2/195, 2/259 ... 260	EAR99	N
3VL9400-8CB3	2/195, 2/259 ... 260	N	N
3VL9400-8CB4	2/195	EAR99	N
3VL9400-8CD	2/259	EAR99	N
3VL9400-8L	2/201, 2/265	EAR99	N
3VL942	2/257, 2/270	EAR99	N
3VL9440-5GG	2/192	N	N
3VL9440-5GH	2/192	EAR99	N
3VL9440-8	2/206, 2/270	EAR99	N
3VL9460-4E	2/260	EAR99	N
3VL9460-4P	2/254	EAR99	N
3VL9460-4R	2/260	EAR99	N
3VL9460-4TA	2/260	N	N
3VL9460-4TB	2/260	N	N
3VL9460-4TC	2/257	EAR99	N
3VL9460-4TF	2/195, 2/257	EAR99	N
3VL9460-4TM	2/259	EAR99	N
3VL9460-4TN	2/257	EAR99	N
3VL9460-4TX	2/260	EAR99	N
3VL9460-4TY	2/260	EAR99	N
3VL9460-4W	2/254	EAR99	N

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3VL9460-8	2/249	EAR99	N
3VL947	2/257, 2/260	EAR99	N
3VL950	2/179, 2/189, 2/196, 2/201 ... 202, 2/265	EAR99	N
3VL956	2/206	N	N
3VL9600-3A	2/179 ... 180, 2/243	EAR99	N
3VL9600-3HA	2/179 ... 180, 2/243	EAR99	N
3VL9600-3HC	2/179 ... 180, 2/243	EAR99	N
3VL9600-3HE	2/179 ... 180, 2/243	N	N
3VL9600-3HF	2/179 ... 180, 2/243	N	N
3VL9600-3HG	2/179 ... 180, 2/243	N	N
3VL9600-3HL	2/202 ... 203, 2/266	EAR99	N
3VL9600-3HN	2/182, 2/249	EAR99	N
3VL9600-3HP	2/179 ... 180	EAR99	N
3VL9600-3J	2/245 ... 249	EAR99	N
3VL9600-3MA	2/182	N	N
3VL9600-3MC	2/182	N	N
3VL9600-3MD	2/182	N	N
3VL9600-3ME	2/182	N	N
3VL9600-3MJ	2/182, 2/249	EAR99	N
3VL9600-3ML	2/182, 2/249	EAR99	N
3VL9600-3MN	2/182, 2/249	EAR99	N
3VL9600-3MQ	2/182, 2/249	EAR99	N
3VL9600-3MS	2/182, 2/249	EAR99	N
3VL9600-4	2/189, 2/197, 2/261	EAR99	N
3VL9600-8B	2/202, 2/209, 2/268	EAR99	N
3VL9600-8CA	2/196 ... 197, 2/261	EAR99	N
3VL9600-8CB	2/196 ... 197, 2/261	EAR99	N
3VL9600-8CE	2/195 ... 197, 2/259 ... 261	N	N
3VL9600-8L	2/202 ... 203, 2/266	EAR99	N
3VL9600-8S	2/203, 2/266	EAR99	N
3VL965	2/261	EAR99	N
3VL966	2/270	EAR99	N
3VL967	2/261	EAR99	N
3VL968	2/206	N	N
3VL9700-4	2/197, 2/261	EAR99	N
3VL9700-8BL00	2/200 ... 204	N	N
3VL9700-8BL01	2/263 ... 267	EAR99	N
3VL9712	2/206	N	N
3VL9715	2/199 ... 204, 2/263, 2/265 ... 267	EAR99	N
3VL975	2/261	EAR99	N
3VL977	2/261	EAR99	N
3VL978	2/270	EAR99	N
