

# SIEMENS

SENTRON

## 3WA Air Circuit Breakers

[siemens.com/sentron-3wa](https://www.siemens.com/sentron-3wa)

Catalog  
LV 13

Edition  
02/2025



# Innovative solutions for industrial controls and power distribution

Reliable components, systems and software solutions are essential in ensuring smooth power distribution in buildings and industrial plants.

With SIRIUS, SENTRON, SIVACON and ALPHA, we offer an innovative portfolio for standard-compliant and demand-oriented applications.

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## Catalog LV 13 · 02/2025

You will find the latest edition and all future editions in SiePortal at [www.siemens.com/lowvoltage/catalogs](http://www.siemens.com/lowvoltage/catalogs)

You can find the current prices in SiePortal at  
[www.siemens.com/lowvoltage/product-catalog](http://www.siemens.com/lowvoltage/product-catalog)



The products and systems described in this catalog are manufactured/ distributed under application of a certified quality management system in accordance with EN ISO 9001 (for the Certified Registration Nos., see [www.siemens.com/system-certificates/ep](http://www.siemens.com/system-certificates/ep)). The certificate is recognized by all IQNet countries.

### Technical specifications

The technical specifications are for general information purposes only. Always heed the operating instructions and notices on individual products during assembly, operation and maintenance.

All illustrations are not binding.

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# 3WA Air Circuit Breakers

Protecting

|                            |     |
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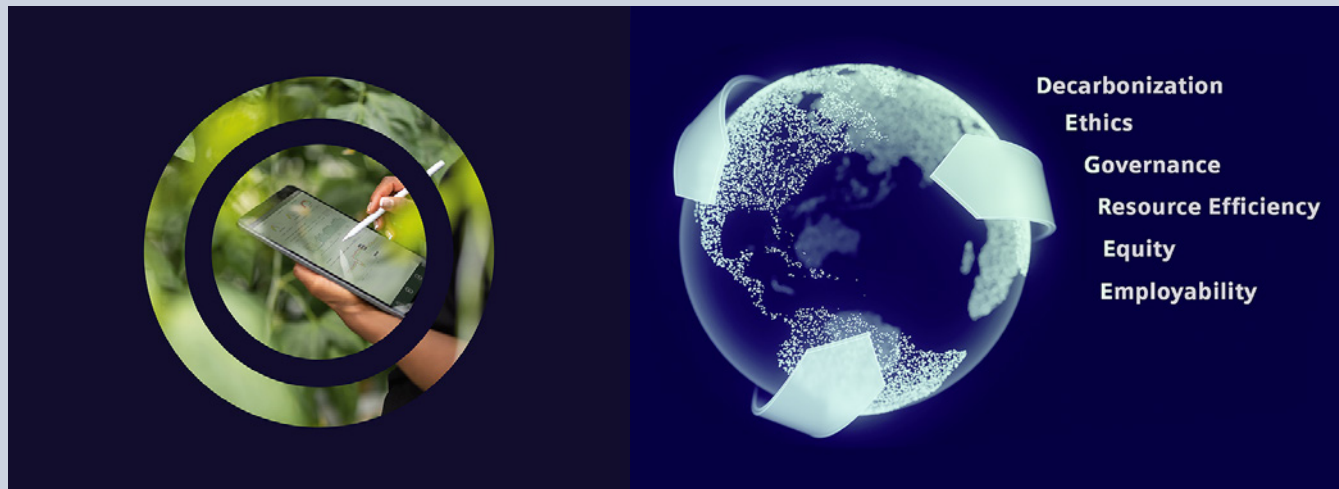
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A

# Sustainability@Siemens

Transforming the everyday to create a better tomorrow.



Siemens as a company takes an all-round view of environmental, social and governance criteria (ESG) with its DEGREE rulebook (decarbonization, ethics, governance, resource efficiency, equity and employability). Not only are we committed to reducing the carbon footprint in our own plants to net zero by 2030, but also to helping our customers achieve their decarbonization and sustainability objectives.

## Mission & strategy

As a focused technology company, Siemens is committed to tackling the world's most profound challenges by leveraging the synergies of digitalization and sustainability.

## Technology with a purpose

We develop technologies that interconnect the real world and the digital world and enable our customers to make positive changes to their industries, which form the backbone of our economy: industry, infrastructure, transportation and healthcare.

## Our contribution

Siemens makes a difference every single day by providing innovative solutions for challenges in environmental protection, decarbonization, health and safety. Innovative solutions that have a clear purpose: to make the world more sustainable, more integrative and a better place to live.

## Facts about sustainability

For almost 175 years, Siemens has been driven by the desire to improve the lives of people around the world with our technologies.



Siemens EcoTech is an environment label for products that promotes the sustainable transformation of industry and infrastructure. The label offers transparency about the performance of our certified products in relation to criteria relevant to the environment so that you can make well-founded decisions in order to achieve your sustainability objectives: [www.siemens.com/SiemensEcoTech](https://www.siemens.com/SiemensEcoTech)

Further information at:  
[www.siemens.com/sustainability](https://www.siemens.com/sustainability)



# New products



**LV 10**  
**Low-Voltage Power Distribution and Electrical Installation Technology**  
 SENTRON • SIVACON • ALPHA  
 PDF (E86060-K8280-A101-B9-7600)

## Siemens EcoTech

Products bearing our Siemens EcoTech label are identified by this clickable symbol in the catalog



[www.siemens.com/lowvoltage/SiemensEcoTech](http://www.siemens.com/lowvoltage/SiemensEcoTech)

## Clickable article numbers

Direct forwarding to the individual products in SiePortal (product catalog) by clicking on the article number in the catalog

3VA9157-0EK11



or by entering this web address incl. article number  
[www.siemens.com/product\\_catalog\\_SIEP?Article No.](http://www.siemens.com/product_catalog_SIEP?Article No.)

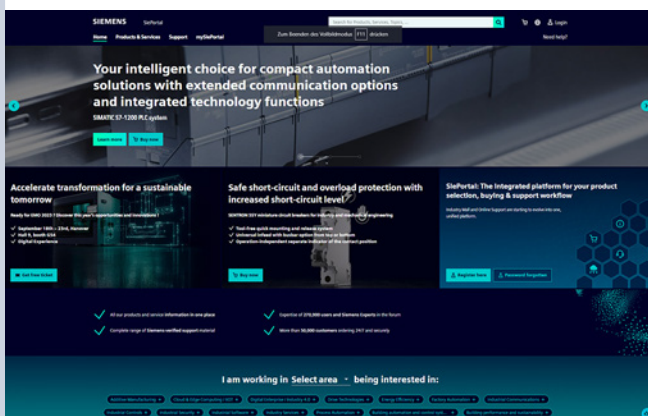
## Clickable images

Direct forwarding to the individual motif types in the Industry image database by clicking on the images in the catalog



Industry image database:  
[www.siemens.com/lowvoltage/picturedb](http://www.siemens.com/lowvoltage/picturedb)

## SiePortal – The integrated platform for product selection, ordering and support



SiePortal:  
[www.siemens.com/sieportal](http://www.siemens.com/sieportal)

## SiePortal – Knowledge base for low-voltage products

SiePortal > Support > Knowledge base

- Catalog/Brochure
- Manual
- Characteristic curves
- Certificates
- FAQ etc.

[www.siemens.com/lowvoltage/product-support](http://www.siemens.com/lowvoltage/product-support)

## SiePortal – Product catalog (Internet ordering platform) for low-voltage products

SiePortal > Products & Services

[www.siemens.com/lowvoltage/product-catalog](http://www.siemens.com/lowvoltage/product-catalog)

# Trust the tried-and-tested

By using the tried and tested SENTRON 3WA air circuit breaker, you can be sure that you are getting the reliable protection you expect for your power distribution equipment. The SENTRON 3WA air circuit breaker and the SENTRON portfolio combine to offer you a comprehensive product range which fulfills all requirements and which is also flexible enough to suit any application. Extensive and modular accessories make functional expansions easy. A long service life and the low maintenance cost of all the components are your assurance of long-term reliability.

You will find more information on our website

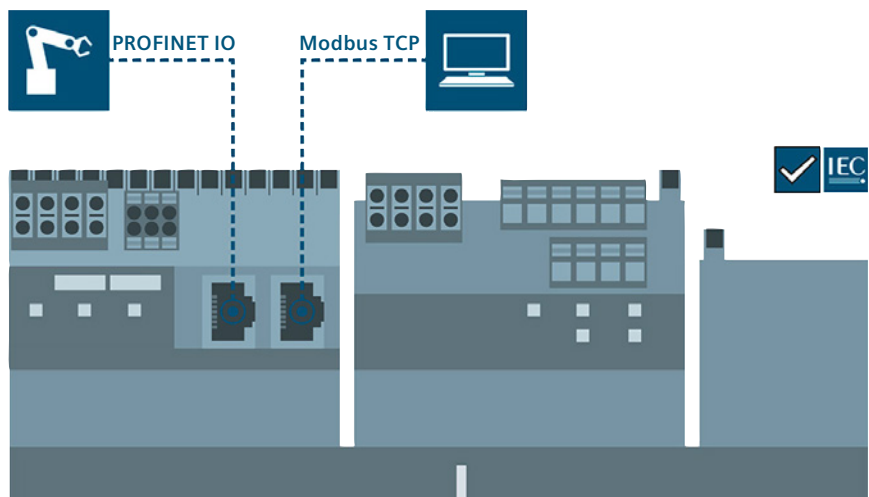
[sie.ag/3RptGW0](https://sie.ag/3RptGW0)

## Consistent portfolio



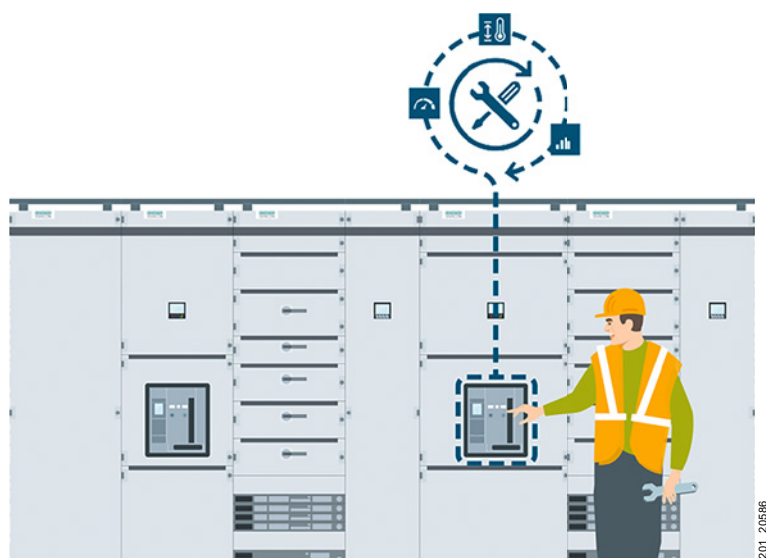
- Consistent, end-to-end portfolio since 2001 thanks to the SENTRON 3WL and 3WA air circuit breakers having the same dimensions and terminals
- Consistent, end-to-end circuit breaker portfolio up to 1150 V AC
- Three sizes with rated currents from 630 A to 6300 A for AC applications
- One size up to 4000 A for DC applications
- High breaking capacity  $I_{cu}$  from 55 kA to 150 kA at 500 V AC
- Simple extension of functions thanks to uniform accessories for all sizes
- A single electronic trip unit that meets all requirements

## Simple extension of functions



- Accessories can also be retrofitted on site at any time
- ETU functions can be extended by means of on-site upgrades (ETU600)
- COM190 PROFINET-IO/Modbus TCP module for connection to higher-level management systems; designed as a combination module to use multiple protocols simultaneously (Modbus TCP and PROFINET)
- Switched Ethernet functionality for optimized architecture, engineering, and redundancy while maintaining highest performance

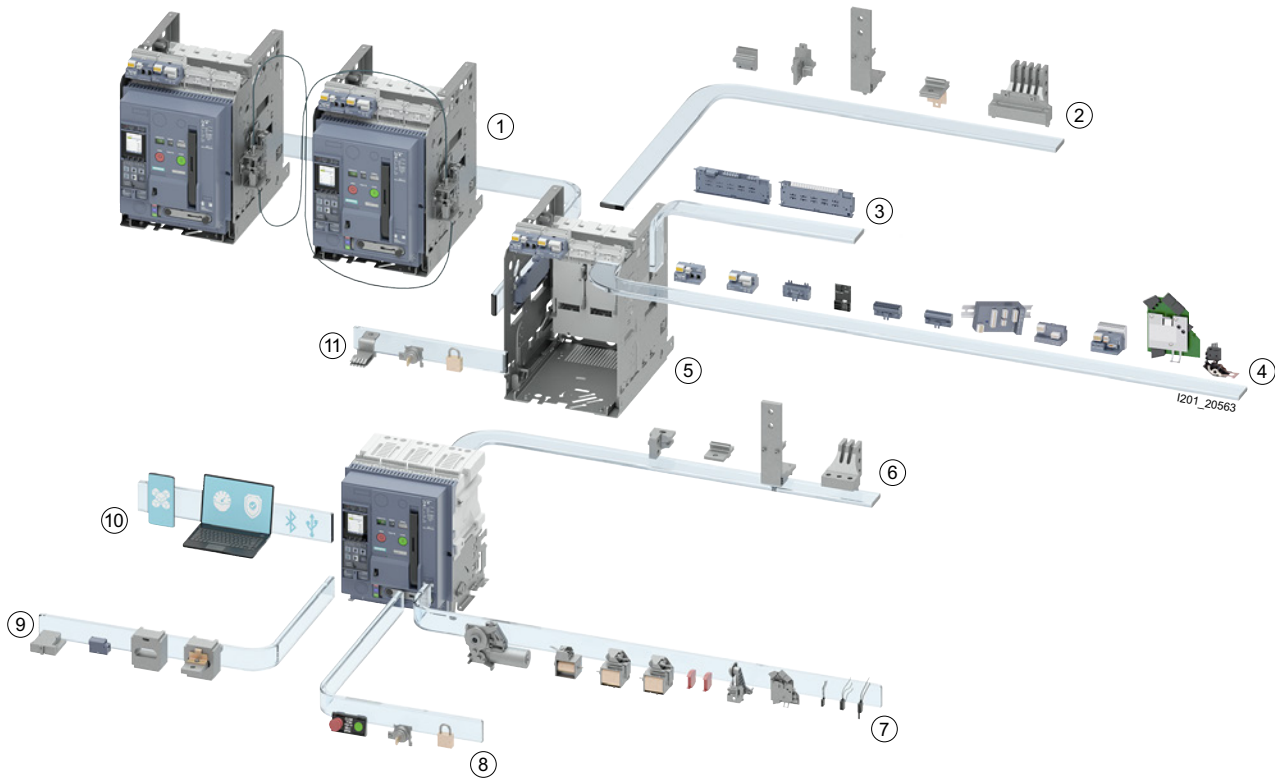
## Long-term reliability



- Simple annual inspection can be carried out independently by the customer
- Replacement of wear parts can be performed as needed by the customer (no Siemens personnel required)
- Under certain ambient conditions, inspections are required only once every four years
- Automatic self-monitoring of proper functioning of the SENTRON 3WA air circuit breaker
- Cybersecurity functions for secure communication

# Trust the tried-and-tested

## System overview



- ① Interlocking solutions with Bowden cable
- ② Main connection variants for guide frame
- ③ Position signaling switch (PSS) for the guide frame
- ④ Interfaces/COM-modules/Aux. terminals
- ⑤ Guide frame with shutter
- ⑥ Main connection variants for fixed-mounted version
- ⑦ Internal accessories:  
aux. release, spring charging motor, aux. contacts
- ⑧ Locking solutions for fixed-mounted version
- ⑨ Electronic trip units (ETU)
- ⑩ Digital function packages can be activated for the ETU
- ⑪ Interlocking solutions for withdrawable version

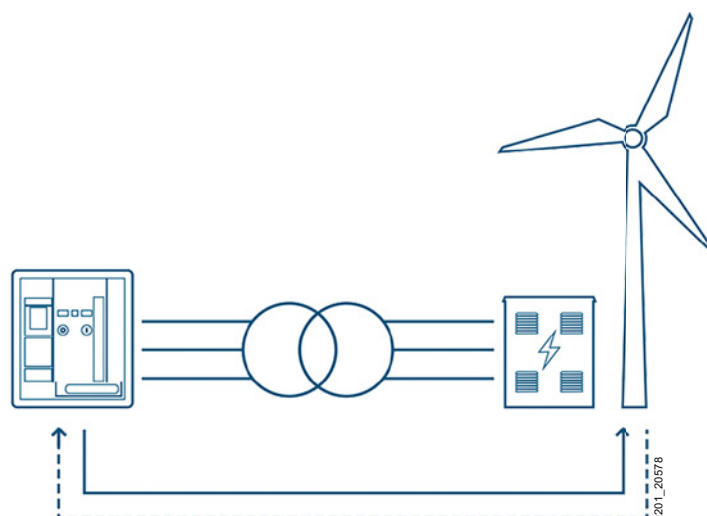


# Benefit from efficiency

The SENTRON 3WA air circuit breaker offers enhanced protective functions and high selectivity for maximum system availability. Its robust mechanics and unbeatable product quality prove their worth even in demanding heavy-duty applications. Using SENTRON 3WA air circuit breakers in your power distribution equipment allows for efficient retrofitting of the SENTRON 3WL air circuit breaker.

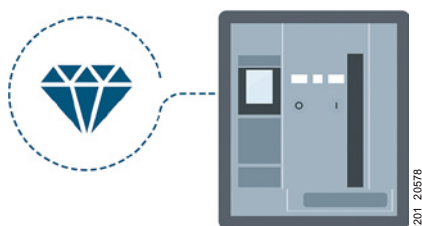
**You will find more information on our website**  
[sie.ag/3CZLoeb](https://sie.ag/3CZLoeb)

## Optimal selectivity



- Perfectly coordinated selectivity values and protective functions for air circuit breakers and downstream protective devices like molded case circuit breakers assure full selectivity in cases of both overload and short circuit (the system component directly affected is safely shut down)
- Directional protective function: better protection of equipment (e.g. transformer) thanks to the detection of short-circuits when the direction of energy flow changes
- Hazardous discharge currents are detected thanks to optimized ground-fault protection functions

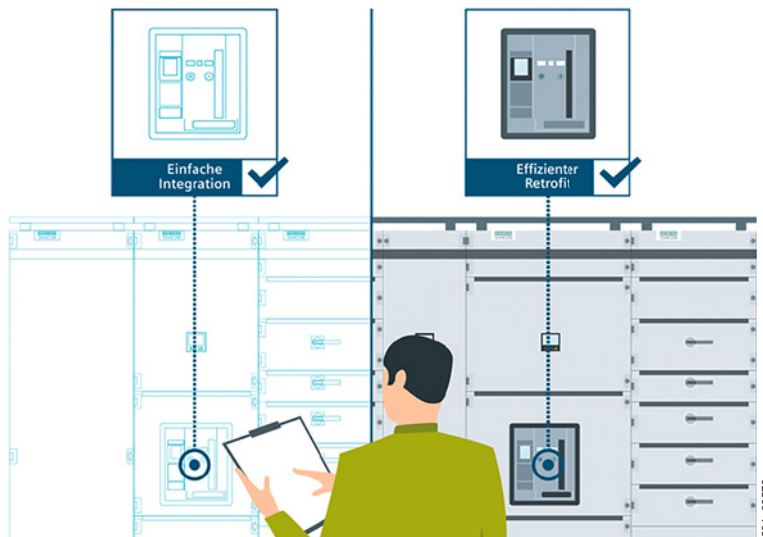
## Highest product quality



- Further development of the proven, extremely robust design of the previous model, the SENTRON 3WL air circuit breaker
- New special versions (high short-circuit breaking capacity at high voltages): up to 125 kA at 1000 V
- Maximum load capacity of circuit breaker thanks to long-lasting short-circuit breaking capacity at  $I_{cw}$  (3 s)
- Accessories designed for the maximum service life of the air circuit breaker
- The SENTRON 3WA air circuit breaker is developed and manufactured in accordance with a certified quality management system complying with DIN EN ISO 9001:2008
- User-friendly operation of ETU600 electronic trip unit via rotary coding switch, display, or remote parameterization

# Trust the tried-and-tested

## *Time and cost savings when integrating into switchboards*



- Easy integration of the SENTRON 3WA air circuit breaker in switchboard with no need for additional testing if the SENTRON 3WL air circuit breaker is already integrated in the switchboard design
- Simple replaceability in existing power distribution equipment: the SENTRON 3WL air circuit breaker can be replaced by the SENTRON 3WA air circuit breaker according to IEC 61439 without any additional testing if the SENTRON 3WA air circuit breaker is operated subject to the same technical requirements
- Type test according to IEC 61439 is only required if new technical features of the SENTRON 3WA air circuit breaker are used (e.g. high switching capacities)
- Possibility of installing the SENTRON 3WA air circuit breaker in an existing guide frame of a SENTRON 3WL air circuit breaker

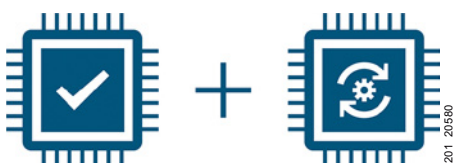
For certificate, see: [www.siemens.com/lowvoltage/certificate](https://www.siemens.com/lowvoltage/certificate) (109783797)

# Create solutions with potential

The SENTRON 3WA air circuit breaker offers selectable and upgradeable functionalities, ensuring long-term flexibility. Powerful communication options allow for secure data transmission. Its power data acquisition ensures maximum transparency in plant operation. Thanks to the easy selection, planning and ordering process, it enables efficient workflows.

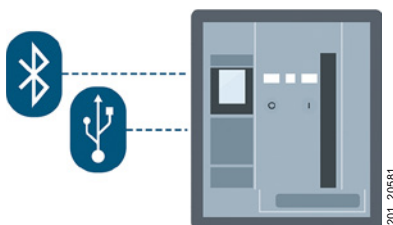
You will find more information on our website  
[sie.ag/3Qe3L1T](https://sie.ag/3Qe3L1T)

## Long-term flexibility



- Intelligent dual-processor solution provides future-proofing and high levels of flexibility, together with strong security: Unmodifiable protection processor for basic protective functions and upgradeable application processor for metering functions and enhanced protective functions
- Easy to install functions and upgrades using the SENTRON Powerconfig configuration software
- Optimal transparency for energy efficiency according to IEC 60364-8-1 thanks to a predefined metering function level (PMF level)
- Adaptation to new standards and modified standards possible at any time via upgrades

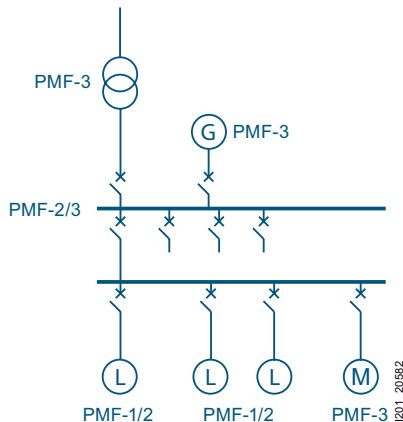
## Future-proof communication solutions



- PROFINET-IO, for example for very demanding industrial communications, and Modbus TCP, e. g. for power monitoring
- PROFINET-IO redundancy and compliance with the highest PROFINET-IO standards (real-time capability)
- Standard interfaces like USB-C and Bluetooth available in every air circuit breaker
- Possibility of using two communications modules simultaneously

# Create solutions with potential

## High system transparency



- Simple integration in energy management systems according to ISO 50001 with selection of metering functions based on the energy efficiency guidelines of IEC 60364-8-1
- ETU600 electronic trip unit with advanced monitoring and reporting concept
- SENTRON 3WA air circuit breaker monitored remotely via the SENTRON Powerconfig mobile app

## Secure communication



- Communication via Bluetooth: only data retrieval possible, no changes can be made to the SENTRON 3WA air circuit breaker
- Comprehensive cybersecurity solutions, such as
  - lockable communications module
  - lockable USB-C interface
- Communication via USB: setting parameters, testing, and switching using the SENTRON Powerconfig configuration software

## Selection, planning, and ordering



- Reduced complexity, bundling of functions, and rapid selection of device configuration
- Visual and interactive online configurator with interface to comprehensive CAx data support
- Direct conversion of SENTRON 3WL air circuit breaker article numbers to SENTRON 3WA air circuit breaker article numbers available
- Quick and easy switchgear documentation thanks to switch-specific EPLAN macros
- After configuration, the SENTRON 3WA air circuit breaker and guide frame can be ordered separately





# Enjoy seamless consistency

## *Convenient planning and configuration*



- Data-based engineering: reduced effort thanks to extensive CAx data and creation of a digital twin
- Easy and fast planning with SIMARIS software tools, e. g. to verify selectivity and for easy calculation of short circuits across the entire power distribution system
- Generating individual EPLAN macros to integrate data (2D, 3D) easily and quickly and configure the circuit diagram

# The advantages: How makers benefit

- Transparent power data can improve energy efficiency by up to 30%
- Lower penalty payments for grid operators in the event of power outages
- Robust air circuit breakers can withstand deviations in voltage supply, minimizing the risk of system faults
- While up to seven hours were previously required to plan the wiring, it can now be done at the push of a button, resulting in considerable time savings
- System tests confirm a combination of robust mechanics, automated diagnostics, and web-based upgrades increase the real service life of the circuit breaker, if properly maintained, to potentially as long as 30 years, which represents a considerable reduction in system life-cycle costs
- SENTRON 3WA air circuit breaker can be easily and inexpensively integrated into switchboards if the SENTRON 3WL air circuit breaker is already integrated

## Made for makers. Simply reliable.

All power distribution systems rely on a secure infeed of electrical energy. The 3WA air circuit breaker combines all of the functions which are required of power distribution equipment in the digital companies of today: from reliably protecting people and equipment from electrical accidents and damage, to flexible application and retrofit options, a long service life and low maintenance, to innovative features for integrated e-engineering, reliable energy data recording and seamless integration into digital environments. As the central component of the electrical power distribution, the 3WA air circuit breaker provides the basis for a holistic energy system in the digital age. The 3WA air circuit breaker is also part of the Siemens Xcelerator portfolio and therefore provides support with achieving digital and sustainable transformation – faster, simpler, and scalable.

## Reliable, versatile and perfectly integrated

The air circuit breakers reliably protect electrical equipment from damage or fire resulting from short circuit, ground fault or overload failures.



### Note:

Products bearing our Siemens EcoTech label are identified by this clickable symbol in the catalog:



[www.siemens.com/lowvoltage/SiemensEcoTech](https://www.siemens.com/lowvoltage/SiemensEcoTech)

# Air Circuit Breakers

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# A multitude of additional information ...

## Information + ordering

### All the important things at a glance

For information about air circuit breakers, please visit our website [www.siemens.com/sentron-3wa](http://www.siemens.com/sentron-3wa)

### Your product in detail

The SiePortal platform (knowledge base) provides comprehensive information  
[www.siemens.com/lowvoltage/product-support](http://www.siemens.com/lowvoltage/product-support)

- Quick Selection Guide
  - 3WA air circuit breakers **(109781967)**
- Brochure
  - 3WA air circuit breakers **(109800077)**

The relevant tender specifications can be found at [www.siemens.com/tenderspecifications](http://www.siemens.com/tenderspecifications)

Use our conversion tool for quick and easy conversion to Siemens products [www.siemens.com/conversion-tool](http://www.siemens.com/conversion-tool)

### Siemens YouTube channel

- 3WA air circuit breaker – Teaserfilm  
[sie.ag/2Myvit](http://sie.ag/2Myvit)
- 3WA air circuit breaker – Highlightfilm  
[sie.ag/3dy65A](http://sie.ag/3dy65A)

### Everything you need for your order

Refer to SiePortal to find an overview of your products (product catalog)

- Air circuit breakers [sie.ag/2IXiZjB](http://sie.ag/2IXiZjB)

Direct forwarding to the individual products in SiePortal by clicking on the article number in the catalog or entering this web address incl. article number  
[www.siemens.com/product\\_catalog\\_SIEP?Article.No.](http://www.siemens.com/product_catalog_SIEP?Article.No.)

Order supports can be found in SiePortal at [www.siemens.com/lowvoltage/product-support](http://www.siemens.com/lowvoltage/product-support)

- Order Support
  - 3WA air circuit breakers – Made for makers. Simply reliable. **(109800074)**

### Configurators

The configurator reduces the time and effort required in the planning and ordering process, and allows for individual adaptations. Configure your air circuit breaker at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

The following are additionally available for your configured air circuit breaker:

- 3D views
- CAD data
- Unit wiring diagrams
- Dimension drawings

## The fast track to the experts

### Contact persons in your region

We offer a comprehensive portfolio of services. You can find your local contacts at [www.siemens.com/lowvoltage/components/contact](http://www.siemens.com/lowvoltage/components/contact)

You will find further information on services at [www.siemens.com/service-offers](http://www.siemens.com/service-offers)

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at [www.siemens.com/support-request](http://www.siemens.com/support-request)

# ... can be found in our online services

## Commissioning + operation



### SENTRON Powerconfig

The combined commissioning and service tool SENTRON Powerconfig for communication-capable measuring devices, circuit protection devices and circuit breakers.

Free download SENTRON Powerconfig  
[www.siemens.com/powerconfig](http://www.siemens.com/powerconfig)

Free download SENTRON Powerconfig mobile via  
[App Store](#) and [Play Store](#)



### Your product in detail

The SiePortal platform (knowledge base) provides detailed technical information  
[www.siemens.com/lowvoltage/product-support](http://www.siemens.com/lowvoltage/product-support)

- Operating instructions
- Characteristic curves
- Certificates

Online Support app available for download from the  
[App Store](#) and [Play Store](#)

You will find further information at  
[www.siemens.com/support-app](http://www.siemens.com/support-app)

Provision of 3D data (step and u3d data formats)

- SiePortal (product catalog)  
[www.siemens.com/lowvoltage/product-catalog](http://www.siemens.com/lowvoltage/product-catalog)
- Image database  
[www.siemens.com/lowvoltage/picturedb](http://www.siemens.com/lowvoltage/picturedb)

Engineering data for CAD or CAE systems are available in the CAX Download Manager at  
[www.siemens.com/cax](http://www.siemens.com/cax)



### Manuals

Manuals can be found in SiePortal at  
[www.siemens.com/lowvoltage/manuals](http://www.siemens.com/lowvoltage/manuals)

- Equipment Manual
  - 3WA1 air circuit breakers (109763061)
- System Manual
  - 3WA air circuit breaker communication (109792368)
- Configuration Manual
  - Low-voltage protection devices selectivity tables (109748621)



### Face-to-face or online training

Our training courses can be found at  
[www.siemens.com/sitrain-lowvoltage](http://www.siemens.com/sitrain-lowvoltage)

- 3WA air circuit breakers (WT-LV3WA)
- Protection systems in low-voltage power distribution (WT-LVAPS)
- Maintenance and operation of 3WA circuit breakers (LV-3WAMAIN)
- Maintenance and operation of 3WL and 3WA circuit breakers (LV-CBMAIN)
- Certification: Maintenance and operation of 3WL and 3WA circuit breakers (LV-CBCERT)
- 3WL and 3WA air circuit breakers protection technology and communication (LV-COPR)



### Technical overview – Air circuit breakers



### The fast way to get you to our online services

This page provides you with comprehensive information and links on air circuit breakers  
[www.siemens.com/lowvoltage/product-support](http://www.siemens.com/lowvoltage/product-support) (109781188)



# 3WA1 circuit breakers and non-automatic circuit breakers for AC and DC

IEC 60947-2

1

AC



3WA11



3WA12

## Basic data

|                                 |   |              |               |  |               |               |  |
|---------------------------------|---|--------------|---------------|--|---------------|---------------|--|
| Rated operational voltage $U_e$ | V | $\leq 1000$  |               |  | $\leq 1150$   |               |  |
| Rated current $I_n$             | A | 630 ... 2500 |               |  | 2000 ... 4000 |               |  |
| Size                            |   | 1            |               |  | 2             |               |  |
| Type of mounting                |   | Withdrawable | Fixed mounted |  | Withdrawable  | Fixed-mounted |  |
| Number of poles                 |   | 3/4-pole     | 3/4-pole      |  | 3/4-pole      | 3/4-pole      |  |

## Dimensions

|                                                           |    |           |           |  |           |           |  |
|-----------------------------------------------------------|----|-----------|-----------|--|-----------|-----------|--|
| Width (3-pole   4-pole)                                   | mm | 320   410 | 320   410 |  | 460   590 | 460   590 |  |
| Height (for breaking capacity N, S, M, H and D   C and E) | mm | 466   516 | 437   462 |  | 466   516 | 437   462 |  |
| Depth                                                     | mm | 471       | 357       |  | 471       | 357       |  |

## Approvals

|                           |                             |  |  |  |  |                             |  |  |  |  |
|---------------------------|-----------------------------|--|--|--|--|-----------------------------|--|--|--|--|
| General product approvals | VDE, EAC, CCC, CE, C-Tick   |  |  |  |  | VDE, EAC, CCC, CE, C-Tick   |  |  |  |  |
| Marine/shipbuilding       | ABS, DNV, LRS, BV, PRS, CCS |  |  |  |  | ABS, DNV, LRS, BV, PRS, CCS |  |  |  |  |

## Breaking capacity

|                                               |    | N       | S       | M       | H <b>new</b> | E       | S       | M       | H         | C         | E       |
|-----------------------------------------------|----|---------|---------|---------|--------------|---------|---------|---------|-----------|-----------|---------|
| Rated short-circuit breaking capacity         |    |         |         |         |              |         |         |         |           |           |         |
| $I_{cu}   I_{cs}$ at $U_e$ up to 415/440 V AC | kA | 55   55 | 66   66 | 85   85 | 100   100    | –   –   | 66   66 | 85   85 | 100   100 | 130   130 | –   –   |
| $I_{cu}   I_{cs}$ at $U_e$ up to 500 V AC     | kA | 55   55 | 66   66 | 85   85 | 100   100    | –   –   | 66   66 | 85   85 | 100   100 | 130   130 | –   –   |
| $I_{cu}   I_{cs}$ at $U_e$ up to 690 V AC     | kA | 42   42 | 50   50 | 66   66 | 66   66      | 85   85 | 50   50 | 66   66 | 85   85   | 100   100 | 85   85 |
| $I_{cu}   I_{cs}$ at $U_e$ up to 1000 V AC    | kA | –   –   | –   –   | –   –   | –   –        | 50   50 | –   –   | –   –   | –   –     | –   –     | 85   85 |
| $I_{cu}   I_{cs}$ at $U_e$ up to 1150 V AC    | kA | –   –   | –   –   | –   –   | –   –        | –   –   | –   –   | –   –   | –   –     | –   –     | 70   70 |

## Rated short-circuit making capacity $I_{cm}$

|                                   |    |     |     |     |     |     |     |     |     |     |     |
|-----------------------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| $I_{cm}$ at $U_e$ up to 415 V AC  | kA | 121 | 145 | 187 | 220 | –   | 145 | 187 | 220 | 286 | –   |
| $I_{cm}$ at $U_e$ up to 500 V AC  | kA | 121 | 145 | 187 | 220 | –   | 145 | 187 | 220 | 286 | –   |
| $I_{cm}$ at $U_e$ up to 690 V AC  | kA | 88  | 105 | 145 | 145 | 187 | 105 | 145 | 187 | 220 | 187 |
| $I_{cm}$ at $U_e$ up to 1000 V AC | kA | –   | –   | –   | –   | 105 | –   | –   | –   | –   | 187 |
| $I_{cm}$ at $U_e$ up to 1150 V AC | kA | –   | –   | –   | –   | –   | –   | –   | –   | –   | 154 |

AC

**3WA13**

DC

**3WA12**

1

| 3WA13                       |                                           |                                           | 3WA12                                           |                           |
|-----------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------------|---------------------------|
| ≤ 1150                      |                                           |                                           | ≤ 1000 (≤ 1500 for 4-pole, Breaking capacity E) |                           |
| 4000 ... 6300               |                                           |                                           | 1000 ... 4000                                   |                           |
| 3                           |                                           |                                           | 2                                               |                           |
| Withdrawable<br>3/4-pole    | Fixed-mounted<br>3/4-pole                 |                                           | Withdrawable<br>3/4-pole                        | Fixed-mounted<br>3/4-pole |
| 704   914                   | 704   914                                 |                                           | 460   590                                       | 460   590                 |
| 466   516                   | 437   462                                 |                                           | 466   516                                       | 437   462                 |
| 471                         | 357                                       |                                           | 471                                             | 357                       |
| VDE, EAC, CCC, CE, C-Tick   |                                           |                                           | VDE, EAC, CCC, CE, C-Tick                       |                           |
| ABS, DNV, LRS, BV, PRS, CCS |                                           |                                           | ABS, DNV, LRS, BV, PRS, CCS                     |                           |
| H                           | C                                         | E                                         | D                                               | E                         |
| 100   100                   | 150   150 (3-pole);<br>130   130 (4-pole) | –   –                                     | –   –                                           | –   –                     |
| 100   100                   | 150   150 (3-pole);<br>130   130 (4-pole) | –   –                                     | –   –                                           | –   –                     |
| 85   85                     | 150   150 (3-pole);<br>130   130 (4-pole) | 150   150 (3-pole);<br>130   130 (4-pole) | –   –                                           | –   –                     |
| –   –                       | –   –                                     | 125   125                                 | –   –                                           | –   –                     |
| –   –                       | –   –                                     | 70   70                                   | –   –                                           | –   –                     |
| 220                         | 330 (3-pole);<br>286 (4-pole)             | –                                         | –                                               | –                         |
| 220                         | 330 (3-pole);<br>286 (4-pole)             | –                                         | –                                               | –                         |
| 187                         | 330 (3-pole);<br>286 (4-pole)             | 330 (3-pole);<br>286 (4-pole)             | –                                               | –                         |
| –                           | –                                         | 275                                       | –                                               | –                         |
| –                           | –                                         | 154                                       | –                                               | –                         |

# 3WA1 circuit breakers and non-automatic circuit breakers for AC and DC

IEC 60947-2 (continued)