3VL9800-1S	2/176, 2/239	N	N
3VL9800-1UD	2/176	N	N
3VL9800-1UG00	2/176	N	N
3VL9800-1UG01	2/239	EAR99	N
3VL9800-1UH	2/176, 2/239	N	N
3VL9800-1UJ	2/176, 2/239	N	N
3VL9800-1UK	2/176, 2/239	EAR99	N
3VL9800-1UL	2/176	N	N
3VL9800-1UM	2/176, 2/239	N	N
3VL9800-1UN00	2/176	EAR99	N
3VL9800-1UN01	2/239	N	N
3VL9800-1UP	2/176, 2/239	N	N
3VL9800-1UQ00	2/176	EAR99	N
3VL9800-1UQ01	2/239	N	N
3VL9800-1UR	2/176, 2/239	N	N
3VL9800-1US	2/176, 2/239	N	N
3VL9800-1UU00	2/176	EAR99	N
3VL9800-1UU01	2/239	N	N
3VL9800-1UV00	2/176	EAR99	N
3VL9800-1UV01	2/239	N	N
3VL9800-2	2/176, 2/239, 2/249	EAR99	N
3VL9800-3AS20	2/181	N	N
3VL9800-3AS21	2/244	EAR99	N
3VL9800-3AT	2/181, 2/244	N	N
3VL9800-3AU	2/181, 2/244	EAR99	N
3VL9800-3AW	2/181, 2/244	EAR99	N
3VL9800-3H	2/181 ... 182, 2/203 ... 204, 2/244, 2/250, 2/267	EAR99	N
3VL9800-3J	2/247, 2/250	EAR99	N
3VL9800-3MJ	2/182, 2/250	EAR99	N
3VL9800-3ML	2/182, 2/250	EAR99	N
3VL9800-3MN	2/182, 2/250	EAR99	N
3VL9800-3MQ	2/182, 2/250	N	N
3VL9800-3MS	2/182, 2/250	EAR99	N
3VL9800-4	2/190 ... 191, 2/197 ... 198, 2/261 ... 262	EAR99	N
3VL9800-8	2/197 ... 198, 2/203 ... 204, 2/210 ... 211, 2/261 ... 262, 2/267, 2/269, 2/271	EAR99	N
3VL9812	2/270	EAR99	N
3VL9816-2	2/177, 2/240	EAR99	N
3VL9816-8TC	2/206	N	N
3VL9816-8TT	2/270	EAR99	N
3VL987	2/262	EAR99	N
3VT			
3VT1716-2D	7/81	On req.	On req.
3VT1716-2E	7/81	N	N
3VT2725-2D	7/86	On req.	On req.
3VT2725-2E	7/86	N	N
3VT3763-2D	7/92	On req.	On req.
3VT3763-2E	7/92	N	N
3VT4	7/98	N	N
3VT5	7/99	N	N
3VT9100-1SB	7/81	EAR99	N
3VT9100-1SC	7/81	N	N
3VT9100-1SD	7/81	N	N
3VT9100-1SE	7/81	N	N

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3VT9100-1U	7/81	N	N
3VT9100-2	7/81	N	N
3VT9100-3H	7/82 ... 83, 7/85	N	N
3VT9100-3MA	7/83	EAR99	N
3VT9100-3MB	7/83	EAR99	N
3VT9100-3MD	7/83	EAR99	N
3VT9100-3ME	7/83	EAR99	N
3VT9100-3MF	7/83	N	N
3VT9100-4	7/84 ... 85	N	N
3VT9100-8	7/83, 7/85	N	N
3VT92	7/87, 7/89 ... 91	N	N
3VT9300-1SB	7/93	EAR99	N
3VT9300-1SC	7/87, 7/93	N	N
3VT9300-1SD	7/87, 7/93	N	N
3VT9300-1SE	7/87, 7/93	N	N
3VT9300-1U	7/87, 7/93	N	N
3VT9300-2	7/86, 7/92	N	N
3VT9300-3HA	7/93	N	N
3VT9300-3HB	7/93	N	N
3VT9300-3HC	7/93	N	N
3VT9300-3HD	7/93	N	N
3VT9300-3HE	7/87, 7/93	N	N
3VT9300-3HF	7/87, 7/93	N	N
3VT9300-3HG1	7/88, 7/94	N	N
3VT9300-3HG2	7/88, 7/94	N	N
3VT9300-3HG3	7/88, 7/94	EAR99	N
3VT9300-3HH1	7/88, 7/94	N	N
3VT9300-3HH2	7/88, 7/94	N	N
3VT9300-3HH3	7/88, 7/94	EAR99	N
3VT9300-3HJ	7/88, 7/94	N	N
3VT9300-3HL	7/97	N	N
3VT9300-3M	7/89, 7/91, 7/95, 7/97	N	N
3VT9300-4	7/91, 7/95 ... 97	N	N
3VT9300-8	7/91, 7/97	N	N
3VT9303	7/96	N	N
3VT931	7/96	N	N
3VT932	7/96	N	N
3VT94	7/101	N	N
3VT95	7/99 ... 102	N	N
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3WL1106-2	1/16 ... 17, 1/23 ... 24, 1/30 ... 31, 1/37 ... 38	EAR99	N
3WL1106-3	1/18 ... 19, 1/25 ... 26, 1/32 ... 33, 1/39 ... 40	EAR99	N
3WL1106-4	1/20 ... 21, 1/27 ... 28, 1/34 ... 35, 1/41 ... 42	EAR99	N
3WL1108-2	1/16 ... 17, 1/23 ... 24, 1/30 ... 31, 1/37 ... 38	EAR99	N
3WL1108-3	1/18 ... 19, 1/25 ... 26, 1/32 ... 33, 1/39 ... 40	EAR99	N
3WL1108-4	1/20 ... 21, 1/27 ... 28, 1/34 ... 35, 1/41 ... 42	EAR99	N
3WL1110-2	1/16 ... 17, 1/23 ... 24, 1/30 ... 31, 1/37 ... 38	EAR99	N
3WL1110-3	1/18 ... 19, 1/25 ... 26, 1/32 ... 33, 1/39 ... 40	EAR99	N
3WL1110-4	1/20 ... 21, 1/27 ... 28, 1/34 ... 35, 1/41 ... 42	EAR99	N
3WL1112-2	1/16 ... 17, 1/23 ... 24, 1/30 ... 31, 1/37 ... 38	EAR99	N
3WL1112-3	1/18 ... 19, 1/25 ... 26, 1/32 ... 33, 1/39 ... 40	EAR99	N
3WL1112-4	1/20 ... 21, 1/27 ... 28, 1/34 ... 35, 1/41 ... 42	EAR99	N
3WL1116-2	1/16 ... 17, 1/23 ... 24, 1/30 ... 31, 1/37 ... 38	EAR99	N
3WL1116-3	1/18 ... 19, 1/25 ... 26, 1/32 ... 33, 1/39 ... 40	EAR99	N
3WL1116-4	1/20 ... 21, 1/27 ... 28, 1/34 ... 35, 1/41 ... 42	EAR99	N
3WL1120-2	1/16 ... 17, 1/23 ... 24, 1/30 ... 31, 1/37 ... 38	EAR99	N
3WL1120-3	1/18 ... 19, 1/25 ... 26, 1/32 ... 33, 1/39 ... 40	EAR99	N
3WL1120-4	1/20 ... 21, 1/27 ... 28, 1/34 ... 35, 1/41 ... 42	EAR99	N
3WL1120-8	1/76	On req.	On req.