1

AC



3WA11

3WA12

| Breaking capacity                                                                          |         |    | N                                 | S  | M  | H new | E  | S                                 | M                                 | H                                 | C   | E                                 |
|--------------------------------------------------------------------------------------------|---------|----|-----------------------------------|----|----|-------|----|-----------------------------------|-----------------------------------|-----------------------------------|-----|-----------------------------------|
| Rated short-time withstand current $I_{cw}^{1)}$                                           |         |    |                                   |    |    |       |    |                                   |                                   |                                   |     |                                   |
| $I_{cw}$ at $U_e$ up to 500 V AC                                                           | 0.5 s   | kA | 55                                | 66 | 85 | 85    | —  | 66                                | 85                                | 100                               | 100 | —                                 |
|                                                                                            | 1 s     | kA | 50                                | 66 | 85 | 85    | —  | 66                                | 85                                | 85                                | 100 | —                                 |
|                                                                                            | 2 s     | kA | 35 <sup>2)/45 <sup>3)</sup></sup> | 45 | 70 | 70    | —  | 66                                | 66 <sup>4)/85 <sup>5)</sup></sup> | 66 <sup>4)/85 <sup>5)</sup></sup> | 85  | —                                 |
|                                                                                            | 3 s     | kA | 30 <sup>2)/35 <sup>3)</sup></sup> | 35 | 60 | 60    | —  | 55 <sup>4)/66 <sup>5)</sup></sup> | 55 <sup>4)/75 <sup>5)</sup></sup> | 55 <sup>4)/75 <sup>5)</sup></sup> | 75  | —                                 |
| $I_{cw}$ at $U_e$ up to 690 V AC                                                           | 0.5 s   | kA | 42                                | 50 | 66 | 66    | 85 | 50                                | 66                                | 85                                | 100 | 85                                |
|                                                                                            | 1 s     | kA | 42                                | 50 | 66 | 66    | 85 | 50                                | 66                                | 85                                | 100 | 85                                |
|                                                                                            | 2 s     | kA | 35 <sup>2)/42 <sup>3)</sup></sup> | 45 | 66 | 66    | 70 | 50                                | 66                                | 66 <sup>4)/85 <sup>5)</sup></sup> | 85  | 66 <sup>4)/85 <sup>5)</sup></sup> |
|                                                                                            | 3 s     | kA | 30 <sup>2)/35 <sup>3)</sup></sup> | 35 | 60 | 60    | 60 | 50                                | 55 <sup>4)/66 <sup>5)</sup></sup> | 55 <sup>4)/75 <sup>5)</sup></sup> | 75  | 55 <sup>4)/75 <sup>5)</sup></sup> |
| $I_{cw}$ at $U_e$ up to 1000 V AC                                                          | 0.5 s   | kA | —                                 | —  | —  | —     | 50 | —                                 | —                                 | —                                 | —   | 85                                |
|                                                                                            | 1 s     | kA | —                                 | —  | —  | —     | 50 | —                                 | —                                 | —                                 | —   | 85                                |
|                                                                                            | 2 s     | kA | —                                 | —  | —  | —     | 50 | —                                 | —                                 | —                                 | —   | 66 <sup>4)/85 <sup>5)</sup></sup> |
|                                                                                            | 3 s     | kA | —                                 | —  | —  | —     | 50 | —                                 | —                                 | —                                 | —   | 55 <sup>4)/75 <sup>5)</sup></sup> |
| $I_{cw}$ at $U_e$ up to 1150 V AC                                                          | 0.5 s   | kA | —                                 | —  | —  | —     | —  | —                                 | —                                 | —                                 | —   | 70                                |
|                                                                                            | 1 s     | kA | —                                 | —  | —  | —     | —  | —                                 | —                                 | —                                 | —   | 70                                |
|                                                                                            | 2 s     | kA | —                                 | —  | —  | —     | —  | —                                 | —                                 | —                                 | —   | 50                                |
|                                                                                            | 3 s     | kA | —                                 | —  | —  | —     | —  | —                                 | —                                 | —                                 | —   | 50                                |
| $I_{cw}$ at $U_e$ up to 220 V DC                                                           | 1 s     | kA | —                                 | —  | —  | —     | —  | —                                 | —                                 | —                                 | —   | —                                 |
| $I_{cw}$ at $U_e$ up to 300 V DC                                                           | 1 s     | kA | —                                 | —  | —  | —     | —  | —                                 | —                                 | —                                 | —   | —                                 |
| $I_{cw}$ at $U_e$ up to 600 V DC                                                           | 1 s     | kA | —                                 | —  | —  | —     | —  | —                                 | —                                 | —                                 | —   | —                                 |
| $I_{cw}$ at $U_e$ up to 1000 V DC                                                          | 1 s     | kA | —                                 | —  | —  | —     | —  | —                                 | —                                 | —                                 | —   | —                                 |
| $I_{cw}$ at $U_e$ up to 1500 V DC                                                          | 1 s     | kA | —                                 | —  | —  | —     | —  | —                                 | —                                 | —                                 | —   | —                                 |
| Rated conditional short-circuit current $I_{cc}$ of the non-automatic air circuit breakers |         |    |                                   |    |    |       |    |                                   |                                   |                                   |     |                                   |
| Up to 500 V AC                                                                             | kA      | 55 | 66                                | 85 | —  | —     | 66 | 85                                | 100                               | 100                               | —   | —                                 |
| Up to 690 V AC                                                                             | kA      | 42 | 50                                | 66 | —  | 85    | 50 | 66                                | 85                                | 100                               | 85  | —                                 |
| Up to 1000 V AC                                                                            | kA      | —  | —                                 | —  | —  | 50    | —  | —                                 | —                                 | —                                 | 85  | —                                 |
| Up to 1150 V AC                                                                            | kA      | —  | —                                 | —  | —  | —     | —  | —                                 | —                                 | —                                 | 70  | —                                 |
| Up to 220 V DC                                                                             | kA      | —  | —                                 | —  | —  | —     | —  | —                                 | —                                 | —                                 | —   | —                                 |
| Up to 300 V DC                                                                             | kA      | —  | —                                 | —  | —  | —     | —  | —                                 | —                                 | —                                 | —   | —                                 |
| Up to 600 V DC                                                                             | kA      | —  | —                                 | —  | —  | —     | —  | —                                 | —                                 | —                                 | —   | —                                 |
| Up to 1000 V DC                                                                            | kA      | —  | —                                 | —  | —  | —     | —  | —                                 | —                                 | —                                 | —   | —                                 |
| Up to 1500 V DC                                                                            | kA      | —  | —                                 | —  | —  | —     | —  | —                                 | —                                 | —                                 | —   | —                                 |
| IT network capability                                                                      |         |    |                                   |    |    |       |    |                                   |                                   |                                   |     |                                   |
| 1-pole short-circuit breaking capacity $I_{IT}$                                            | ≤ 500 V | kA | 50                                | 50 | 50 | 50    | —  | 50                                | 50                                | 50                                | 50  | —                                 |
| acc. to IEC 60947-2 Annex H                                                                | ≤ 690 V | kA | —                                 | —  | —  | —     | 50 | —                                 | —                                 | —                                 | —   | 50                                |
|                                                                                            | 1000 V  | kA | —                                 | —  | —  | —     | —  | —                                 | —                                 | —                                 | —   | —                                 |

<sup>1)</sup> At rated operational voltage  $U_e \geq 690$  V, the  $I_{cw}$  value of the circuit breaker corresponds to the  $I_{cu}$  or  $I_{cs}$  value

<sup>2)</sup> Size 1 with  $I_{n \max} \leq 1250$  A  
<sup>3)</sup> Size 1 with  $I_{n \max} \geq 1600$  A

<sup>4)</sup>  $I_{n \max} \leq 2500$  A  
<sup>5)</sup>  $I_{n \max} \geq 3200$  A

AC



DC



1

## 3WA13

## 3WA12

| H   | C                          | E                          | D  | E                       |
|-----|----------------------------|----------------------------|----|-------------------------|
| 100 | 130 (3-pole); 120 (4-pole) | –                          | –  | –                       |
| 100 | 130 (3-pole); 120 (4-pole) | –                          | –  | –                       |
| 100 | 130 (3-pole); 120 (4-pole) | –                          | –  | –                       |
| 100 | 130 (3-pole); 120 (4-pole) | –                          | –  | –                       |
| 85  | 130 (3-pole); 120 (4-pole) | 130 (3-pole); 120 (4-pole) | –  | –                       |
| 85  | 130 (3-pole); 120 (4-pole) | 130 (3-pole); 120 (4-pole) | –  | –                       |
| 85  | 130 (3-pole); 120 (4-pole) | 130 (3-pole); 120 (4-pole) | –  | –                       |
| 85  | 130 (3-pole); 120 (4-pole) | 130 (3-pole); 120 (4-pole) | –  | –                       |
| –   | –                          | 125 (3-pole); 120 (4-pole) | –  | –                       |
| –   | –                          | 125 (3-pole); 120 (4-pole) | –  | –                       |
| –   | –                          | 125 (3-pole); 120 (4-pole) | –  | –                       |
| –   | –                          | 125 (3-pole); 120 (4-pole) | –  | –                       |
| –   | –                          | 70                         | –  | –                       |
| –   | –                          | 70                         | –  | –                       |
| –   | –                          | 70                         | –  | –                       |
| –   | –                          | 70                         | –  | –                       |
| –   | –                          | –                          | 35 | –                       |
| –   | –                          | –                          | 30 | –                       |
| –   | –                          | –                          | 25 | –                       |
| –   | –                          | –                          | –  | 20                      |
| –   | –                          | –                          | –  | – (3-pole); 20 (4-pole) |
| 100 | 130 (3-pole); 120 (4-pole) | –                          | –  | –                       |
| 85  | 130 (3-pole); 120 (4-pole) | 130 (3-pole); 120 (4-pole) | –  | –                       |
| –   | –                          | 125 (3-pole); 120 (4-pole) | –  | –                       |
| –   | –                          | 70                         | –  | –                       |
| –   | –                          | –                          | 35 | –                       |
| –   | –                          | –                          | 30 | –                       |
| –   | –                          | –                          | 25 | –                       |
| –   | –                          | –                          | –  | 20                      |
| –   | –                          | –                          | –  | – (3-pole); 20 (4-pole) |
| 50  | 50                         | –                          | –  | –                       |
| –   | –                          | 50                         | –  | –                       |
| –   | –                          | –                          | –  | –                       |

# 3WA1 circuit breakers and non-automatic circuit breakers for AC

IEC 60947-2

1

3WA11

Rated current  $I_n$ 

630 A

800 A

1000 A

1250 A

1600 A

2000 A

2500 A

## General data

Isolating function acc. to EN 60947-2

Yes

Utilization category

B

Permissible ambient temperature

Operation

°C

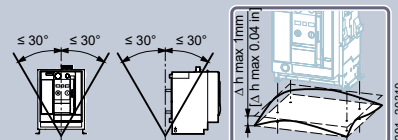
-40 ... +70

Storage

°C

-40 ... +80

Mounting position



Degree of protection

IP20 without control cabinet door, IP41 with door sealing frame, IP55 with cover

## Voltage

Rated operational voltage  $U_e$  at 50/60 Hz

1000 V version

V AC

≤ 1000

Rated insulation voltage  $U_i$ 

V AC

1000

Rated impulse withstand voltage  $U_{imp}$ 

Main conducting paths

kV

12

Auxiliary circuits

kV

4

Control circuits

kV

2.5

## Permissible load <sup>1)</sup>

### Permissible load for withdrawable versions

For all connection types (except rear vertical main connections)

Up to 40 °C (Cu bare)

A

630

800

1000

1250

1600

2000

–

Up to 55 °C (Cu bare)

A

630

800

1000

1250

1600

2000

–

Up to 60 °C (Cu bare)

A

630

800

1000

1250

1600

1930

–

Up to 70 °C (Cu bare)

A

630

800

1000

1210

1490

1780

–

With rear vertical connections

Up to 55 °C (Cu bare)

A

630

800

1000

1250

1600

2000

2500

Up to 60 °C (Cu bare)

A

630

800

1000

1250

1600

2000

2370

Up to 70 °C (Cu bare)

A

630

800

1000

1250

1545

1855

2060

### Permissible load for fixed-mounted versions

For all connection types (except rear vertical main connections)

Up to 55 °C (Cu bare)

A

630

800

1000

1250

1600

2000

–

Up to 60 °C (Cu bare)

A

630

800

1000

1250

1600

2000

–

Up to 70 °C (Cu bare)

A

630

800

1000

1250

1600

2000

–

With rear vertical connections

Up to 55 °C (Cu bare)

A

630

800

1000

1250

1600

2000

2500 <sup>2)</sup>

Up to 60 °C (Cu bare)

A

630

800

1000

1250

1600

2000

2500 <sup>2)</sup>

Up to 70 °C (Cu bare)

A

630

800

1000

1250

1600

2000

2500 <sup>2)</sup>

## Power loss at $I_n$

With 3-phase symmetrical load with maximum rated current, complete device (3/4p)

Fixed-mounted

W

30

45

70

105

135

240

360

Withdrawable versions

W

55

85

130

205

310

440

600

<sup>1)</sup> The stated temperatures are the ambient temperatures of the circuit breaker

<sup>2)</sup> Copper bars painted black

<sup>3)</sup> Only flange connections are available

<sup>4)</sup> 4000 A up to 65 °C

<sup>5)</sup> For 4000 A circuit breakers with horizontal connection, 5 × 100 × 10 mm bars are required

## 3WA12



## 3WA13



1

| 3WA12                                                                               |        |        |                    | 3WA13       |                    |                                             |                                                                                     |        |        |
|-------------------------------------------------------------------------------------|--------|--------|--------------------|-------------|--------------------|---------------------------------------------|-------------------------------------------------------------------------------------|--------|--------|
| 2000 A                                                                              | 2500 A | 3200 A | 3600 A<br>new      | 3-pole      | 4-pole             | 4-pole<br>N pole left<br>with option<br>D04 | 4000 A                                                                              | 5000 A | 6300 A |
| Yes                                                                                 |        |        |                    |             |                    |                                             | Yes                                                                                 |        |        |
| B                                                                                   |        |        |                    |             |                    |                                             | B                                                                                   |        |        |
| -40 ... +70                                                                         |        |        |                    |             |                    |                                             | -40 ... +70                                                                         |        |        |
| -40 ... +80                                                                         |        |        |                    |             |                    |                                             | -40 ... +80                                                                         |        |        |
|                                                                                     |        |        |                    |             |                    |                                             |                                                                                     |        |        |
| IP20 without control cabinet door, IP41 with door sealing frame,<br>IP55 with cover |        |        |                    |             |                    |                                             | IP20 without control cabinet door, IP41 with door sealing frame,<br>IP55 with cover |        |        |
| ≤ 1150                                                                              |        |        |                    |             |                    |                                             | ≤ 1150                                                                              |        |        |
| ≤ 1150                                                                              |        |        |                    |             |                    |                                             | ≤ 1150                                                                              |        |        |
| 12                                                                                  |        |        |                    |             |                    |                                             | 12                                                                                  |        |        |
| 4                                                                                   |        |        |                    |             |                    |                                             | 4                                                                                   |        |        |
| 2.5                                                                                 |        |        |                    |             |                    |                                             | 2.5                                                                                 |        |        |
| 2000                                                                                | 2500   | 3200   | 3600 <sup>3)</sup> | 4000        | 4000               | 4000                                        | 4000                                                                                | 5000   | —      |
| 2000                                                                                | 2500   | 3200   | 3490 <sup>3)</sup> | 3750        | 3750               | 3750                                        | 4000                                                                                | 5000   | —      |
| 2000                                                                                | 2500   | 3020   | 3380 <sup>3)</sup> | 3620        | 3620               | 3620                                        | 4000                                                                                | 5000   | —      |
| 2000                                                                                | 2280   | 2870   | 3150 <sup>3)</sup> | 3360        | 3360               | 3360                                        | 4000                                                                                | 5000   | —      |
| 2000                                                                                | 2500   | 3200   | —                  | 4000        | 4000               | 4000                                        | 4000                                                                                | 5000   | 5920   |
| 2000                                                                                | 2500   | 3200   | —                  | 3910        | 3910               | 3910                                        | 4000                                                                                | 5000   | 5810   |
| 2000                                                                                | 2390   | 2945   | —                  | 3645        | 3645               | 3645                                        | 4000                                                                                | 5000   | 5500   |
| 2000                                                                                | 2500   | 3200   | —                  | 4000        | 4000               | 4000                                        | 4000                                                                                | 5000   | —      |
| 2000                                                                                | 2500   | 3200   | —                  | 4000        | 4000 <sup>4)</sup> | 4000                                        | 4000                                                                                | 5000   | —      |
| 2000                                                                                | 2500   | 3200   | —                  | 4000        | 3860               | 4000                                        | 4000                                                                                | 5000   | —      |
| 2000                                                                                | 2500   | 3200   | —                  | 4000        | 4000               | 4000                                        | 4000                                                                                | 5000   | 6300   |
| 2000                                                                                | 2500   | 3200   | —                  | 4000        | 4000               | 4000                                        | 4000                                                                                | 5000   | 6300   |
| 2000                                                                                | 2500   | 3200   | —                  | 4000        | 4000               | 4000                                        | 4000                                                                                | 5000   | 5920   |
| Connections: vertical   horizontal                                                  |        |        |                    |             |                    |                                             |                                                                                     |        |        |
| 180                                                                                 | 270    | 410    | —                  | 760   805   | 760   830          | 760   805                                   | 520                                                                                 | 630    | 900    |
| 320                                                                                 | 520    | 710    | 800                | 1040   1170 | 1040   1200        | 1040   1170                                 | 810                                                                                 | 1050   | 1600   |

# 3WA1 circuit breakers and non-automatic circuit breakers for AC

IEC 60947-2 (continued)

3WA11



| Rated current $I_n$                                           |                                      |                  | 630 A | 800 A | 1000 A | 1250 A           | 1600 A | 2000 A | 2500 A |
|---------------------------------------------------------------|--------------------------------------|------------------|-------|-------|--------|------------------|--------|--------|--------|
| <b>Switching times</b>                                        |                                      |                  |       |       |        |                  |        |        |        |
| Make time (mechanical)                                        |                                      | ms               |       |       |        | 35               |        |        |        |
| Electrical make time (through closing coil 100% OP)           |                                      | ms               |       |       |        | 80               |        |        |        |
| Electrical make time (through closing coil 5% OP)             |                                      | ms               |       |       |        | 50               |        |        |        |
| Opening time (mechanical)                                     |                                      | ms               |       |       |        | 38               |        |        |        |
| Electrical opening time (through shunt trip 100% OP)          |                                      | ms               |       |       |        | 80               |        |        |        |
| Electrical opening time (through shunt trip 5% OP)            |                                      | ms               |       |       |        | 50               |        |        |        |
| Electrical opening time (through undervoltage release)        |                                      | ms               |       |       |        | 80 <sup>2)</sup> |        |        |        |
| Opening time due to ETU (instantaneous short-circuit release) |                                      | ms               |       |       |        | 50               |        |        |        |
| <b>Service life/endurance</b>                                 |                                      |                  |       |       |        |                  |        |        |        |
| <b>Breaking capacity N, 3/4-pole</b>                          |                                      |                  |       |       |        |                  |        |        |        |
| Mechanical                                                    | Without maintenance                  | Operating cycles |       |       |        | 15000            |        |        |        |
|                                                               | With maintenance <sup>1)</sup>       | Operating cycles |       |       |        | 30000            |        |        |        |
| Electrical                                                    | Without maintenance 690 V            | Operating cycles |       |       | 10000  |                  |        | 7500   | 5000   |
|                                                               | With maintenance <sup>1)</sup>       | Operating cycles |       |       |        | 30000            |        |        |        |
| <b>Breaking capacity S, 3/4-pole</b>                          |                                      |                  |       |       |        |                  |        |        |        |
| Mechanical                                                    | Without maintenance                  | Operating cycles |       |       |        | 15000            |        |        |        |
|                                                               | With maintenance <sup>1)</sup>       | Operating cycles |       |       |        | 30000            |        |        |        |
| Electrical                                                    | Without maintenance 690 V            | Operating cycles |       |       | 10000  |                  |        | 7500   | 5000   |
|                                                               | With maintenance <sup>1)</sup>       | Operating cycles |       |       |        | 30000            |        |        |        |
| <b>Breaking capacity M, 3/4-pole</b>                          |                                      |                  |       |       |        |                  |        |        |        |
| Mechanical                                                    | Without maintenance                  | Operating cycles |       |       |        | 10000            |        |        |        |
|                                                               | With maintenance <sup>1)</sup>       | Operating cycles |       |       |        | 20000            |        |        |        |
| Electrical                                                    | Without maintenance 690 V            | Operating cycles |       |       | 10000  |                  |        | 7500   | 5000   |
|                                                               | With maintenance <sup>1)</sup>       | Operating cycles |       |       |        | 20000            |        |        |        |
| <b>Breaking capacity E, 3/4-pole <sup>3)</sup></b>            |                                      |                  |       |       |        |                  |        |        |        |
| Mechanical                                                    | Without maintenance                  | Operating cycles |       |       |        | 10000            |        |        |        |
|                                                               | With maintenance <sup>1)</sup>       | Operating cycles |       |       |        | 20000            |        |        |        |
| Electrical                                                    | Without maintenance 690 V            | Operating cycles |       |       | 10000  |                  |        | 7500   | 5000   |
|                                                               | Without maintenance 1000 V           | Operating cycles |       |       |        | 1000             |        |        |        |
|                                                               | Without maintenance 1150 V           | Operating cycles |       |       |        | –                |        |        |        |
|                                                               | With maintenance <sup>1)</sup>       | Operating cycles |       |       |        | 20000            |        |        |        |
| <b>Breaking capacity H, 3/4-pole</b>                          |                                      |                  |       |       |        |                  |        |        |        |
| Mechanical                                                    | Without maintenance                  | Operating cycles |       |       |        | 10000            |        |        |        |
|                                                               | With maintenance <sup>1)</sup>       | Operating cycles |       |       |        | 20000            |        |        |        |
| Electrical                                                    | Without maintenance 690 V            | Operating cycles |       |       | 10000  |                  |        | 7500   | 5000   |
|                                                               | With maintenance <sup>1)</sup>       | Operating cycles |       |       |        | 20000            |        |        |        |
| <b>Breaking capacity C, 3/4-pole</b>                          |                                      |                  |       |       |        |                  |        |        |        |
| Mechanical                                                    | Without maintenance                  | Operating cycles |       |       |        | –                |        |        |        |
|                                                               | With maintenance <sup>1)</sup>       | Operating cycles |       |       |        | –                |        |        |        |
| Electrical                                                    | Without maintenance 690 V            | Operating cycles |       |       |        | –                |        |        |        |
|                                                               | With maintenance 690 V <sup>1)</sup> | Operating cycles |       |       |        | –                |        |        |        |
| <b>Switching frequency (electrical operating cycles)</b>      |                                      |                  |       |       |        |                  |        |        |        |
| <b>Breaking capacity N and S</b>                              |                                      |                  |       |       |        |                  |        |        |        |
|                                                               | 3-pole                               | 1/h              |       |       |        | 45               |        |        |        |
|                                                               | 4-pole                               | 1/h              |       |       |        | 45               |        |        |        |
| <b>Breaking capacity M and H</b>                              |                                      |                  |       |       |        |                  |        |        |        |
|                                                               | 3-pole                               | 1/h              |       |       |        | 45               |        |        |        |
|                                                               | 4-pole                               | 1/h              |       |       |        | 60               |        |        |        |
| <b>Breaking capacity C</b>                                    |                                      |                  |       |       |        |                  |        |        |        |
|                                                               | 3-pole                               | 1/h              |       |       |        | –                |        |        |        |
|                                                               | 4-pole                               | 1/h              |       |       |        | –                |        |        |        |
| <b>Breaking capacity E <sup>3)</sup></b>                      |                                      |                  |       |       |        |                  |        |        |        |
| ≤ 690 V                                                       | 3-pole                               | 1/h              |       |       |        | 45               |        |        |        |
|                                                               | 4-pole                               | 1/h              |       |       |        | 60               |        |        |        |
| 1000 V/1150 V                                                 | 3-pole                               | 1/h              |       |       |        | 20               |        |        |        |
|                                                               | 4-pole                               | 1/h              |       |       |        | 20               |        |        |        |

<sup>1)</sup> Maintenance means: Replacing main contact elements and arc chutes (see operating instructions: [www.siemens.com/lowvoltage/manuals](http://www.siemens.com/lowvoltage/manuals)).