3WL1208-2	1/16 ... 17, 1/23 ... 24, 1/30 ... 31, 1/37 ... 38	EAR99	N
3WL1208-3	1/18 ... 19, 1/25 ... 26, 1/32 ... 33, 1/39 ... 40	EAR99	N
3WL1208-4	1/20 ... 21, 1/27 ... 28, 1/34 ... 35, 1/41 ... 42	EAR99	N
3WL1210-2	1/16 ... 17, 1/23 ... 24, 1/30 ... 31, 1/37 ... 38	EAR99	N
3WL1210-3	1/18 ... 19, 1/25 ... 26, 1/32 ... 33, 1/39 ... 40	EAR99	N
3WL1210-4	1/20 ... 21, 1/27 ... 28, 1/34 ... 35, 1/41 ... 42	EAR99	N
3WL1210-8	1/76 ... 78	EAR99	N
3WL1212-2	1/16 ... 17, 1/23 ... 24, 1/30 ... 31, 1/37 ... 38	EAR99	N
3WL1212-3	1/18 ... 19, 1/25 ... 26, 1/32 ... 33, 1/39 ... 40	EAR99	N
3WL1212-4	1/20 ... 21, 1/27 ... 28, 1/34 ... 35, 1/41 ... 42	EAR99	N
3WL1216-2	1/16 ... 17, 1/23 ... 24, 1/30 ... 31, 1/37 ... 38	EAR99	N
3WL1216-3	1/18 ... 19, 1/25 ... 26, 1/32 ... 33, 1/39 ... 40	EAR99	N
3WL1216-4	1/20 ... 21, 1/27 ... 28, 1/34 ... 35, 1/41 ... 42	EAR99	N
3WL1216-5	1/22, 1/29, 1/36, 1/43	EAR99	N
3WL1220-2	1/16 ... 17, 1/23 ... 24, 1/30 ... 31, 1/37 ... 38	EAR99	N
3WL1220-3	1/18 ... 19, 1/25 ... 26, 1/32 ... 33, 1/39 ... 40	EAR99	N
3WL1220-4	1/20 ... 21, 1/27 ... 28, 1/34 ... 35, 1/41 ... 42	EAR99	N
3WL1220-5	1/22, 1/29, 1/36, 1/43	EAR99	N
3WL1220-8	1/76 ... 78	EAR99	N
3WL1225-2	1/16 ... 17, 1/23 ... 24, 1/30 ... 31, 1/37 ... 38	EAR99	N

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3WL1225-4	1/20 ... 21, 1/27 ... 28, 1/34 ... 35, 1/41 ... 42	EAR99	N
3WL1225-5	1/22, 1/29, 1/36, 1/43	EAR99	N
3WL1232-2	1/16 ... 17, 1/23 ... 24, 1/30 ... 31, 1/37 ... 38	EAR99	N
3WL1232-3	1/18 ... 19, 1/25 ... 26, 1/32 ... 33, 1/39 ... 40	EAR99	N
3WL1232-4	1/20 ... 21, 1/27 ... 28, 1/34 ... 35, 1/41 ... 42	EAR99	N
3WL1232-5	1/22, 1/29, 1/36, 1/43	EAR99	N
3WL1240-2	1/16, 1/23 ... 24, 1/30, 1/37 ... 38	EAR99	N
3WL1240-3	1/18, 1/25 ... 26, 1/32, 1/39 ... 40	EAR99	N
3WL1240-4	1/20, 1/27 ... 28, 1/34, 1/41 ... 42	EAR99	N
3WL1240-8	1/76 ... 78	EAR99	N
3WL1340-4	1/20 ... 21, 1/27 ... 28, 1/34 ... 35, 1/41 ... 42	EAR99	N
3WL1340-5	1/22, 1/29, 1/36, 1/43	EAR99	N
3WL1350-4	1/20, 1/27 ... 28, 1/34, 1/41 ... 42	EAR99	N
3WL1350-5	1/22, 1/29, 1/36, 1/43	EAR99	N
3WL1363-4	1/20, 1/27 ... 28, 1/34, 1/41 ... 42	EAR99	N
3WL1363-5	1/22, 1/29, 1/36, 1/43	EAR99	N
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3WL9	1/52, 1/54 ... 55, 1/57 ... 71, 1/79 ... 80, 1/102 ... 115, 2/175 ... 176	EAR99	N
3ZS			
3ZS271	13/15	EAR99	N
3ZS278	13/10	N	N
3ZS2791-1CC10	13/11	N	N
3ZS2791-1CC11	13/11	5D992	N
3ZS28	13/15	5D992	N
4AC			
4AC	9/3 ... 5, 12/36	N	N
4NC			
4NC	11/38 ... 39	N	N
5SA			
5SA	5/13	N	N
5SB			
5SB	5/13	N	N
5SC			
5SC	5/13	N	N
5SD			
5SD4	5/68	N	N
5SD5	5/68	N	N
5SD6	5/14	N	N
5SD7	6/4, 6/6, 6/8, 6/10 ... 13, 6/19 ... 20	N	N
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5SH2	5/16, 10/31	N	N
5SH3	5/16 ... 17, 5/32, 10/20, 10/24, 17.3/28, 17.4/22, 17.5/21	N	N
5SH4	5/11	N	N
5SH5	5/8, 5/10 ... 11, 5/31 ... 32, 10/30 ... 31	N	N
5SJ			
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5SL	3/5 ... 12	N	N
5SM			
5SM192	4/45	N	N
5SM193	4/21	EAR99	N
5SM21	3/39, 4/24, 4/26	N	N
5SM2322-0	4/24	N	N
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5SM2322-6	3/39, 4/26	N	N
5SM2322-6K	3/40, 4/27	EAR99	N
5SM2323	4/24, 4/26	N	N
5SM2325	3/39 ... 40, 4/24, 4/26 ... 27, 4/29	EAR99	N
5SM2326	4/24, 4/26	N	N
5SM2327	3/39, 4/25, 4/27	EAR99	N
5SM2332-0	4/24	N	N
5SM2332-6	3/39, 4/26	N	N
5SM2332-6K	3/40, 4/27	EAR99	N
5SM2333	4/24, 4/26	N	N
5SM2335	3/39 ... 40, 4/24, 4/26 ... 27	EAR99	N
5SM2336	4/24, 4/26	N	N
5SM2342-0	4/24	N	N
5SM2342-6	3/39, 4/26	N	N
5SM2342-6K	3/40, 4/27	EAR99	N
5SM2343	4/24, 4/26	N	N
5SM2345	3/39 ... 40, 4/24, 4/26 ... 27	EAR99	N
5SM2346	4/24, 4/26	N	N
5SM2347	3/39, 4/25, 4/27	EAR99	N
5SM24	3/39, 4/26	N	N
5SM2622-0	4/24	N	N
5SM2622-2	4/25	EAR99	N
5SM2622-6	3/39, 4/26	N	N
5SM2622-8	3/40, 4/28	EAR99	N
5SM2623	4/24 ... 26, 4/28	N	N
5SM2625-0	4/24	N	N

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5SM2625-8	3/40, 4/28	EAR99	N
5SM2626	4/24 ... 26, 4/28	N	N
5SM2627-0	4/25	EAR99	N
5SM2627-6	3/39, 4/27	EAR99	N
5SM2627-8	3/40, 4/29	N	N
5SM2632	3/39, 4/24, 4/26	N	N
5SM2633	4/24, 4/26	N	N
5SM2635-0	4/24	N	N
5SM2635-6	3/39, 4/26	N	N
5SM2635-8	3/40, 4/28	EAR99	N
5SM2636	4/24, 4/26, 4/28	N	N
5SM2642	3/39, 4/24, 4/26	N	N
5SM2643	4/24, 4/26	N	N
5SM2645-0	4/24	N	N
5SM2645-2	4/25	EAR99	N
5SM2645-6	3/39, 4/26	N	N
5SM2645-8	3/40, 4/28	EAR99	N
5SM2646	4/24 ... 26, 4/28	N	N
5SM2647	3/39 ... 40, 4/25, 4/27, 4/29	EAR99	N
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5SM2735-8	3/40, 4/28	EAR99	N
5SM2745-0	4/24	N	N
5SM2745-6	3/39, 4/26	N	N
5SM2745-8	3/40, 4/28	EAR99	N
5SM2822	4/28	EAR99	N
5SM2825-0	4/24	N	N
5SM2825-8	4/28	EAR99	N
5SM2827	4/29	EAR99	N
5SM283	3/40, 4/28	EAR99	N
5SM284	3/40, 4/25, 4/28 ... 29	EAR99	N
5SM331	4/11 ... 12	N	N
5SM332	4/15	EAR99	N
5SM3342	4/15	EAR99	N
5SM3344	4/15	EAR99	N
5SM3345	4/11 ... 12	N	N
5SM3346	4/15	EAR99	N
5SM3347	4/15	EAR99	N
5SM3348	4/11 ... 12	N	N
5SM34	4/11 ... 12	N	N
5SM361	4/11 ... 12	N	N
5SM362	4/15	EAR99	N
5SM3642	4/15	EAR99	N