<sup>2)</sup> Opening time with short-time delay of the undervoltage release can be set up to 200 ms

<sup>3)</sup> On E class circuit breakers, the main contact elements can only be replaced in the factory



## 3WA12



## 3WA13



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| 2000 A | 2500 A | 3200 A           | 3600 A <sup>new</sup> | 4000 A | 4000 A | 5000 A           | 6300 A |
|--------|--------|------------------|-----------------------|--------|--------|------------------|--------|
|        |        | 35               |                       |        |        | 35               |        |
|        |        | 80               |                       |        |        | 100              |        |
|        |        | 50               |                       |        |        | 50               |        |
|        |        | 34               |                       |        |        | 34               |        |
|        |        | 80               |                       |        |        | 73               |        |
|        |        | 50               |                       |        |        | 50               |        |
|        |        | 80 <sup>2)</sup> |                       |        |        | 80 <sup>2)</sup> |        |
|        |        | 50               |                       |        |        | 50               |        |
|        |        | –                |                       |        |        | –                |        |
|        |        | –                |                       |        |        | –                |        |
|        |        | –                |                       |        |        | –                |        |
|        |        | –                |                       |        |        | –                |        |
|        |        | 10000            |                       |        |        | –                |        |
|        |        | 20000            |                       |        |        | –                |        |
| 7500   | 7500   | 4000             | 2000                  | 2000   |        | –                |        |
|        |        | 20000            |                       |        |        | –                |        |
|        |        | 10000            |                       |        |        | –                |        |
|        |        | 20000            |                       |        |        | –                |        |
| 7500   | 7500   | 4000             | 2000                  | 2000   |        | –                |        |
|        |        | 20000            |                       |        |        | –                |        |
|        |        | 10000            |                       |        |        | 5000             |        |
|        |        | 20000            |                       |        |        | 10000            |        |
| 7500   | 7500   | 4000             | 2000                  | 2000   |        | 1000             |        |
|        |        | 1000             |                       |        |        | 1000             |        |
|        |        | 500              |                       |        |        | 500              |        |
|        |        | 20000            |                       |        |        | 10000            |        |
|        |        | 10000            |                       |        |        | 7500             |        |
|        |        | 20000            |                       |        |        | 15000            |        |
| 7500   | 7500   | 4000             | 2000                  | 2000   |        | 2000             |        |
| 20000  | 20000  | 20000            | 20000                 | 20000  |        | 15000            |        |
| 5000   | 5000   | 5000             | –                     | –      |        | 5000             |        |
| 10000  | 10000  | 10000            | –                     | –      |        | 10000            |        |
| 5000   | 5000   | 4000             | –                     | –      |        | 1000             |        |
| 10000  | 10000  | 10000            | –                     | –      |        | 10000            |        |
|        |        | 45 <sup>4)</sup> |                       |        |        | –                |        |
|        |        | 60 <sup>4)</sup> |                       |        |        | –                |        |
|        |        | 45               |                       |        |        | 60 <sup>5)</sup> |        |
|        |        | 60               |                       |        |        | 60 <sup>5)</sup> |        |
|        | 60     |                  | –                     |        |        | 60               |        |
|        | 60     |                  | –                     |        |        | 60               |        |
|        |        | 45               |                       |        |        | 60               |        |
|        |        | 60               |                       |        |        | 60               |        |
|        |        | 20               |                       |        |        | 20               |        |
|        |        | 20               |                       |        |        | 20               |        |

<sup>4)</sup> Breaking capacity N not available in frame size 2<sup>5)</sup> Breaking capacity N not available in frame size 3

# 3WA1 circuit breakers and non-automatic circuit breakers for AC

IEC 60947-2 (continued)

3WA11



| Rated current $I_n$                                                                           |                                                  |                |  | 630 A       | 800 A       | 1000 A      | 1250 A                                                                                          | 1600 A      | 2000 A      | 2500 A                      |
|-----------------------------------------------------------------------------------------------|--------------------------------------------------|----------------|--|-------------|-------------|-------------|-------------------------------------------------------------------------------------------------|-------------|-------------|-----------------------------|
| Connection                                                                                    |                                                  |                |  |             |             |             |                                                                                                 |             |             |                             |
| Minimum main conductor cross-sections (horizontal, front and flange connection)               |                                                  |                |  |             |             |             |                                                                                                 |             |             |                             |
| Copper bars, Cu, bare                                                                         |                                                  | Unit x mm x mm |  | 1 x 40 x 10 | 1 x 50 x 10 | 1 x 60 x 10 | 2 x 40 x 10                                                                                     | 2 x 50 x 10 | 3 x 50 x 10 | 4 x 50 x 10                 |
| Copper bars, Cu, painted black                                                                |                                                  | Unit x mm x mm |  | 1 x 40 x 10 | 1 x 50 x 10 | 1 x 60 x 10 | 2 x 40 x 10                                                                                     | 2 x 50 x 10 | 3 x 50 x 10 | 4 x 50 x 10                 |
| Minimum main conductor cross-sections (vertical connection)                                   |                                                  |                |  |             |             |             |                                                                                                 |             |             |                             |
| Copper bars, Cu, bare                                                                         |                                                  | Unit x mm x mm |  | 1 x 40 x 10 | 1 x 50 x 10 | 1 x 60 x 10 | 2 x 40 x 10                                                                                     | 2 x 50 x 10 | 3 x 50 x 10 | 4 x 100 x 5<br>2 x 100 x 10 |
| Copper bars, Cu, painted black                                                                |                                                  | Unit x mm x mm |  | 1 x 40 x 10 | 1 x 50 x 10 | 1 x 60 x 10 | 2 x 40 x 10                                                                                     | 2 x 50 x 10 | 3 x 50 x 10 | 4 x 100 x 5<br>2 x 100 x 10 |
| Auxiliary conductor (Cu) max. number of auxiliary conductors x cross-section (solid/stranded) |                                                  |                |  |             |             |             |                                                                                                 |             |             |                             |
| Standard connection = push-in                                                                 | Without end sleeve                               |                |  |             |             |             | 2 x 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 14)                                                 |             |             |                             |
|                                                                                               | With end sleeve acc. to DIN 46228 Part 1         |                |  |             |             |             | 2 x 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 14)                                                 |             |             |                             |
|                                                                                               | With end sleeve acc. to DIN 46228 Part 4         |                |  |             |             |             | 2 x 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 14)                                                 |             |             |                             |
|                                                                                               | With twin end sleeve                             |                |  |             |             |             | 2 x 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                 |             |             |                             |
|                                                                                               | Stripped length                                  |                |  |             |             |             | 10 ... 11 mm (0.39 ... 0.43 inch)                                                               |             |             |                             |
| Optional connection with screw connection                                                     | Without end sleeve                               |                |  |             |             |             | 2 x 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)/1 x 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 14) |             |             |                             |
|                                                                                               | With end sleeve acc. to DIN 46228 Part 1         |                |  |             |             |             | 2 x 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)/1 x 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 14) |             |             |                             |
|                                                                                               | With end sleeve acc. to DIN 46228 Part 4         |                |  |             |             |             | 1 x 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                 |             |             |                             |
|                                                                                               | With twin end sleeve                             |                |  |             |             |             | 1 x 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                 |             |             |                             |
|                                                                                               | Stripped length                                  |                |  |             |             |             | 7 ... 8 mm (0.28 ... 0.31 inch)                                                                 |             |             |                             |
| Position signaling switch modul                                                               |                                                  |                |  |             |             |             |                                                                                                 |             |             |                             |
| Spring-loaded terminals for standard signaling contacts                                       | Without end sleeve                               |                |  |             |             |             | 0.2 ... 2.5 mm <sup>2</sup> (AWG 28 ... 12)                                                     |             |             |                             |
|                                                                                               | With end sleeve acc. to DIN 46228 Part 4         |                |  |             |             |             | 0.25 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                    |             |             |                             |
|                                                                                               | Stripped length                                  |                |  |             |             |             | 5 ... 6 mm (0.2 ... 0.24 inch)                                                                  |             |             |                             |
| Push-in connection for standard signaling contacts                                            | Solid                                            |                |  |             |             |             | 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 12)                                                     |             |             |                             |
|                                                                                               | With end sleeve                                  |                |  |             |             |             | 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                     |             |             |                             |
|                                                                                               | Stripped length                                  |                |  |             |             |             | 10 ... 12 mm (0.39 ... 0.47 inch)                                                               |             |             |                             |
| Push-in connection for COM signaling contacts                                                 | Solid                                            |                |  |             |             |             | 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 12)                                                     |             |             |                             |
|                                                                                               | With end sleeve                                  |                |  |             |             |             | 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                     |             |             |                             |
|                                                                                               | Stripped length                                  |                |  |             |             |             | 10 ... 12 mm (0.39 ... 0.47 inch)                                                               |             |             |                             |
| Weights <sup>1)</sup>                                                                         |                                                  |                |  |             |             |             |                                                                                                 |             |             |                             |
| 3-pole                                                                                        | Fixed-mounted circuit breaker                    | kg             |  | 38.5        | 38.5        | 38.5        | 42.5                                                                                            | 42.5        | 43.5        | 43.5                        |
|                                                                                               | Withdrawable circuit breaker without guide frame | kg             |  | 39          | 39          | 39          | 40                                                                                              | 40          | 41          | 41                          |
|                                                                                               | Guide frames                                     | kg             |  | 26          | 26          | 26          | 27                                                                                              | 27          | 29          | 29                          |
| 4-pole                                                                                        | Fixed-mounted circuit breaker                    | kg             |  | 47          | 47          | 47          | 52                                                                                              | 52          | 53          | 53                          |
|                                                                                               | Withdrawable circuit breaker without guide frame | kg             |  | 45          | 45          | 45          | 46                                                                                              | 46          | 47          | 47                          |
|                                                                                               | Guide frames                                     | kg             |  | 30          | 30          | 30          | 32                                                                                              | 32          | 34          | 34                          |

<sup>1)</sup> Only available as a flange connection

Weights refer to:

- Breakers with the lowest breaking capacity in each case (size 1: breaking capacity N, size 2: breaking capacity S, size 3: breaking capacity H)
- Breakers with ETU600 (LSI)
- Fixed-mounted circuit breakers/guide frames with vertical connections
- Guide frame with position signaling switch
- Without any other accessories

## 3WA12



## 3WA13



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| 2000 A                                                                                          | 2500 A       | 3200 A       | 3600 A <span style="color: orange;">new</span> | 4000 A       | 4000 A                                                                                          | 5000 A       | 6300 A       |
|-------------------------------------------------------------------------------------------------|--------------|--------------|------------------------------------------------|--------------|-------------------------------------------------------------------------------------------------|--------------|--------------|
| 3 × 100 × 5<br>(3 × 50 × 10)<br>2 × 80 × 10                                                     | 2 × 100 × 10 | 3 × 100 × 10 | 5 × 100 × 10 <sup>1)</sup>                     | 5 × 100 × 10 | 4 × 100 × 10                                                                                    | 6 × 100 × 10 | –            |
| 3 × 100 × 5<br>(3 × 50 × 10)<br>2 × 80 × 10                                                     | 2 × 100 × 10 | 3 × 100 × 10 | 5 × 100 × 10 <sup>1)</sup>                     | 5 × 100 × 10 | 4 × 100 × 10                                                                                    | 6 × 100 × 10 | –            |
| 3 × 100 × 5<br>(3 × 50 × 10)<br>2 × 80 × 10                                                     | 2 × 100 × 10 | 3 × 100 × 10 | –                                              | 4 × 120 × 10 | 4 × 100 × 10                                                                                    | 6 × 100 × 10 | 6 × 120 × 10 |
| 3 × 100 × 5<br>(3 × 50 × 10)<br>2 × 80 × 10                                                     | 2 × 100 × 10 | 3 × 100 × 10 | –                                              | 4 × 120 × 10 | 4 × 100 × 10                                                                                    | 6 × 100 × 10 | 6 × 120 × 10 |
| 2 × 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 14)                                                 |              |              |                                                |              | 2 × 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 14)                                                 |              |              |
| 2 × 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 14)                                                 |              |              |                                                |              | 2 × 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 14)                                                 |              |              |
| 2 × 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 14)                                                 |              |              |                                                |              | 2 × 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 14)                                                 |              |              |
| 2 × 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                 |              |              |                                                |              | 2 × 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                 |              |              |
| 10 ... 11 mm (0.39 ... 0.43 inch)                                                               |              |              |                                                |              | 10 ... 11 mm (0.39 ... 0.43 inch)                                                               |              |              |
| 2 × 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)/1 × 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 14) |              |              |                                                |              | 2 × 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)/1 × 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 14) |              |              |
| 2 × 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)/1 × 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 14) |              |              |                                                |              | 2 × 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)/1 × 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 14) |              |              |
| 1 × 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                 |              |              |                                                |              | 1 × 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                 |              |              |
| 1 × 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                 |              |              |                                                |              | 1 × 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                 |              |              |
| 7 ... 8 mm (0.28 ... 0.31 inch)                                                                 |              |              |                                                |              | 7 ... 8 mm (0.28 ... 0.31 inch)                                                                 |              |              |
| 0.2 ... 2.5 mm <sup>2</sup> (AWG 28 ... 12)                                                     |              |              |                                                |              | 0.2 ... 2.5 mm <sup>2</sup> (AWG 28 ... 12)                                                     |              |              |
| 0.25 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                    |              |              |                                                |              | 0.25 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                    |              |              |
| 5 ... 6 mm (0.2 ... 0.24 inch)                                                                  |              |              |                                                |              | 5 ... 6 mm (0.2 ... 0.24 inch)                                                                  |              |              |
| 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 12)                                                     |              |              |                                                |              | 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 12)                                                     |              |              |
| 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                     |              |              |                                                |              | 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                     |              |              |
| 10 ... 12 mm (0.39 ... 0.47 inch)                                                               |              |              |                                                |              | 10 ... 12 mm (0.39 ... 0.47 inch)                                                               |              |              |
| 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 12)                                                     |              |              |                                                |              | 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 12)                                                     |              |              |
| 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                     |              |              |                                                |              | 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                     |              |              |
| 10 ... 12 mm (0.39 ... 0.47 inch)                                                               |              |              |                                                |              | 10 ... 12 mm (0.39 ... 0.47 inch)                                                               |              |              |
| 55                                                                                              | 57           | 69           | On request                                     | 77           | 113                                                                                             | 115          | 115          |
| 52                                                                                              | 54           | 59           | On request                                     | 59           | 91                                                                                              | 92           | 92           |
| 33.5                                                                                            | 35.5         | 36.5         | On request                                     | 40           | 85.5                                                                                            | 87           | 87           |
| 68.5                                                                                            | 71.5         | 86.5         | On request                                     | 97.5         | 147.5                                                                                           | 149.5        | 149.5        |
| 63.5                                                                                            | 66           | 73           | On request                                     | 73           | 115.5                                                                                           | 116.5        | 116.5        |
| 40                                                                                              | 42.5         | 51.5         | On request                                     | 53           | 103.5                                                                                           | 105.5        | 105.5        |

# 3WA1 non-automatic circuit breakers for DC

IEC 60947-2

3WA12



## Rated current $I_n$

1000 A

2000 A

4000 A

## General data

Isolating function acc. to EN 60947-2

Yes

Utilization category

B

Permissible ambient temperature  
(in operation with LCD max. 55 °C)

°C

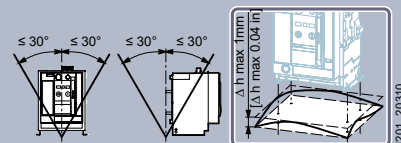
-40 ... +70

Storage

°C

-40 ... +80

Mounting position



Degree of protection

IP20 without control cabinet door, IP41 with door sealing frame, IP55 with cover

## Voltage

Rated operational voltage  $U_e$  Breaking capacity D | E V DC 600 | 1000 (3-pole); 1500 (4-pole)Rated insulation voltage  $U_i$  Breaking capacity D | E V DC 600 | 1000 (3-pole); 1500 (4-pole)

Rated impulse withstand voltage Main conducting paths kV 12

 $U_{imp}$  Auxiliary circuits kV 4

Control circuits kV 2.5

## Permissible load

### Permissible load for withdrawable versions

|                                                                     |                       |   |      |      |      |
|---------------------------------------------------------------------|-----------------------|---|------|------|------|
| For all connection types<br>(except rear vertical main connections) | Up to 40 °C (Cu bare) | A | 1000 | 2000 | 4000 |
|                                                                     | Up to 55 °C (Cu bare) | A | 1000 | 2000 | 3640 |
|                                                                     | Up to 60 °C (Cu bare) | A | 1000 | 2000 | 3500 |
|                                                                     | Up to 70 °C (Cu bare) | A | 1000 | 1950 | 3250 |
| With rear vertical connections                                      | Up to 40 °C (Cu bare) | A | 1000 | 2000 | 4000 |
|                                                                     | Up to 55 °C (Cu bare) | A | 1000 | 2000 | 4000 |
|                                                                     | Up to 60 °C (Cu bare) | A | 1000 | 2000 | 3640 |
|                                                                     | Up to 70 °C (Cu bare) | A | 1000 | 2000 | 3400 |

### Permissible load for fixed-mounted versions

|                                                                     |                       |   |      |      |      |
|---------------------------------------------------------------------|-----------------------|---|------|------|------|
| For all connection types<br>(except rear vertical main connections) | Up to 40 °C (Cu bare) | A | 1000 | 2000 | 4000 |
|                                                                     | Up to 55 °C (Cu bare) | A | 1000 | 2000 | 4000 |
|                                                                     | Up to 60 °C (Cu bare) | A | 1000 | 2000 | 4000 |
|                                                                     | Up to 70 °C (Cu bare) | A | 1000 | 2000 | 3900 |
| With rear vertical connections                                      | Up to 40 °C (Cu bare) | A | 1000 | 2000 | 4000 |
|                                                                     | Up to 55 °C (Cu bare) | A | 1000 | 2000 | 4000 |
|                                                                     | Up to 60 °C (Cu bare) | A | 1000 | 2000 | 4000 |
|                                                                     | Up to 70 °C (Cu bare) | A | 1000 | 2000 | 4000 |

## Power loss at $I_n$

|                                                          |                                |   |           |           |            |
|----------------------------------------------------------|--------------------------------|---|-----------|-----------|------------|
| With 3-phase symmetrical load,<br>complete device (3/4p) | Withdrawable versions 3/4-pole | W | 170   220 | 320   420 | 750   1000 |
|                                                          | Fixed-mounted 3/4-pole         | W | 130   190 | 240   360 | 500   660  |

## Switching times

|                                                      |    |                  |                  |                  |
|------------------------------------------------------|----|------------------|------------------|------------------|
| Make time (mechanical)                               | ms | 35               | 35               | 35               |
| Electrical make time (through closing coil 100% OP)  | ms | 80               | 80               | 80               |
| Electrical make time (through closing coil 5% OP)    | ms | 50               | 50               | 50               |
| Opening time (mechanical)                            | ms | 34               | 34               | 34               |
| Electrical opening time (through shunt trip 100% OP) | ms | 80               | 80               | 80               |
| Electrical opening time (through shunt trip 5% OP)   | ms | 50               | 50               | 50               |
| Electrical opening time (über undervoltage release)  | ms | 80 <sup>1)</sup> | 80 <sup>1)</sup> | 80 <sup>1)</sup> |

## Service life/endurance

### Breaking capacity D, 3/4-pole

|            |                                |                  |       |       |       |
|------------|--------------------------------|------------------|-------|-------|-------|
| Mechanical | Without maintenance            | Operating cycles | 10000 | 10000 | 10000 |
|            | With maintenance <sup>1)</sup> | Operating cycles | 20000 | 20000 | 20000 |
| Electrical | Without maintenance 600 V      | Operating cycles | 6000  | 6000  | 4000  |
|            | With maintenance <sup>1)</sup> | Operating cycles | 20000 | 20000 | 20000 |

<sup>1)</sup> Opening time with short-time delay of the undervoltage release can be set up to 200 ms