5SM3644	4/15	EAR99	N
5SM3645	4/11 ... 12	N	N
5SM3646	4/15	EAR99	N
5SM3647	4/15	EAR99	N
5SM3648	4/11 ... 12	N	N
5SM3745	4/11 ... 12	N	N
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5SM3748	4/11 ... 12	N	N
5SM601	4/40	EAR99	N
5SM602	4/40	EAR99	N
5SM609	4/41	N	N
5SP			
5SP	3/21, 3/75 ... 77	N	N
5ST			
5ST1	3/77	N	N
5ST2	3/41 ... 42, 3/59, 3/61, 4/44, 4/46, 5/25, 5/31 ... 32, 14/90	N	N
5ST3010	3/38, 3/70, 4/20, 5/8, 8/7, 8/16, 8/20, 8/22	N	N
5ST3011	3/38, 3/70, 4/20, 5/8, 8/7, 8/16, 8/20, 8/22	N	N
5ST3012	3/38, 3/70, 4/20, 5/8, 8/7, 8/16, 8/20, 8/22	N	N
5ST3013	3/38, 4/20, 8/16, 8/20, 8/22	EAR99	N
5ST3013-2	3/38, 4/20	N	N
5ST3014	3/38, 4/20, 8/16, 8/20, 8/22	EAR99	N
5ST3014-2	3/38, 4/20	N	N
5ST3015	3/38, 4/20, 8/16, 8/20, 8/22	EAR99	N
5ST3015-2	3/38, 4/20	N	N
5ST302	3/38, 3/70, 4/20	N	N
5ST303	3/38, 3/70, 4/21	N	N
5ST304	3/38, 4/20	EAR99	N
5ST305	3/38, 4/21	N	N
5ST306	3/41	N	N
5ST36	3/35, 3/46 ... 47, 3/55, 3/71 ... 72, 4/43 ... 44, 5/32 ... 33	N	N
5ST37	3/35, 3/47 ... 49, 3/55, 3/71, 4/40, 4/43 ... 44, 5/30 ... 31, 5/33	N	N
5ST38	3/41, 3/72, 4/21, 4/37, 8/7, 8/16, 8/21	N	N
5SU			
5SU1154-6	4/35	EAR99	N
5SU1154-7KK0	4/35	EAR99H	N
5SU1154-7KK1	4/35	EAR99	N
5SU1324-0	4/33	EAR99	N
5SU1324-1	4/33	EAR99	N
5SU1324-6F	4/35	N	N
5SU1324-6K	4/35	EAR99	N
5SU1324-7F	4/35	N	N
5SU1324-7K	4/35	EAR99	N
5SU134	4/33, 4/35	N	N
5SU135	4/32 ... 36	N	N
5SU137	4/16	EAR99	N

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5SU1624-1	4/33	EAR99	N
5SU1624-6K	4/35	EAR99	N
5SU1624-6W	4/36	N	N
5SU1624-7K	4/35	EAR99	N
5SU1624-7W	4/36	N	N
5SU1644-0	4/33	N	N
5SU1644-1	4/33	N	N
5SU1644-6	4/35 ... 36	N	N
5SU1644-7K	4/35	N	N
5SU1644-7W	4/36	EAR99	N
5SU1653-1	4/32	N	N
5SU1653-7	4/34	EAR99	N
5SU1654-0	4/33	N	N
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5SU1654-6	4/35	EAR99	N
5SU1654-7	4/35	EAR99	N
5SU1656-0	4/32	N	N
5SU1656-1	4/32	N	N
5SU1656-6	4/34	EAR99	N
5SU1656-7	4/34	EAR99	N
5SU167	4/16	EAR99	N
5SU18	4/36	EAR99	N
5SV			
5SV3111-6	4/7	EAR99	N
5SV3111-6K	4/7	N	N
5SV33	4/7 ... 9	N	N
5SV3412-6	4/7	EAR99	N
5SV3412-6K	4/7	N	N
5SV3414-6	4/7	EAR99	N
5SV3414-6K	4/7	N	N
5SV3416-6	4/7	EAR99	N
5SV3416-6K	4/7	N	N
5SV3416-8	4/8	N	N
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5SV3417-6K	4/7	N	N
5SV344	4/7 ... 8	N	N
5SV3612	4/7 ... 9	N	N
5SV3614	4/7 ... 9	N	N
5SV3616-3	4/9	N	N
5SV3616-6	4/7	EAR99	N
5SV3616-6K	4/7 ... 8	N	N
5SV3616-8	4/8	N	N
5SV3617-3	4/9	N	N
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5SV3617-7	4/9	N	N