## 3WA12



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| Rated current $I_n$                                                                           |                                                  |                  | 1000 A                                                                                              | 2000 A                         | 4000 A                    |
|-----------------------------------------------------------------------------------------------|--------------------------------------------------|------------------|-----------------------------------------------------------------------------------------------------|--------------------------------|---------------------------|
| Service life/endurance                                                                        |                                                  |                  |                                                                                                     |                                |                           |
| Breaking capacity E, 3/4-pole                                                                 |                                                  |                  |                                                                                                     |                                |                           |
| Mechanical                                                                                    | Without maintenance                              | Operating cycles | 10000                                                                                               | 10000                          | 10000                     |
|                                                                                               | With maintenance <sup>1)</sup>                   | Operating cycles | 20000                                                                                               | 20000                          | 20000                     |
| Electrical                                                                                    | Without maintenance 1000 V                       | Operating cycles | 1000                                                                                                | 1000                           | 1000                      |
|                                                                                               | With maintenance <sup>1)</sup>                   | Operating cycles | 20000                                                                                               | 20000                          | 20000                     |
| Breaking capacity E, 4-pole                                                                   |                                                  |                  |                                                                                                     |                                |                           |
| Electrical                                                                                    | Without maintenance 1500 V <sup>2)</sup>         | Operating cycles | 1000                                                                                                | 1000                           | 1000                      |
|                                                                                               | With maintenance <sup>1)</sup>                   | Operating cycles | 20000                                                                                               | 20000                          | 20000                     |
| Switching frequency (electrical operating cycles)                                             |                                                  |                  |                                                                                                     |                                |                           |
| Breaking capacity D                                                                           |                                                  |                  |                                                                                                     |                                |                           |
|                                                                                               | 3- and 4-pole                                    | 1/h              | 45/60                                                                                               | 45/60                          | 45/60                     |
| Breaking capacity E                                                                           |                                                  |                  |                                                                                                     |                                |                           |
|                                                                                               | 3- and 4-pole <sup>3)</sup>                      | 1/h              | 20/20                                                                                               | 20/20                          | 20/20                     |
| Connection                                                                                    |                                                  |                  |                                                                                                     |                                |                           |
| Minimum cross-sections of main conductor bars (infeed and load connections)                   |                                                  |                  |                                                                                                     |                                |                           |
| Copper bars, bare or painted black                                                            |                                                  | Unit × mm × mm   | 1 × 60 × 10                                                                                         | 3 × 100 × 5;<br>2 × 80 × 10    | 4 × 100 × 10              |
| Minimum cross-sections of main conductor bars (pole straps) <sup>4)</sup>                     |                                                  |                  |                                                                                                     |                                |                           |
| Copper bars, bare or painted black                                                            |                                                  | Unit × mm × mm   | 1 × 100 × 10;<br>(2 × 100 × 5)                                                                      | 2 × 100 × 5;<br>(2 × 100 × 10) | 3 × 100 × 10;<br>vertical |
| Auxiliary conductor (Cu) max. number of auxiliary conductors × cross-section (solid/stranded) |                                                  |                  |                                                                                                     |                                |                           |
| Standard connection = push-in                                                                 | Without end sleeve                               |                  | 2 × 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 14)                                                     |                                |                           |
|                                                                                               | With end sleeve acc. to DIN 46228 Part 1         |                  | 2 × 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 14)                                                     |                                |                           |
|                                                                                               | With end sleeve acc. to DIN 46228 Part 4         |                  | 2 × 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 14)                                                     |                                |                           |
|                                                                                               | With twin end sleeve                             |                  | 2 × 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                     |                                |                           |
|                                                                                               | Stripped length                                  |                  | 10 ... 11 mm (0.39 ... 0.43 inch)                                                                   |                                |                           |
| Optional connection with screw connection                                                     | Without end sleeve                               |                  | 2 × 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)/<br>1 × 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 14) |                                |                           |
|                                                                                               | With end sleeve acc. to DIN 46228 Part 1         |                  | 2 × 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)/<br>1 × 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 14) |                                |                           |
|                                                                                               | With end sleeve acc. to DIN 46228 Part 4         |                  | 1 × 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                     |                                |                           |
|                                                                                               | With twin end sleeve                             |                  | 1 × 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                     |                                |                           |
|                                                                                               | Stripped length                                  |                  | 7 ... 8 mm (0.28 ... 0.31 inch)                                                                     |                                |                           |
| Position signaling switch module                                                              |                                                  |                  |                                                                                                     |                                |                           |
| Spring-loaded terminals for standard signaling contacts                                       | Without end sleeve                               |                  | 0.2 ... 2.5 mm <sup>2</sup> (AWG 28 ... 12)                                                         |                                |                           |
|                                                                                               | With end sleeve acc. to DIN 46228 Part 4         |                  | 0.25 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                        |                                |                           |
|                                                                                               | Stripped length                                  |                  | 5 ... 6 mm (0.2 ... 0.24 inch)                                                                      |                                |                           |
| Push-in connection for standard signaling contacts                                            | Solid                                            |                  | 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 12)                                                         |                                |                           |
|                                                                                               | With end sleeve                                  |                  | 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                         |                                |                           |
|                                                                                               | Stripped length                                  |                  | 10 ... 12 mm (0.39 ... 0.47 inch)                                                                   |                                |                           |
| Push-in connection for COM signaling contacts                                                 | Solid                                            |                  | 0.5 ... 2.5 mm <sup>2</sup> (AWG 20 ... 12)                                                         |                                |                           |
|                                                                                               | With end sleeve                                  |                  | 0.5 ... 1.5 mm <sup>2</sup> (AWG 20 ... 16)                                                         |                                |                           |
|                                                                                               | Stripped length                                  |                  | 10 ... 12 mm (0.39 ... 0.47 inch)                                                                   |                                |                           |
| Weights <sup>3)</sup>                                                                         |                                                  |                  |                                                                                                     |                                |                           |
| 3-pole                                                                                        | Fixed-mounted circuit breaker                    | kg               | 55                                                                                                  | 55                             | 68                        |
|                                                                                               | Withdrawable circuit breaker without guide frame | kg               | 52                                                                                                  | 52                             | 59                        |
|                                                                                               | Guide frames                                     | kg               | 34                                                                                                  | 34                             | 50                        |
| 4-pole                                                                                        | Fixed-mounted circuit breaker                    | kg               | 68.5                                                                                                | 68.5                           | 86.5                      |
|                                                                                               | Withdrawable circuit breaker without guide frame | kg               | 63.5                                                                                                | 63.5                           | 74                        |
|                                                                                               | Guide frames                                     | kg               | 40.5                                                                                                | 40.5                           | 61.5                      |

<sup>1)</sup> Maintenance means: Replacing main contact elements and arc chutes (see operating instructions: [www.siemens.com/lowvoltage/manuals](http://www.siemens.com/lowvoltage/manuals)).

<sup>2)</sup> 1500 V DC applications only possible with 4-pole circuit breakers and breaking capacity E.

<sup>3)</sup> Weights refer to:

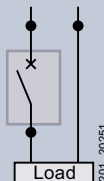
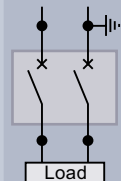
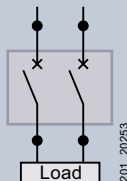
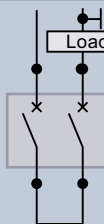
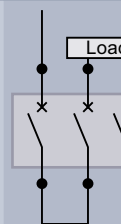
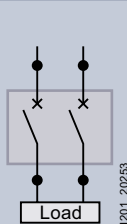
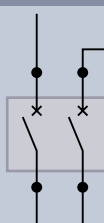
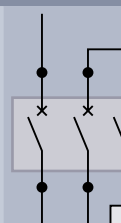
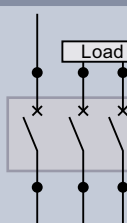
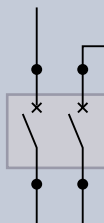
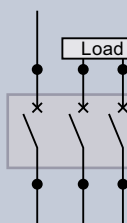
- Breakers with breaking capacity E
- Fixed-mounted circuit breakers/guide frames with vertical connections
- Guide frame with position signaling switch
- Without any other accessories

<sup>4)</sup> For more information on the DC pole straps, see the Equipment Manual for 3WA1

# 3WA1 non-automatic circuit breakers for DC

## Application examples

The connection to the non-automatic circuit breakers is not dependent on direction and polarity; the circuit diagrams can be adapted accordingly. If the parallel or series connections are made directly to the connection bars, for thermal reasons the continuous load on the non-automatic circuit breakers must only be 80% of the permissible operational current. If the parallel or series connection is made at a distance of 1 m from the connection bars, the non-automatic circuit breaker can be used at full operational current load.

| Minimum required contact gaps at rated voltage                                      | DC 1-pole disconnection<br>Grounded system                                          | DC 2-pole (all-pole) disconnection<br>Grounded system                               | Non-grounded system                                                                   |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Rated operational voltage up to 300 V                                               |                                                                                     |                                                                                     |                                                                                       |
|    |    |    |    |
| Rated operational voltage up to 600 V                                               |                                                                                     |                                                                                     |                                                                                       |
|    |   |   |   |
| Rated operational voltage up to 1000 V                                              |                                                                                     |                                                                                     |                                                                                       |
|  |  |  |  |
| Rated operational voltage up to 1500 V                                              |                                                                                     |                                                                                     |                                                                                       |
|  |  |                                                                                     |  |

### Note:

#### DC 2-pole (all-pole) disconnection; grounded system

The grounded conductor must always be assigned to the individual switching pole of the non-automatic air circuit breaker, so that in the event of a ground fault there are always 2 conducting paths in series in a circuit with 3-pole circuit breakers, and 3 conducting paths in series in a circuit with 4-pole circuit breakers.

The jumpers between the switching poles must be short-circuit and ground-fault proof.



# Electronic trip unit

## Differentiation

1



|                                                | ETU300 electronic trip unit | ETU600 electronic trip unit |
|------------------------------------------------|-----------------------------|-----------------------------|
| Function                                       |                             |                             |
| Protective function LSI                        | ■                           | ■                           |
| Protective function LSIG                       | ■                           | ■                           |
| Protective function LSIG Hi-Z                  | —                           | ■                           |
| Neutral conductor protection (N)               | ■                           | ■                           |
| Metering function                              | —                           | ■                           |
| Enhanced Protective functions                  | —                           | ■                           |
| CubicleBUS <sup>2</sup>                        | —                           | ■                           |
| Display                                        | —                           | ■                           |
| DAS+ input/output                              | ■                           | ■                           |
| LED display of reason for tripping             | ■                           | ■                           |
| Bluetooth and USB                              | —                           | ■                           |
| FW Updates                                     | —                           | ■                           |
| Internal self-test with and without tripping   | ■                           | ■                           |
| Extended test option (tripping characteristic) | —                           | ■                           |
| Activation of the ETU via powerbank            | —                           | ■                           |
| Activation of the ETU for self-test via TD400  | ■                           | —                           |

**Note:**  
By replacing the electronic trip unit, it is possible to upgrade from ETU300 to ETU600.



# ETU300 electronic trip unit

## Protective functions

### ETU300 LSI, ETU300 LSIg

| Protective function                                      | Setting range and invariable parameters                  | Values                                                                   |
|----------------------------------------------------------|----------------------------------------------------------|--------------------------------------------------------------------------|
| <b>L: Overload protection LT</b>                         |                                                          |                                                                          |
| Tripping                                                 | Switched on                                              |                                                                          |
| Current setting $I_r$                                    | 0.4 ... $1.0 \times I_n$                                 | 0.4/0.5/0.6/0.7/0.75/0.8/0.85/0.9/0.95/1.0 $\times I_n$                  |
| Tripping time $t_r$ at $6 \times I_r$                    | 0.75 ... 25 s                                            | 0.75/1/2/5/8/10/14/17/21/25 s                                            |
| Characteristic LT curve                                  | $I^2t$                                                   |                                                                          |
| Thermal memory                                           | Switched on                                              |                                                                          |
| Cooling time constant                                    | $18 \times t_r$                                          |                                                                          |
| Phase failure detection                                  | Switched on                                              |                                                                          |
| <b>L: Overload protection LT, neutral conductor</b>      |                                                          |                                                                          |
| Tripping                                                 | Switched on                                              |                                                                          |
| Current setting $I_N$                                    | $1.0 \times I_n$                                         |                                                                          |
| <b>S: Short-time-delayed short-circuit protection ST</b> |                                                          |                                                                          |
| Tripping                                                 | Can be switched on/off                                   |                                                                          |
| Current setting $I_{sd}$                                 | 1.5 ... $10 \times I_n$<br>max. $0.8 \times I_{cw}^{1)}$ | OFF/1.5/2/2.5/3/4/5/6/8/10 $\times I_r$<br>max. $0.8 \times I_{cw}^{1)}$ |
| Tripping time $t_{sd}$                                   | 0.08 ... 0.4 s                                           | 0.08/0.15/0.22/0.3/0.4 s                                                 |
| Characteristic ST curve                                  | $I^2t$ and $I^2t$                                        |                                                                          |
| Reference point $I_{ST ref}$                             | $8 \times I_r$                                           |                                                                          |
| <b>I: Instantaneous short-circuit protection INST</b>    |                                                          |                                                                          |
| Tripping                                                 | Switched on                                              |                                                                          |
| Current setting $I_i$                                    | 1.5 ... $15 \times I_n$<br>max. $0.8 \times I_{cs}^{1)}$ | 1.5/2/3/4/5/6/8/10/12/15 $\times I_n$<br>max. $0.8 \times I_{cs}^{1)}$   |
| <b>Maintenance mode DAS+</b>                             |                                                          |                                                                          |
| Current setting $I_{i DAS+}$                             | $1.5 \times I_n$                                         | Activation via ETU input                                                 |

### ETU300 LSIg

| Protective function                  | Setting range |                                                                                                     |
|--------------------------------------|---------------|-----------------------------------------------------------------------------------------------------|
| <b>G: Ground fault protection GF</b> |               |                                                                                                     |
| Tripping                             | Switched on   |                                                                                                     |
| Method of ground fault detection     | Residual      | Detection of ground-fault current via summation current formation in all phases and the N conductor |
| Characteristic KF curve              |               | $I^2t$                                                                                              |
| Current setting $I_g$                |               | $0.2 \times I_n$ (min. 100 A, max. 1200 A)                                                          |
| Tripping time $t_g$                  | 0.2 s         |                                                                                                     |

<sup>1)</sup> The setting value is limited as a function of the breaking capacity at rated operational voltage  $U_e$

# ETU600 electronic trip unit

## Protective functions

1

|                                                                       |                                                                                |                                                                      | Current<br>metering | ready4COM | PMF-I<br>Energy<br>efficiency | PMF-II<br>Basic<br>Power<br>Monitoring | PMF-III<br>Advanced<br>Power<br>Monitoring |
|-----------------------------------------------------------------------|--------------------------------------------------------------------------------|----------------------------------------------------------------------|---------------------|-----------|-------------------------------|----------------------------------------|--------------------------------------------|
| <b>ETU600 LSI, ETU600 LSIG, ETU600 LSIG Hi-Z</b>                      |                                                                                |                                                                      |                     |           |                               |                                        |                                            |
| Protective function                                                   | Variable<br>setting range                                                      | Setting values with<br>rotary switch                                 |                     |           |                               |                                        |                                            |
| <b>L: Overload protection LT</b>                                      |                                                                                |                                                                      |                     |           |                               |                                        |                                            |
| Tripping                                                              | Can be switched on/off                                                         |                                                                      | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Current setting $I_r$                                                 | $0.4 \dots 1.0 \times I_n$                                                     | 0.5/0.6/0.7/0.75/0.8/0.85/0.9/<br>0.95/1.0 $\times I_n$              | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Tripping time $t_r$ at $6 \times I_r$                                 | At $I^2t$ : $0.5 \dots 30$ s and at<br>$I^4t$ : $0.5 \dots 5$ s                | 1/2/5/8/10/14/17/21/25 s                                             | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Characteristic LT curve                                               | $I^2t$ and $I^4t$                                                              |                                                                      | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Thermal memory                                                        | Can be switched on/off                                                         |                                                                      | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Cooling time constant                                                 | $10$ and $18 \times t_r$                                                       |                                                                      | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Phase failure detection                                               | Can be switched on/off                                                         |                                                                      | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Overload pre-alarm PAL                                                | Can be switched on/off                                                         |                                                                      | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Current setting $I_{r\text{ PAL}}$                                    | $0.7 \dots 1.0 \times I_r$                                                     |                                                                      | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Delay time $t_{r\text{ PAL}}$                                         | $0.5 \dots 1.0 \times t_r$                                                     |                                                                      | ■                   | ■         | ■                             | ■                                      | ■                                          |
| <b>L: Overload protection LT, neutral conductor</b>                   |                                                                                |                                                                      |                     |           |                               |                                        |                                            |
| Tripping                                                              | Can be switched on/off                                                         |                                                                      | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Current setting $I_N$                                                 | $0.2 \dots 2.0 \times I_n$ for 4-pole circuit breakers max. $I_{n\text{ max}}$ |                                                                      | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Current setting $I_{N\text{ PAL}}$                                    | $0.7 \dots 1.0 \times I_N$                                                     |                                                                      | ■                   | ■         | ■                             | ■                                      | ■                                          |
| <b>S: Short-time-delayed short-circuit protection ST</b>              |                                                                                |                                                                      |                     |           |                               |                                        |                                            |
| Tripping                                                              | Can be switched on/off                                                         |                                                                      | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Current setting $I_{sd}$                                              | $0.6 \times I_n \dots 0.8 \times I_{cw}$<br>max. $0.8 \times I_{cw}^{1)}$      | 1.5/2/2.5/3/4/5/6/8/10 $\times I_r$<br>max. $0.8 \times I_{cw}^{1)}$ | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Tripping time $t_{sd}$                                                | $0.02 \dots 0.4$ s                                                             | At Fix: 0.08/0.15/0.22/0.3/0.4 s<br>At $I^2t$ : 0.1/0.2/0.3/0.4 s    | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Characteristic ST curve                                               | $I^0t$ and $I^2t$                                                              |                                                                      | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Reference point $I_{ST\text{ ref}}$                                   | $6 \dots 12 \times I_r$                                                        |                                                                      | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Intermittent detection                                                | Can be switched on/off                                                         |                                                                      | ■                   | ■         | ■                             | ■                                      | ■                                          |
| <b>S: Directional short-time-delayed short-circuit protection dST</b> |                                                                                |                                                                      |                     |           |                               |                                        |                                            |
| Tripping                                                              | Can be switched on/off                                                         |                                                                      | □                   | □         | □                             | ■                                      | ■                                          |
| Direction setting                                                     | Forwards: ↓ or ↑                                                               |                                                                      | □                   | □         | □                             | ■                                      | ■                                          |
| Current setting $I_{sd\text{ FW}}$                                    | $0.6 \times I_n \dots 0.8 \times I_{cw}$                                       |                                                                      | □                   | □         | □                             | ■                                      | ■                                          |
| Current setting $I_{sd\text{ REV}}$                                   | $0.6 \times I_n \dots 0.8 \times I_{cw}$                                       |                                                                      | □                   | □         | □                             | ■                                      | ■                                          |
| Tripping time $t_{sd\text{ FW}}$                                      | $0.05 \dots 0.4$ s                                                             |                                                                      | □                   | □         | □                             | ■                                      | ■                                          |
| Tripping time $t_{sd\text{ REV}}$                                     | $0.05 \dots 0.4$ s                                                             |                                                                      | □                   | □         | □                             | ■                                      | ■                                          |
| <b>I: Instantaneous short-circuit protection INST</b>                 |                                                                                |                                                                      |                     |           |                               |                                        |                                            |
| Tripping                                                              | Can be switched on/off                                                         |                                                                      | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Current setting $I_i$                                                 | $1.5 \times I_n \dots 0.8 \times I_{cs}$<br>max. $0.8 \times I_{cs}^{1)}$      | 1.5/2/3/4/6/8/10/12/15 $\times I_n$<br>max. $0.8 \times I_{cs}^{1)}$ | ■                   | ■         | ■                             | ■                                      | ■                                          |

<sup>1)</sup> The setting value is limited as a function of the breaking capacity at the set rated voltage.

■ Available, feature of the application package

□ Can be retrofitted

|                                                     |                                                                                                                                                                        |                                      | Current<br>metering                 | ready4COM                           | PMF-I<br>Energy<br>efficiency       | PMF-II<br>Basic<br>Power<br>Monitoring | PMF-III<br>Advanced<br>Power<br>Monitoring |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|----------------------------------------|--------------------------------------------|
| ETU600 LSI, ETU600 LSIG, ETU600 LSIG HI-Z           |                                                                                                                                                                        |                                      |                                     |                                     |                                     |                                        |                                            |
| Protective function                                 | Variable<br>setting range                                                                                                                                              | Setting values with<br>rotary switch |                                     |                                     |                                     |                                        |                                            |
| <b>Reverse power protection RP</b>                  |                                                                                                                                                                        |                                      |                                     |                                     |                                     |                                        |                                            |
| Tripping                                            | Can be switched on/off                                                                                                                                                 |                                      | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/>        |
| Setting value $P_{RP}$                              | $0.05 \dots 0.5 \times P_n$                                                                                                                                            |                                      | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/>        |
| Tripping time $t_{RP}$                              | $0.01 \dots 25 \text{ s}$                                                                                                                                              |                                      | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/>        |
| <b>Enhanced Protective functions EPF</b>            |                                                                                                                                                                        |                                      |                                     |                                     |                                     |                                        |                                            |
| Phase unbalance current and phase unbalance voltage |                                                                                                                                                                        |                                      | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/>        |
| Undervoltage and overvoltage                        |                                                                                                                                                                        |                                      | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/>        |
| Active power import and active power export         |                                                                                                                                                                        |                                      | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/>        |
| Underfrequency and overfrequency                    |                                                                                                                                                                        |                                      | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/>        |
| Total harmonic distortion for current and voltage   |                                                                                                                                                                        |                                      | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/>        |
| Phase sequence detection                            |                                                                                                                                                                        |                                      | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/>        |
| <b>Maintenance mode DAS+</b>                        |                                                                                                                                                                        |                                      |                                     |                                     |                                     |                                        |                                            |
| Current setting $I_{DAS+}$                          | $1.5 \dots 10 \times I_n$                                                                                                                                              |                                      | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/>        |
| Current setting $I_{gDAS+}$                         | With LSIG GFx option plug<br>Residual:<br>– Sizes 1 and 2: $100 \dots 2000 \text{ A}$ and<br>– Size 3: $400 \dots 2000 \text{ A}$<br>Direct: $15 \dots 2000 \text{ A}$ |                                      | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/>        |
| Tripping time $t_{gDAS+}$                           | $0 \dots 5 \text{ s}$                                                                                                                                                  |                                      | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/>        |
| <b>Options</b>                                      |                                                                                                                                                                        |                                      |                                     |                                     |                                     |                                        |                                            |
| Parameter set changeover                            | Switchable between parameter set A and B                                                                                                                               |                                      | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/>        |
| Limit values                                        | Undershooting, overshooting                                                                                                                                            |                                      | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/>        |
| Waveform memory                                     |                                                                                                                                                                        |                                      | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>               | <input checked="" type="checkbox"/>        |

- ☒ Available, feature of the application package  
☐ Can be retrofitted

# ETU600 electronic trip unit

## Protective functions

1

### ETU600 LSI

| Protective function                   | Variable setting range | Current metering | ready4COM | PMF-I<br>Energy efficiency | PMF-II<br>Basic Power Monitoring | PMF-III<br>Advanced Power Monitoring |
|---------------------------------------|------------------------|------------------|-----------|----------------------------|----------------------------------|--------------------------------------|
| <b>G: Ground fault GF alarm</b>       |                        |                  |           |                            |                                  |                                      |
| Alarm                                 | Can be switched on/off | □                | □         | □                          | ■                                | ■                                    |
| Current setting $I_{g \text{ alarm}}$ | Detection method       | □                | □         | □                          | ■                                | ■                                    |
|                                       | Residual               |                  |           |                            |                                  |                                      |
| Alarm time $t_{g \text{ alarm}}$      | 0 ... 0.5 s            | □                | □         | □                          | ■                                | ■                                    |

■ Available, feature of the application package  
□ Can be retrofitted

### ETU600 LSIG

| Protective function                                             | Variable setting range         | Current metering | ready4COM | PMF-I<br>Energy efficiency | PMF-II<br>Basic Power Monitoring | PMF-III<br>Advanced Power Monitoring |
|-----------------------------------------------------------------|--------------------------------|------------------|-----------|----------------------------|----------------------------------|--------------------------------------|
| <b>G: Ground fault GF</b>                                       |                                |                  |           |                            |                                  |                                      |
| Tripping                                                        | Can be switched on/off         | ■                | ■         | ■                          | ■                                | ■                                    |
| Method of ground fault detection                                | Residual                       | ■                | ■         | ■                          | ■                                | ■                                    |
|                                                                 | Direct                         | ■                | ■         | ■                          | ■                                | ■                                    |
|                                                                 | Dual                           | ■                | ■         | ■                          | ■                                | ■                                    |
| Characteristic GF curve                                         | With LSIG GFx option plug      | ■                | ■         | ■                          | ■                                | ■                                    |
| Current setting $I_g$ with LSIG GFx option plug                 | Detection method               | ■                | ■         | ■                          | ■                                | ■                                    |
|                                                                 | Residual                       |                  |           |                            |                                  |                                      |
|                                                                 | Detection method               | ■                | ■         | ■                          | ■                                | ■                                    |
|                                                                 | Direct                         |                  |           |                            |                                  |                                      |
| Tripping time $t_g$                                             | For Fix ( $I^0 t$ )            | ■                | ■         | ■                          | ■                                | ■                                    |
|                                                                 | For $I^0 t$ at $3 \times I_g$  | ■                | ■         | ■                          | ■                                | ■                                    |
|                                                                 | $t_{g \text{ det}}$ at $I^0 t$ | ■                | ■         | ■                          | ■                                | ■                                    |
| Intermittent detection                                          | Can be switched on/off         | ■                | ■         | ■                          | ■                                | ■                                    |
| <b>G: Ground fault GF alarm</b>                                 |                                |                  |           |                            |                                  |                                      |
| Alarm                                                           | Can be switched on/off         | ■                | ■         | ■                          | ■                                | ■                                    |
| Current setting $I_{g \text{ alarm}}$ with LSIG GFx option plug | Detection method               | ■                | ■         | ■                          | ■                                | ■                                    |
|                                                                 | Residual                       |                  |           |                            |                                  |                                      |
|                                                                 | Detection method               | ■                | ■         | ■                          | ■                                | ■                                    |
|                                                                 | Direct                         |                  |           |                            |                                  |                                      |
| Alarm time $t_{g \text{ alarm}}$                                | 0 ... 0.5 s                    | ■                | ■         | ■                          | ■                                | ■                                    |

■ Available, feature of the application package

|                                                                   |                                                                                           |                                                                                                                                                                                                                                      | Current<br>metering | ready4COM | PMF-I<br>Energy<br>efficiency | PMF-II<br>Basic<br>Power<br>Monitoring | PMF-III<br>Advanced<br>Power<br>Monitoring |
|-------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------|-------------------------------|----------------------------------------|--------------------------------------------|
| ETU600 LSIG Hi-Z                                                  |                                                                                           |                                                                                                                                                                                                                                      |                     |           |                               |                                        |                                            |
| Protective function                                               | Variable setting range                                                                    |                                                                                                                                                                                                                                      |                     |           |                               |                                        |                                            |
| G: Ground fault GF Hi-Z                                           |                                                                                           |                                                                                                                                                                                                                                      |                     |           |                               |                                        |                                            |
| Tripping                                                          | Can be switched on/off                                                                    |                                                                                                                                                                                                                                      | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Method of ground fault<br>detection                               | Residual                                                                                  | Detection of ground-fault<br>current via summation current<br>formation in all phases and the<br>N conductor                                                                                                                         | ■                   | ■         | ■                             | ■                                      | ■                                          |
|                                                                   | Dual Hi-Z,<br>for high-impedance<br>connection of the<br>external current<br>transformers | Protection zone UREF:<br>Detection of the ground-fault<br>current by means of summation<br>current formation,<br>Protection zone REF:<br>Metering of the ground-fault<br>current with an external current<br>transformer combination | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Characteristic GF curve                                           | With LSIG GFx<br>option plug                                                              | For Fix ( $I^0t$ ) $I^2t/I^4t/I^6t$                                                                                                                                                                                                  | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Current setting $I_g$<br>with LSIG GFx option plug                | Protection zone UREF                                                                      | Size 2: 100 ... 2000 A and<br>Size 3: 400 ... 2000 A                                                                                                                                                                                 | ■                   | ■         | ■                             | ■                                      | ■                                          |
|                                                                   | Protection zone REF                                                                       | 15 ... 2000 A                                                                                                                                                                                                                        | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Tripping time $t_g$                                               | For Fix ( $I^0t$ )                                                                        | 0 ... 5 s                                                                                                                                                                                                                            | ■                   | ■         | ■                             | ■                                      | ■                                          |
|                                                                   | For $I^2t$ $3 \times I_g$ in<br>protection zone UREF                                      | 0 ... 30 s                                                                                                                                                                                                                           | ■                   | ■         | ■                             | ■                                      | ■                                          |
|                                                                   | $t_{g\text{ def}}$ at $I^2t$                                                              | 0.05 ... 0.5 s                                                                                                                                                                                                                       | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Intermittent detection                                            | Can be switched on/off                                                                    |                                                                                                                                                                                                                                      | ■                   | ■         | ■                             | ■                                      | ■                                          |
| G: Ground fault GF alarm                                          |                                                                                           |                                                                                                                                                                                                                                      |                     |           |                               |                                        |                                            |
| Alarm                                                             | Can be switched on/off                                                                    |                                                                                                                                                                                                                                      | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Current setting $I_{g\text{ alarm}}$<br>with LSIG GFx option plug | Protection zone UREF                                                                      | Size 2: 100 ... 5000 A and<br>Size 3: 400 ... 5000 A                                                                                                                                                                                 | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Alarm time $t_{q\text{ alarm}}$                                   | 0 ... 0.5 s                                                                               |                                                                                                                                                                                                                                      | ■                   | ■         | ■                             | ■                                      | ■                                          |

■ Available, feature of the application package

# ETU600 electronic trip unit

## Operation, interfaces and metering function

|                                                                        |                                                                                                                             | Current metering | ready4COM | PMF-I Energy efficiency | PMF-II Basic Power Monitoring | PMF-III Advanced Power Monitoring | Non-automatic circuit breakers |
|------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|------------------|-----------|-------------------------|-------------------------------|-----------------------------------|--------------------------------|
| <b>ETU600</b>                                                          |                                                                                                                             |                  |           |                         |                               |                                   |                                |
| <b>Operation and interfaces</b>                                        |                                                                                                                             |                  |           |                         |                               |                                   |                                |
| Rotary switch                                                          |                                                                                                                             | ■                | ■         | ■                       | ■                             | ■                                 | –                              |
| Display and operating keys                                             |                                                                                                                             | ■                | ■         | ■                       | ■                             | ■                                 | –                              |
| SETRON Powerconfig configuration software                              |                                                                                                                             | ■                | ■         | ■                       | ■                             | ■                                 | –                              |
| Fieldbus communication                                                 |                                                                                                                             | ■                | ■         | ■                       | ■                             | ■                                 | –                              |
| Color display                                                          |                                                                                                                             | ■                | ■         | ■                       | ■                             | ■                                 | –                              |
| Bluetooth <sup>1)</sup> and USB interface                              |                                                                                                                             | ■                | ■         | ■                       | ■                             | ■                                 | –                              |
| <b>Communication</b>                                                   |                                                                                                                             |                  |           |                         |                               |                                   |                                |
| Prepared for connection of a communications module (ready4COM feature) | Status messages of the circuit breaker                                                                                      | □                | ■         | ■                       | ■                             | ■                                 | □                              |
|                                                                        | Status messages of the ETU600 electronic trip unit                                                                          | □                | ■         | ■                       | ■                             | ■                                 | –                              |
|                                                                        | Remote operation, requires a communications module, closing coil, shunt trip                                                | □                | ■         | ■                       | ■                             | ■                                 | □                              |
| Communications module                                                  |                                                                                                                             | □                | □         | □                       | □                             | □                                 | □                              |
| <b>Digital input and output on the ETU600 electronic trip unit</b>     |                                                                                                                             |                  |           |                         |                               |                                   |                                |
| Parameterizable input                                                  | For activating Maintenance mode DAS+ or can be used for parameter set changeover                                            | ■                | ■         | ■                       | ■                             | ■                                 | –                              |
| Parameterizable output                                                 | Usable as "life contact", early trip contact, and for displaying "Parameter set B active" or "Maintenance mode DAS+ active" | ■                | ■         | ■                       | ■                             | ■                                 | –                              |

<sup>1)</sup> A country-specific radio license is required to operate the Bluetooth interface.  
Before activating the Bluetooth function, ensure that the license is available:  
[www.siemens.com/lowvoltage/certificates](http://www.siemens.com/lowvoltage/certificates)

- Not available
- Available, feature of the application package
- Can be retrofitted

|                                                               |           | Current<br>metering | ready4COM | PMF-I<br>Energy<br>efficiency | PMF-II<br>Basic<br>Power<br>Monitoring | PMF-III<br>Advanced<br>Power<br>Monitoring |
|---------------------------------------------------------------|-----------|---------------------|-----------|-------------------------------|----------------------------------------|--------------------------------------------|
| <b>ETU600</b>                                                 |           |                     |           |                               |                                        |                                            |
| <b>Metering function</b>                                      |           |                     |           |                               |                                        |                                            |
| Integrated voltage tap at top/bottom                          |           | –                   | –         | ■                             | ■                                      | ■                                          |
| Voltage tap module VTM                                        |           | –                   | –         | ■                             | ■                                      | ■                                          |
| Type acc. to IEC 61557-12                                     | PMF-I     | –                   | –         | ■                             | ■                                      | ■                                          |
|                                                               | PMF-II    | –                   | –         | –                             | ■                                      | ■                                          |
|                                                               | PMF-III   | –                   | –         | –                             | –                                      | ■                                          |
| <b>Metering values</b>                                        |           |                     |           |                               |                                        |                                            |
| Temperature                                                   |           | –                   | ■         | ■                             | ■                                      | ■                                          |
| <b>Accuracy according to IEC 61557-12</b>                     |           |                     |           |                               |                                        |                                            |
| Phase current $I_{L1}, I_{L2}, I_{L3}$                        | Class 1   | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Neutral conductor current $I_N$                               | Class 1   | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Voltage $U_{LN}$                                              | Class 0.5 | –                   | –         | ■                             | ■                                      | ■                                          |
| Voltage $U_{LL}$                                              | Class 0.5 | –                   | –         | ■                             | ■                                      | ■                                          |
| Active energy $E_a$                                           | Class 2   | –                   | –         | ■                             | ■                                      | ■                                          |
| Active power $P$                                              | Class 2   | –                   | –         | –                             | ■                                      | ■                                          |
| <b>Accuracy according to manufacturer's specifications</b>    |           |                     |           |                               |                                        |                                            |
| Ground-fault current $I_g$ with ETU600 LSI                    | 2%        | –                   | –         | –                             | ■                                      | ■                                          |
| Ground-fault current $I_g$ with ETU600 LSIG, ETU600 LSIG Hi-Z | 2%        | ■                   | ■         | ■                             | ■                                      | ■                                          |
| Reactive energy $E_r$                                         | 2%        | –                   | –         | –                             | ■                                      | ■                                          |
| Apparent energy $E_{ap}$                                      | 2%        | –                   | –         | –                             | ■                                      | ■                                          |
| Reactive power $Q$                                            | 2%        | –                   | –         | –                             | ■                                      | ■                                          |
| Apparent power $S$                                            | 2%        | –                   | –         | –                             | ■                                      | ■                                          |
| Power factor $PF$                                             | 6%        | –                   | –         | –                             | ■                                      | ■                                          |
| $\cos \varphi$                                                | 6%        | –                   | –         | –                             | ■                                      | ■                                          |
| Frequency $f$                                                 | 0.5%      | –                   | –         | –                             | ■                                      | ■                                          |
| Current unbalance                                             | 2.5%      | –                   | –         | –                             | ■                                      | ■                                          |
| Voltage unbalance                                             | 1.5%      | –                   | –         | –                             | ■                                      | ■                                          |
| Total harmonic distortion $THD-I^{(1)}$                       | 2%        | –                   | –         | –                             | –                                      | ■                                          |
| Total harmonic distortion $THD-U^{(1)}$                       | 2%        | –                   | –         | –                             | –                                      | ■                                          |
| Harmonic $I, U^{(1)}$                                         | 2%        | –                   | –         | –                             | –                                      | ■                                          |

<sup>1)</sup> For 2nd to 15th harmonic  $\pm 2\%$  and for 16th to 31st harmonic  $\pm 5\%$

■ Available, feature of the application package  
– Not available

#### Licenses for activating the test function in SENTRON Powerconfig software

| License (ALM)                  | Test scope                                                                                                                                                                                                                                                                                                                                                                                        | Test values can be set | Documentation | Article No.        |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------|--------------------|
| Basic (unlimited)              | LSIG                                                                                                                                                                                                                                                                                                                                                                                              | No                     | No            | Free available     |
| Standard (365 days)            | LSIG                                                                                                                                                                                                                                                                                                                                                                                              | Yes                    | Yes           | 7KN2720-OCE00-1YC1 |
| Extended <b>new</b> (365 days) | <ul style="list-style-type: none"> <li>LSIG</li> <li>dST</li> <li>Phase unbalance current</li> <li>Phase unbalance voltage</li> <li>Total harmonic distortion (THD) for current and voltage (from Powerconfig V3.28)</li> <li>Undervoltage, overvoltage</li> <li>Forward power</li> <li>Reverse power</li> <li>Underfrequency</li> <li>Overfrequency</li> <li>Phase sequence detection</li> </ul> | Yes                    | Yes           | 7KN2720-OCE00-2YC1 |

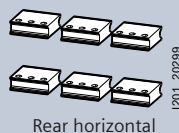
# Connection

## Main circuit connection

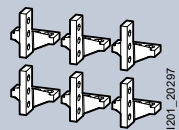
### 3WA11 – 3WA13

#### Fixed-mounted

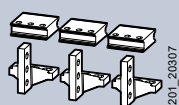
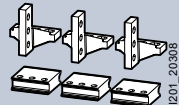
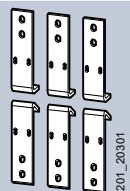
#### Withdrawable



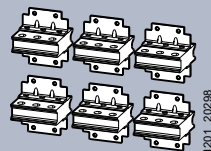
Rear horizontal



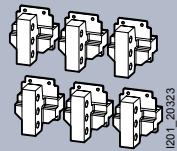
Rear vertical

Horizontal on top,  
vertical at the bottomVertical on top,  
horizontal at the bottom

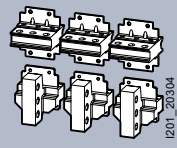
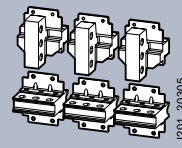
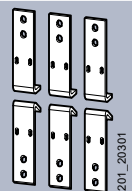
Front connection with double hole



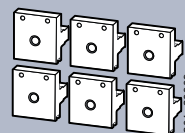
Rear horizontal



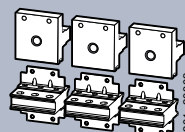
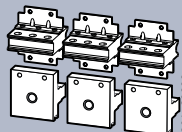
Rear vertical

Horizontal on top,  
vertical at the bottomVertical on top,  
horizontal at the bottom

Front connection with double hole



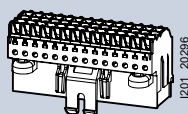
Flange

Flange on top and  
horizontal at bottomFlange on bottom and  
horizontal at top

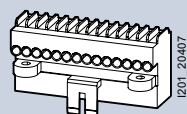
## Secondary disconnect terminal

The auxiliary and control cables are connected at the manual connectors using the push-in technology of the auxiliary conductor connections of the circuit breaker.

Coding pins on the manual connectors prevent them being inserted in the wrong slots.