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5SV3742	4/7	EAR99	N
5SV3744	4/7	EAR99	N
5SV3746-6	4/7	EAR99	N
5SV3746-6G	4/7	N	N
5SV3746-6K	4/7	N	N
5SV3747	4/7	EAR99	N
5SV38	4/8	N	N
5SV4111-0	4/6	EAR99	N
5SV4111-0K	4/6	N	N
5SV43	4/6	N	N
5SV4412	4/6	EAR99	N
5SV4414-0	4/6	EAR99	N
5SV4414-0K	4/6	N	N
5SV4416-0	4/6	EAR99	N
5SV4416-0K	4/6	N	N
5SV4417	4/6	EAR99	N
5SV444	4/6	N	N
5SV4612	4/6	N	N
5SV4614	4/6	N	N
5SV4616-0	4/6	EAR99	N
5SV4616-0K	4/6	N	N
5SV4617-0	4/6	EAR99	N
5SV4617-0K	4/6	N	N
5SV464	4/6	N	N
5SV47	4/6	EAR99	N
5SV8	12/11 ... 12	N	N
5SW			
5SW	3/42, 4/20 ... 21, 4/46	N	N
5SY			
5SY3	3/33	N	N
5SY4	3/17 ... 20	N	N
5SY5	3/22 ... 23	N	N
5SY6	3/15 ... 16, 3/34	N	N
5SY7	3/24 ... 26	N	N
5SY8	3/27 ... 28	N	N
5SZ			
5SZ	4/45	N	N
5TE			
5TE1	7/28	N	N
5TE2	8/17, 8/22	N	N
5TE480	8/9	N	N
5TE481	8/9	N	N
5TE4820	8/9	N	N
5TE4821	8/9	N	N
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5TE4823	8/9	N	N
5TE4824	8/9	N	N
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5TT31	5/44, 8/51, 12/17, 12/25, 12/41	N	N
5TT3201-1KK2	12/43	EAR99	N
5TT3201-1KK3	12/43	EAR99	N
5TT3201-1KK8	12/45	N	N
5TT34	8/39, 12/17 ... 18, 12/20, 12/24, 12/26 ... 27, 12/34, 12/37, 12/40	N	N
5TT410	8/28	N	N
5TT411	8/28	N	N
5TT4121	8/28	EAR99	N
5TT4122	8/28	EAR99	N
5TT4123	8/28	N	N
5TT4125	8/28	EAR99	N
5TT413	8/28	N	N
5TT414	8/29	N	N
5TT415	8/28	EAR99	N
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5TT5	8/34, 8/37 ... 38, 12/38	N	N
5TT6	12/22	N	N
5TT7	12/36	N	N
7KM			
7KM2	11/16	EAR99	N
7KM3	11/14	EAR99	N
7KM4	11/18	EAR99	N
7KM5	11/19, 11/21	N	N
7KM92	11/25	EAR99	N
7KM93	2/107, 11/25	EAR99	N
7KM9900-0G	11/22	N	N
7KM9900-0S	11/22	EAR99	N
7KM9900-0X	11/22	N	N
7KM9900-0Y	11/22	N	N
7KT			
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7KT5	11/35 ... 36	N	N
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7LF			
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8GB5021	17/9, 17/14	N	N
8GB5024	17/6, 17/13	N	N
8GB5025	17/10	EAR99	N
8GB5036-0	17/13	N	N
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8GB5036-3	17/10	EAR99	N
8GB5036-4	17/6	N	N
8GB5048-0	17/13	N	N
8GB5048-1	17/6	N	N
8GB5048-3	17/10	EAR99	N
8GB5048-4	17/6	N	N
8GB52	17/8	N	N
8GD			
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8GS			
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8JK			
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8MF1000-2G	16/12	N	N
8MF1000-2H	16/34, 16/37, 16/39	N	N
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