Screwless connection (push in)



Screw connection (optional)

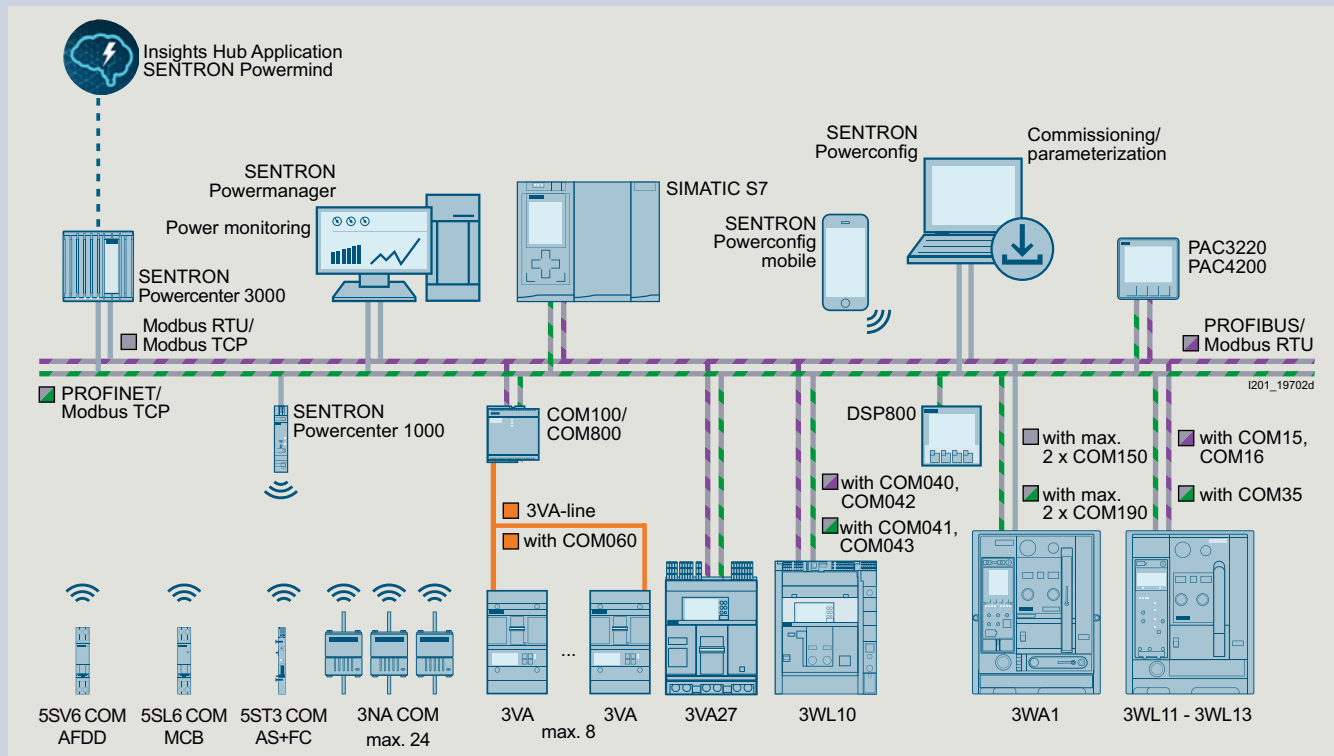
For size 1, up to 4 secondary disconnect terminal blocks are possible; for sizes 2 and 3, up to 5 secondary disconnect terminal blocks are possible

- Circuit breakers and non-automatic circuit breakers with secondary disconnect terminal blocks are supplied from the factory:
  - Non-automatic circuit breakers with 3 blocks
  - Non-automatic circuit breakers with ready4COM feature with 4 blocks
  - Non-automatic circuit breakers with ETU600 LSI or LSIG with 4 blocks
  - Non-automatic circuit breaker with ETU600 LSIG-HiZ with 5 blocks
  - Non-automatic circuit breaker with ETU300 LSI/LSIG with 4 blocks

For dimension drawings, see Equipment Manual – 3WA1 air circuit breakers [www.siemens.com/lowvoltage/manuals](http://www.siemens.com/lowvoltage/manuals) (109763061)



# Communication



The 3WA can be equipped with up to two PROFINET IO/Modbus TCP COM190 communications modules or Modbus RTU COM150 and up to five IOM230 digital input/output modules.

For the optional communications interface with the COM190 or COM150 communications module, a circuit breaker with the ready4COM feature must be selected as the circuit breaker/non-automatic air circuit breaker. The first COM190 or COM150 communications module must be selected via a Z option. If you want to use a further COM190 or COM150 communications module, this must be ordered separately as an accessory. Both COM190 or COM150 communications modules can be run in parallel.

The first IOM230 digital input/output module can be selected via a Z option.

The up to four further digital input/output modules must be ordered separately as accessories.

You will find further information on the COM190 in the Equipment Manual – 3WA1 air circuit breakers

[www.siemens.com/lowvoltage/manuals](http://www.siemens.com/lowvoltage/manuals) (109763061)

# Selection guide

## Components pre-installed at the factory

The following components are contained in the 3WA air circuit breakers as standard (if the condition is fulfilled) and do not have to be configured:

| Components                            | Condition                                                                           |
|---------------------------------------|-------------------------------------------------------------------------------------|
| Ready-to-close signaling switch (S20) | Installed at the factory in all 3WA1 as standard                                    |
| 1st trip alarm switch (S24)           | Installed at the factory in all 3WA1 circuit breakers (incl. ETU) as standard       |
| Spring charge signaling switch (S21)  | Installed at the factory in all 3WA1 as standard when using a spring charging motor |
| Shutters                              | Installed at the factory in all 3WA1 withdrawable circuit breakers as standard      |

# Manuals for downloading

1



You will find further information under:  
[www.siemens.com/lowvoltage/manuals](http://www.siemens.com/lowvoltage/manuals)

Equipment Manual:

- 3WA1 air circuit breakers  
(109763061)



System Manual:

- 3WA air circuit breaker communication (109792368)



Configuration Manual:

- Low voltage protection devices selectivity-tables (109748621)

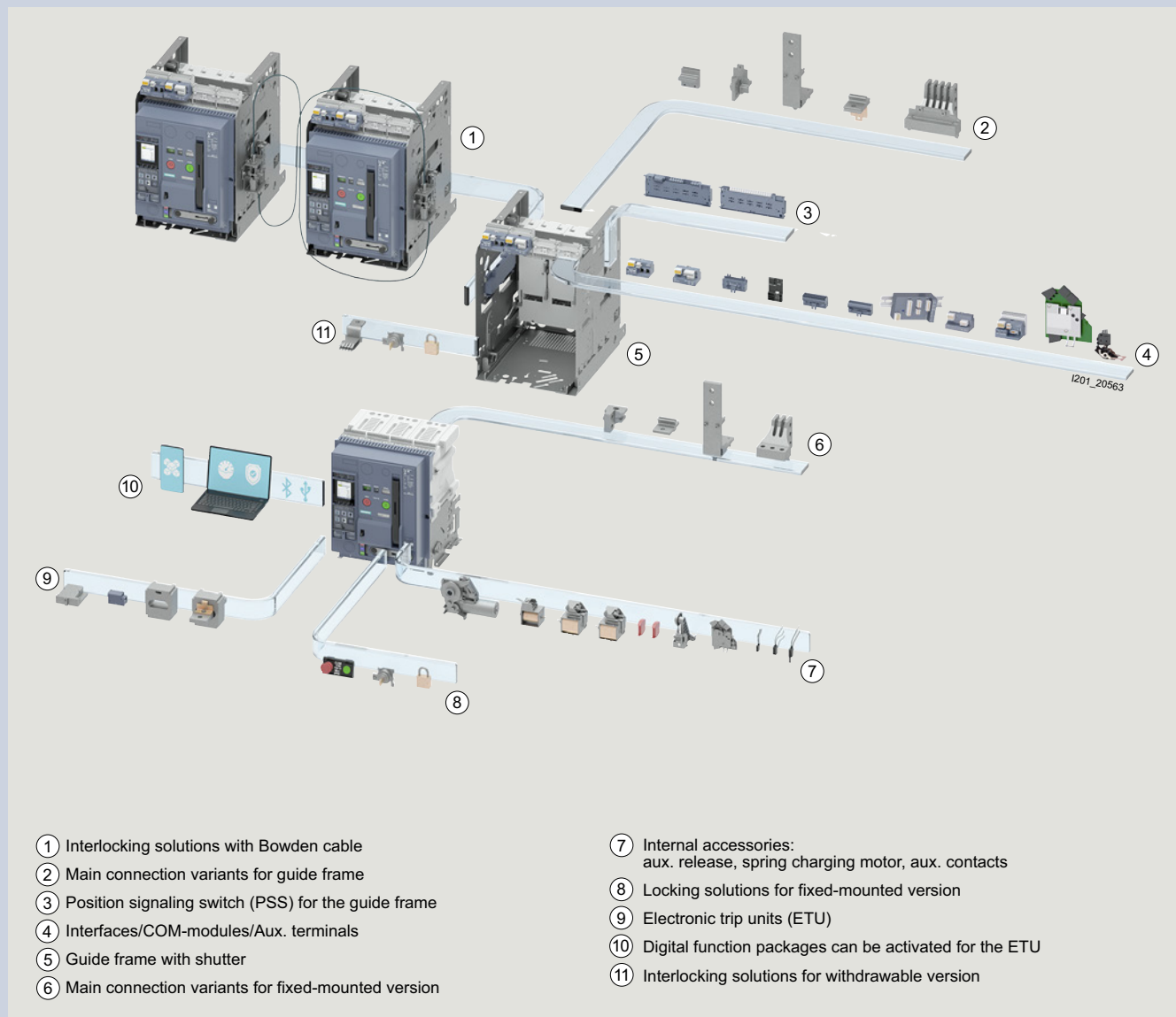


# 3WA11 – 3WA13 system overview

Circuit breakers and non-automatic circuit breakers for AC and DC

For a complete and valid configuration of your air circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

1



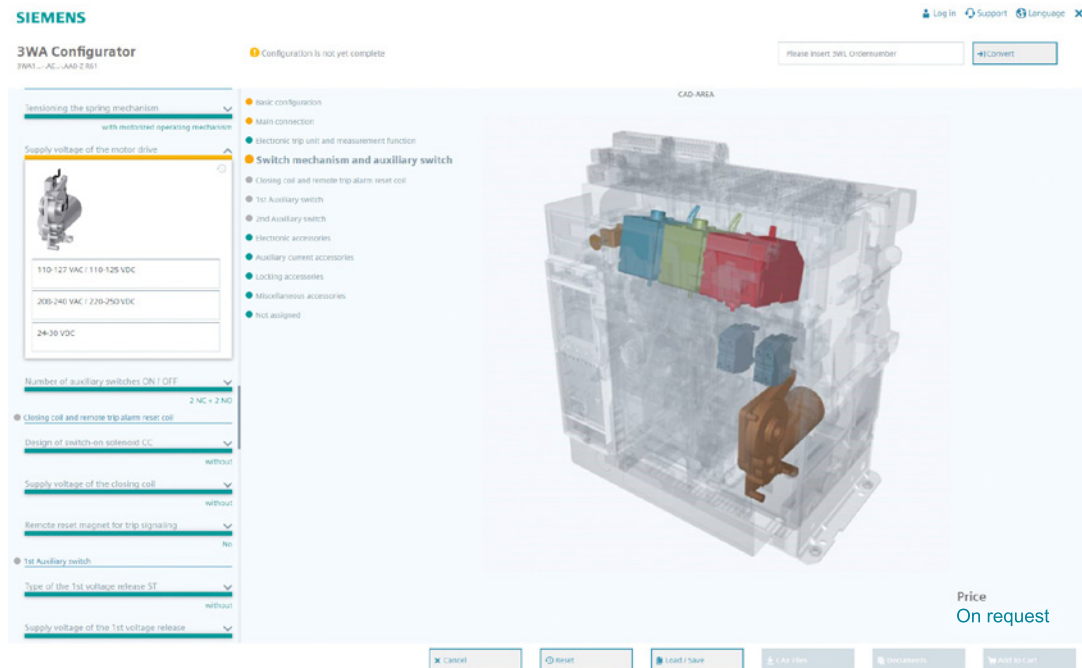


# Online configurator highlights

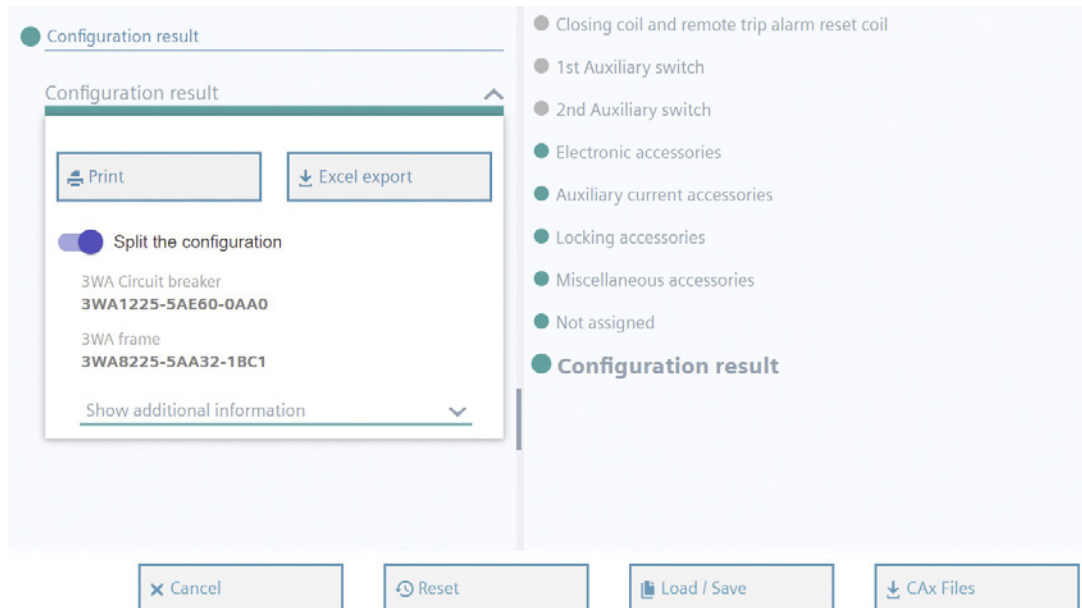
[www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

## Graphical display

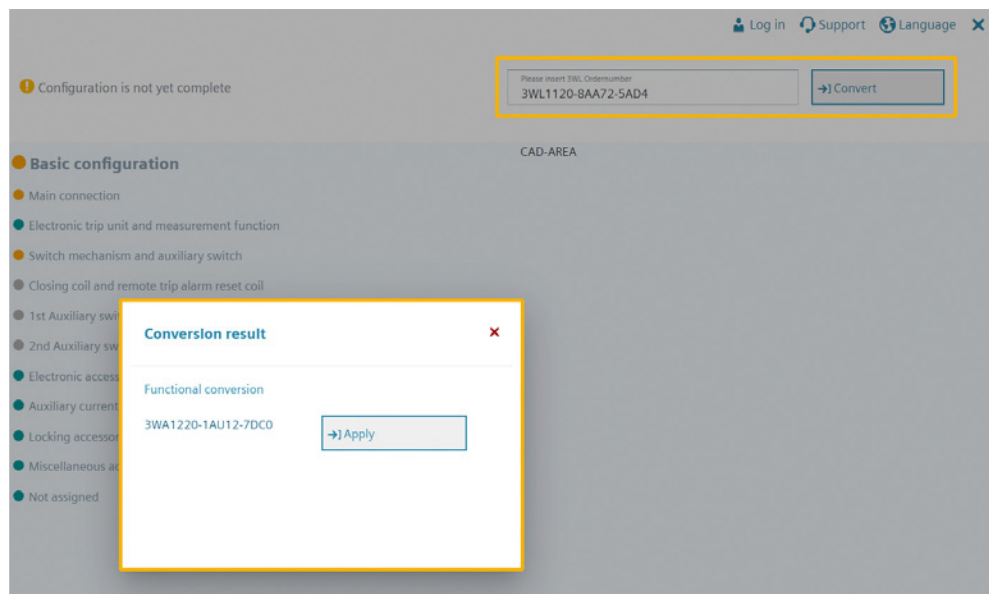
- Integration of the legend as a color system
  - Orange: still to be selected
  - Petrol: already selected
  - Gray: preselected (default)
- Graphical highlighting of the individual configuration steps: “What you see is what you get”



## Splitting function (Frame and circuit breaker can be ordered separately)



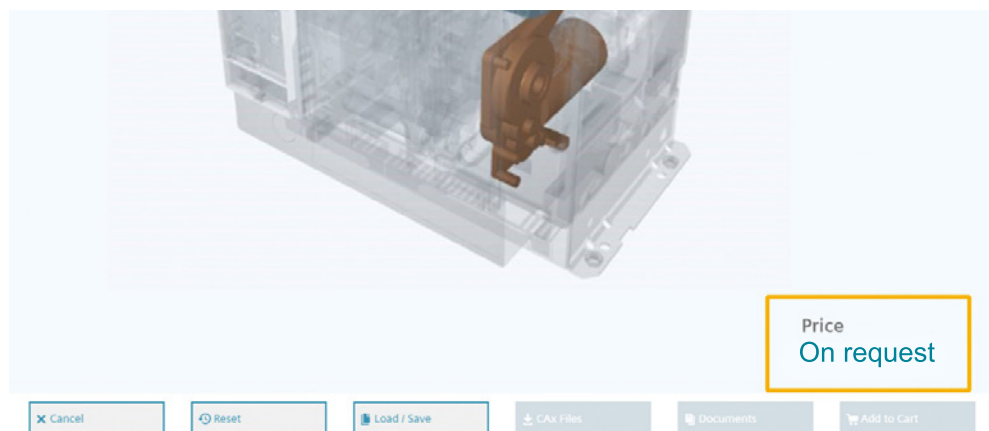
## Direct conversion of a 3WL article number to a 3WA article number in the configurator



## Responsive design (adapted to the differing requirements of the displaying devices)



## Dynamic customer price during configuration



# Structure of the article numbers



## Protective and metering functions for circuit breakers

The structure shown below is intended as an overview of each position and its meaning.

For a complete and valid configuration of your air circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

| Digit | 1–7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Price difference in € per PU | Price group |
|-------|-----|---|---|----|----|----|----|----|----|----|----|------------------------------|-------------|
|       |     | – |   |    |    |    | –  |    |    |    | –  |                              |             |

### Electronic trip units

|        | SZ 1 | SZ 2 | SZ 3 |           |   |
|--------|------|------|------|-----------|---|
| ETU300 | ■    | ■    | ■    | LSI       | B |
|        | ■    | ■    | ■    | LSIG      | C |
| ETU600 | ■    | ■    | ■    | LSI       | E |
|        | ■    | ■    | ■    | LSIG      | F |
|        | –    | ■    | ■    | LSIG Hi-Z | G |

### Application packages with protective and metering functions for circuit breakers

|               |                                                                                                                                                                                                     |   |  |     |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|--|-----|
| ETU300/ETU600 | Protective function/Current metering                                                                                                                                                                | A |  | 1CE |
| ETU600        | Current metering, ready4COM feature <sup>1)</sup>                                                                                                                                                   | C |  | 1CE |
|               | For AC non-automatic circuit breakers up to 690 V (with metering function, internal voltage tap in the circuit breaker, power supply of the ETU600 via the VTM680 voltage tap module and ready4COM) | L |  | 1CE |
|               |                                                                                                                                                                                                     | E |  | 1CE |
|               | PMF-I Energy efficiency Voltage tap at top                                                                                                                                                          | M |  | 1CE |
|               | PMF-II Basic Voltage tap at top                                                                                                                                                                     | F |  | 1CE |
|               | Power Monitoring Voltage tap at bottom                                                                                                                                                              | N |  | 1CE |
|               | PMF-III Advanced Voltage tap at top                                                                                                                                                                 | G |  | 1CE |
|               | Power Monitoring Voltage tap at bottom                                                                                                                                                              |   |  |     |
|               | For AC circuit breakers for higher voltages and in the 690-V IT system (with metering function, internal voltage tap in the circuit breaker, VTM640 voltage tap module and ready4COM)               | U |  | 1CE |
|               |                                                                                                                                                                                                     | Q |  | 1CE |
|               | PMF-I Energy efficiency Voltage tap at top                                                                                                                                                          | V |  | 1CE |
|               | PMF-II Basic Voltage tap at top                                                                                                                                                                     | R |  | 1CE |
|               | Power Monitoring Voltage tap at bottom                                                                                                                                                              | W |  | 1CE |
|               | PMF-III Advanced Voltage tap at top                                                                                                                                                                 | S |  | 1CE |
|               | Power Monitoring Voltage tap at bottom                                                                                                                                                              |   |  |     |

#### Note:

- Protective function LSI
  - Incl. LSI option plug (can be upgraded to LSIG using LSIG option plug)
- Protective function LSIG
  - Incl. LSI option plug
- Protective function LSIG Hi-Z
  - Version incl. second tripping solenoid (F6) with reclosing lockout and incl. external trip controller ETC600
- ETU600 current metering:
  - Electronic trip unit with protective function, without communication function/BSS200 (BSS200 retrofittable), without metering function and without enhanced protective functions (functions retrofittable: voltage tap (only at the bottom), voltage tap module and metering/protective functions required as licenses, see accessories and spare parts)
- Function ready4COM:
  - Circuit breaker including BSS200 breaker status sensor
- PMF Level:
  - Electronic trip unit including metering function according to IEC 61557-12 and enhanced protective functions (for more information, see ETU600 electronic trip unit, [page 1/20](#))
  - Incl. voltage tap module VTM and voltage tap
  - Incl. Breaker Status Sensor BSS200 (ready4COM)

For subsequent upgrading to PMF level, measuring accuracy according to manufacturer's specifications.

<sup>1)</sup> If ready4COM circuit breakers are ordered with closing coils/shunt trips, these are installed in the factory as communication-capable versions (CC-COM/ST-COM)



## Non-automatic circuit breakers with and without ready4COM

The structure shown below is intended as an overview of each position and its meaning.  
For a complete and valid configuration of your air circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

| Digit | 1–7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Price difference in<br>€ per PU | Price group |
|-------|-----|---|---|----|----|----|----|----|----|----|----|---------------------------------|-------------|
|-------|-----|---|---|----|----|----|----|----|----|----|----|---------------------------------|-------------|

### AC non-automatic circuit breakers

AC non-automatic circuit breakers <sup>1)</sup>

AC non-automatic circuit breakers, ready4COM

|   |   |
|---|---|
| A | A |
| C | A |

|  |     |
|--|-----|
|  | 1CE |
|  | 1CE |

### DC non-automatic circuit breakers

DC non-automatic circuit breakers

DC non-automatic circuit breakers, ready4COM

|   |   |
|---|---|
| A | U |
| C | U |

|  |     |
|--|-----|
|  | 1CE |
|  | 1CE |

#### Note:

- Function ready4COM:
  - Circuit breaker including BSS200 breaker status sensor (can be retrofitted)

<sup>1)</sup> Frame size 1 with breaking capacity H is not offered as a non-automatic circuit breaker

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# Structure of the article numbers



## Operating mechanism, auxiliary switch and auxiliary release

The structure shown below is intended as an overview of each position and its meaning.

For a complete and valid configuration of your air circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

| Digit | 1–7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Price difference in € per PU | Price group |
|-------|-----|---|---|----|----|----|----|----|----|----|----|------------------------------|-------------|
|       |     | – |   |    |    |    |    |    |    | –  |    |                              |             |

### Operating mechanisms and auxiliary switches

|                                                                        |                               |            |   |  |  |     |
|------------------------------------------------------------------------|-------------------------------|------------|---|--|--|-----|
| Manual recharging of the stored energy mechanism                       | Without spring charging motor | 2 NO, 2 NC | 0 |  |  | 1CE |
|                                                                        |                               | 4 NO, 4 NC | 1 |  |  | 1CE |
| Recharging of the stored energy mechanism by spring charging motor (M) | 24 ... 30 V DC                | 2 NO, 2 NC | 2 |  |  | 1CE |
|                                                                        |                               | 4 NO, 4 NC | 5 |  |  | 1CE |
|                                                                        | 48 ... 60 V DC                | 4 NO, 4 NC | 6 |  |  | 1CE |
|                                                                        |                               |            | 3 |  |  | 1CE |
|                                                                        | 110 ... 127 V AC/             | 2 NO, 2 NC | 7 |  |  | 1CE |
|                                                                        | 110 ... 125 V DC              | 4 NO, 4 NC | 4 |  |  | 1CE |
|                                                                        | 208 ... 240 V AC/             | 2 NO, 2 NC | 8 |  |  | 1CE |
|                                                                        | 220 ... 250 V DC              | 4 NO, 4 NC |   |  |  | 1CE |

### Closing coils and remote trip alarm reset coils <sup>1)2)</sup>

|                                                                             |                                                                 |                                   |   |  |  |     |
|-----------------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------|---|--|--|-----|
| Without closing coil                                                        | Without remote trip alarm reset coil                            |                                   | A |  |  | 1CE |
| With closing coil (CC/CC-COM) <sup>3)</sup> for uninterrupted duty, 100% OP | Without remote trip alarm reset coil                            | 24 ... 30 V DC                    | B |  |  | 1CE |
|                                                                             |                                                                 | 48 ... 60 V DC                    | C |  |  | 1CE |
|                                                                             |                                                                 | 110 ... 127 V AC/110 ... 125 V DC | D |  |  | 1CE |
|                                                                             |                                                                 | 208 ... 240 V AC/220 ... 250 V DC | E |  |  | 1CE |
|                                                                             | With remote trip alarm reset coil (RR) for momentary duty 1% OP | 24 ... 30 V DC                    | F |  |  | 1CE |
|                                                                             |                                                                 | 48 ... 60 V DC                    | G |  |  | 1CE |
|                                                                             |                                                                 | 110 ... 127 V AC/110 ... 125 V DC | H |  |  | 1CE |
|                                                                             |                                                                 | 208 ... 240 V AC/220 ... 250 V DC | J |  |  | 1CE |
| With closing coil (CC) for momentary duty, 5% OP                            | Without remote trip alarm reset coil                            | 24 ... 30 V DC                    | K |  |  | 1CE |
|                                                                             |                                                                 | 48 ... 60 V DC                    | L |  |  | 1CE |
|                                                                             |                                                                 | 110 ... 127 V AC/110 ... 125 V DC | M |  |  | 1CE |
|                                                                             |                                                                 | 208 ... 240 V AC/220 ... 250 V DC | N |  |  | 1CE |
|                                                                             | With remote trip alarm reset coil (RR) for momentary duty 1% OP | 24 ... 30 V DC                    | P |  |  | 1CE |
|                                                                             |                                                                 | 48 ... 60 V DC                    | Q |  |  | 1CE |
|                                                                             |                                                                 | 110 ... 127 V AC/110 ... 125 V DC | R |  |  | 1CE |
|                                                                             |                                                                 | 208 ... 240 V AC/220 ... 250 V DC | S |  |  | 1CE |

<sup>1)</sup> Remote trip alarm reset coil is not available for non-automatic circuit breakers

<sup>2)</sup> When using the remote trip alarm reset coil, the reclosing lockout is generally deactivated. The circuit breaker can be closed again immediately if the conditions for closing are fulfilled.

<sup>3)</sup> If the property ready4COM is selected in conjunction with 100% OP closing coils/shunt trips, communication-capable closing coils (CC-COM)/shunt trips (ST-COM) are installed in the factory. Optionally, this communication capability of the 100% OP closing coils/shunt trips can be deselected with option M71.

| Digit | 1–7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Price difference in<br>€ per PU | Price group |
|-------|-----|---|---|----|----|----|----|----|----|----|----|---------------------------------|-------------|
|       |     | – |   |    |    |    | –  |    |    |    | –  |                                 |             |

## 2nd auxiliary releases

|                                                                                                           |                                   |   |  |  |     |
|-----------------------------------------------------------------------------------------------------------|-----------------------------------|---|--|--|-----|
| Without 2nd auxiliary release                                                                             |                                   | A |  |  | 1CE |
| With shunt trip (ST),<br>uninterrupted duty 100% OP                                                       | 24 ... 30 V DC                    | B |  |  | 1CE |
|                                                                                                           | 48 ... 60 V DC                    | C |  |  | 1CE |
|                                                                                                           | 110 ... 127 V AC/110 ... 125 V DC | D |  |  | 1CE |
|                                                                                                           | 208 ... 240 V AC/220 ... 250 V DC | E |  |  | 1CE |
| With shunt trip (ST),<br>momentary duty 5% OP                                                             | 24 ... 30 V DC                    | F |  |  | 1CE |
|                                                                                                           | 48 ... 60 V DC                    | G |  |  | 1CE |
|                                                                                                           | 110 ... 127 V AC/110 ... 125 V DC | H |  |  | 1CE |
|                                                                                                           | 208 ... 240 V AC/220 ... 250 V DC | J |  |  | 1CE |
| With undervoltage release (UVR),<br>instantaneous ( $\leq 0.08$ s) and short-time delayed ( $\leq 0.2$ s) | 24 ... 30 V DC                    | L |  |  | 1CE |
|                                                                                                           | 48 ... 60 V DC                    | N |  |  | 1CE |
|                                                                                                           | 110 ... 127 V AC/110 ... 125 V DC | P |  |  | 1CE |
|                                                                                                           | 208 ... 240 V AC/220 ... 250 V DC | Q |  |  | 1CE |
|                                                                                                           | 380 ... 415 V AC                  | R |  |  | 1CE |
| With undervoltage release (UVR-t) <sup>1)</sup> ,<br>adjustable delay 0.2 ... 3.2 s                       | 48 V DC                           | S |  |  | 1CE |
|                                                                                                           | 60 V DC                           | T |  |  | 1CE |
|                                                                                                           | 110 ... 127 V AC/110 ... 125 V DC | U |  |  | 1CE |
|                                                                                                           | 208 ... 240 V AC/220 ... 250 V DC | V |  |  | 1CE |
|                                                                                                           | 380 ... 415 V AC                  | W |  |  | 1CE |

## 1st auxiliary releases

|                                                                           |                                   |   |  |  |     |
|---------------------------------------------------------------------------|-----------------------------------|---|--|--|-----|
| Without 1st auxiliary release                                             |                                   | 0 |  |  | 1CE |
| With shunt trip (ST/ST-COM) <sup>2)</sup> ,<br>uninterrupted duty 100% OP | 24 ... 30 V DC                    | 1 |  |  | 1CE |
|                                                                           | 48 ... 60 V DC                    | 2 |  |  | 1CE |
|                                                                           | 110 ... 127 V AC/110 ... 125 V DC | 3 |  |  | 1CE |
|                                                                           | 208 ... 240 V AC/220 ... 250 V DC | 4 |  |  | 1CE |
| With shunt trip (ST),<br>momentary duty 5% OP                             | 24 ... 30 V DC                    | 5 |  |  | 1CE |
|                                                                           | 48 ... 60 V DC                    | 6 |  |  | 1CE |
|                                                                           | 110 ... 127 V AC/110 ... 125 V DC | 7 |  |  | 1CE |
|                                                                           | 208 ... 240 V AC/220 ... 250 V DC | 8 |  |  | 1CE |

<sup>1)</sup> The maximum allowable cable length to the actuator for quick shutdown is currently  $\leq 50$  m (maximum allowable cable length between the terminals  $\leq 100$  m).

<sup>2)</sup> If the property ready4COM is selected in conjunction with 100% OP closing coils/shunt trips, communication-capable closing coils (CC-COM)/shunt trips (ST-COM) are installed in the factory. Optionally, this communication capability of the 100% OP closing coils/shunt trips can be deselected with option M71.

# Structure of the article numbers



## Basic configuration for AC circuit breakers, fixed-mounted, size 1

The structure shown below is intended as an overview of each position and its meaning.  
For a complete and valid configuration of your air circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

| Size                                              |                                                             | Short-circuit breaking capacity $I_{cu}/I_{cs}$ |         | Max. rated current $I_n$ max |   | Short-circuit breaking capacity $I_{cu}$ |   | Application packages |   | ETU and basic protective functions |   | 3-pole |   | 4-pole, N left |   | 4-pole, N right <b>new</b> |      | Vertical |      | Horizontal |  | Front double hole |  | Vertical on top/horizontal at the bottom |  | Horizontal on top/vertical at the bottom |  |
|---------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------|---------|------------------------------|---|------------------------------------------|---|----------------------|---|------------------------------------|---|--------|---|----------------|---|----------------------------|------|----------|------|------------|--|-------------------|--|------------------------------------------|--|------------------------------------------|--|
| Digit                                             |                                                             | 1–7                                             |         | 8                            |   | 9                                        |   | 10                   |   | 11                                 |   | 12     |   | 13             |   | 14                         |      | 15       |      | 16         |  | 17                |  |                                          |  |                                          |  |
|                                                   |                                                             |                                                 |         | –                            |   |                                          |   |                      |   |                                    |   |        |   | –              |   |                            |      |          |      |            |  | –                 |  |                                          |  |                                          |  |
| Up to 690 V                                       |                                                             |                                                 |         |                              |   |                                          |   |                      |   |                                    |   |        |   |                |   |                            |      |          |      |            |  |                   |  |                                          |  |                                          |  |
| 1                                                 | 55/42 kA at 500 V/690 V<br>N                                | 630 A                                           | 3WA1106 | 2                            | A | E                                        | 0 | 1                    | 2 | 1                                  | 2 | 3      | 5 | 6              | 0 | A                          | A    | 0        | Z... |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 800 A                                                       | 3WA1108                                         | 2       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 3 | 5      | 6 | 0              | A | A                          | 0    | Z...     |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 1000 A                                                      | 3WA1110                                         | 2       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 3 | 5      | 6 | 0              | A | A                          | 0    | Z...     |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 1250 A                                                      | 3WA1112                                         | 2       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 3 | 5      | 6 | 0              | A | A                          | 0    | Z...     |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 1600 A                                                      | 3WA1116                                         | 2       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 3 | 5      | 6 | 0              | A | A                          | 0    | Z...     |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 2000 A                                                      | 3WA1120                                         | 2       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 3 | 5      | 6 | 0              | A | A                          | 0    | Z...     |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 2500 A                                                      | 3WA1125                                         | 2       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 5 | 6      | 0 | A              | A | 0                          | Z... |          |      |            |  |                   |  |                                          |  |                                          |  |
| 1                                                 | 66/50 kA at 500 V/690 V<br>S                                | 630 A                                           | 3WA1106 | 3                            | A | E                                        | 0 | 1                    | 2 | 1                                  | 2 | 3      | 5 | 6              | 0 | A                          | A    | 0        | Z... |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 800 A                                                       | 3WA1108                                         | 3       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 3 | 5      | 6 | 0              | A | A                          | 0    | Z...     |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 1000 A                                                      | 3WA1110                                         | 3       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 3 | 5      | 6 | 0              | A | A                          | 0    | Z...     |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 1250 A                                                      | 3WA1112                                         | 3       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 3 | 5      | 6 | 0              | A | A                          | 0    | Z...     |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 1600 A                                                      | 3WA1116                                         | 3       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 3 | 5      | 6 | 0              | A | A                          | 0    | Z...     |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 2000 A                                                      | 3WA1120                                         | 3       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 3 | 5      | 6 | 0              | A | A                          | 0    | Z...     |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 2500 A                                                      | 3WA1125                                         | 3       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 5 | 6      | 0 | A              | A | 0                          | Z... |          |      |            |  |                   |  |                                          |  |                                          |  |
| 1                                                 | 85/66 kA at 500 V/690 V<br>M                                | 630 A                                           | 3WA1106 | 4                            | A | E                                        | 0 | 1                    | 2 | 1                                  | 2 | 3      | 5 | 6              | 0 | A                          | A    | 0        | Z... |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 800 A                                                       | 3WA1108                                         | 4       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 3 | 5      | 6 | 0              | A | A                          | 0    | Z...     |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 1000 A                                                      | 3WA1110                                         | 4       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 3 | 5      | 6 | 0              | A | A                          | 0    | Z...     |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 1250 A                                                      | 3WA1112                                         | 4       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 3 | 5      | 6 | 0              | A | A                          | 0    | Z...     |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 1600 A                                                      | 3WA1116                                         | 4       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 3 | 5      | 6 | 0              | A | A                          | 0    | Z...     |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 2000 A                                                      | 3WA1120                                         | 4       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 3 | 5      | 6 | 0              | A | A                          | 0    | Z...     |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 2500 A                                                      | 3WA1125                                         | 4       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 5 | 6      | 0 | A              | A | 0                          | Z... |          |      |            |  |                   |  |                                          |  |                                          |  |
| 1                                                 | 100/66 kA at 500 V/690 V<br>H <b>new</b>                    | 630 A                                           | 3WA1106 | 5                            | A | E                                        | 0 | 1                    | 2 | 1                                  | 2 | 5      | 6 | 0              | A | A                          | 0    | Z...     |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 800 A                                                       | 3WA1108                                         | 5       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 5 | 6      | 0 | A              | A | 0                          | Z... |          |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 1000 A                                                      | 3WA1110                                         | 5       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 5 | 6      | 0 | A              | A | 0                          | Z... |          |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 1250 A                                                      | 3WA1112                                         | 5       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 5 | 6      | 0 | A              | A | 0                          | Z... |          |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 1600 A                                                      | 3WA1116                                         | 5       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 5 | 6      | 0 | A              | A | 0                          | Z... |          |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 2000 A                                                      | 3WA1120                                         | 5       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 5 | 6      | 0 | A              | A | 0                          | Z... |          |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 2500 A                                                      | 3WA1125                                         | 5       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 5 | 6      | 0 | A              | A | 0                          | Z... |          |      |            |  |                   |  |                                          |  |                                          |  |
| For higher voltages and<br>in the 690-V IT system |                                                             |                                                 |         |                              |   |                                          |   |                      |   |                                    |   |        |   |                |   |                            |      |          |      |            |  |                   |  |                                          |  |                                          |  |
| 1                                                 | 85/50/50 kA<br>at 690 V/<br>690-V IT system/<br>1000 V<br>E | 630 A                                           | 3WA1106 | 8                            | A | E                                        | 0 | 1                    | 2 | 1                                  | 2 | 3      | 5 | 6              | 0 | A                          | A    | 0        | Z... |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 800 A                                                       | 3WA1108                                         | 8       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 3 | 5      | 6 | 0              | A | A                          | 0    | Z...     |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 1000 A                                                      | 3WA1110                                         | 8       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 3 | 5      | 6 | 0              | A | A                          | 0    | Z...     |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 1250 A                                                      | 3WA1112                                         | 8       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 3 | 5      | 6 | 0              | A | A                          | 0    | Z...     |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 1600 A                                                      | 3WA1116                                         | 8       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 3 | 5      | 6 | 0              | A | A                          | 0    | Z...     |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 2000 A                                                      | 3WA1120                                         | 8       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 3 | 5      | 6 | 0              | A | A                          | 0    | Z...     |      |            |  |                   |  |                                          |  |                                          |  |
|                                                   | 2500 A                                                      | 3WA1125                                         | 8       | A                            | E | 0                                        | 1 | 2                    | 1 | 2                                  | 5 | 6      | 0 | A              | A | 0                          | Z... |          |      |            |  |                   |  |                                          |  |                                          |  |

Reduction of the rated current up to  $I_n = 250$  A possible with option plug (Z = B02 – B20)

Protective and metering functions for circuit breakers, from page 1/34 onwards

Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards

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**Quick selection guide, pages 1/4 and 1/8**

# Structure of the article numbers



## Basic configuration for AC circuit breakers, fixed-mounted, size 2

The structure shown below is intended as an overview of each position and its meaning.

For a complete and valid configuration of your air circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

| Size                                           | Short-circuit breaking capacity $I_{cu}/I_{cs}$                   | Max. rated current $I_{n\ max}$ | Short-circuit breaking capacity $I_{cu}$ | Application packages | ETU and basic protective functions | 3-pole | 4-pole, N left | 4-pole, N right new | Vertical | Horizontal | Front double hole | Vertical on top/horizontal at the bottom | Horizontal on top/vertical at the bottom | Connection fixed-mounted |   |   |   |   |      |
|------------------------------------------------|-------------------------------------------------------------------|---------------------------------|------------------------------------------|----------------------|------------------------------------|--------|----------------|---------------------|----------|------------|-------------------|------------------------------------------|------------------------------------------|--------------------------|---|---|---|---|------|
| Digit                                          | 1–7                                                               | 8                               | 9                                        | 10                   | 11                                 | 12     | 13             | 14                  | 15       | 16         | 17                |                                          |                                          |                          |   |   |   |   |      |
| Up to 690 V                                    |                                                                   |                                 |                                          |                      |                                    |        |                |                     |          |            |                   |                                          |                                          |                          |   |   |   |   |      |
| 2                                              | 66/50 kA at 500 V/690 V<br>S                                      | 2000 A                          | 3WA1220                                  | 3                    | A                                  | E      | 0              | 1                   | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0 | A | A | 0 | Z... |
|                                                |                                                                   | 2500 A                          | 3WA1225                                  | 3                    | A                                  | E      | 0              | 1                   | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0 | A | A | 0 | Z... |
|                                                |                                                                   | 3200 A                          | 3WA1232                                  | 3                    | A                                  | E      | 0              | 1                   | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0 | A | A | 0 | Z... |
|                                                |                                                                   | 4000 A                          | 3WA1240                                  | 3                    | A                                  | E      | 0              | 1                   | 2        | 1          | 2                 |                                          | 5                                        | 6                        | 0 | A | A | 0 | Z... |
| 2                                              | 85/66 kA at 500 V/690 V<br>M                                      | 2000 A                          | 3WA1220                                  | 4                    | A                                  | E      | 0              | 1                   | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0 | A | A | 0 | Z... |
|                                                |                                                                   | 2500 A                          | 3WA1225                                  | 4                    | A                                  | E      | 0              | 1                   | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0 | A | A | 0 | Z... |
|                                                |                                                                   | 3200 A                          | 3WA1232                                  | 4                    | A                                  | E      | 0              | 1                   | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0 | A | A | 0 | Z... |
|                                                |                                                                   | 4000 A                          | 3WA1240                                  | 4                    | A                                  | E      | 0              | 1                   | 2        | 1          | 2                 |                                          | 5                                        | 6                        | 0 | A | A | 0 | Z... |
| 2                                              | 100/85 kA at 500 V/690 V<br>H                                     | 2000 A                          | 3WA1220                                  | 5                    | A                                  | E      | 0              | 1                   | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0 | A | A | 0 | Z... |
|                                                |                                                                   | 2500 A                          | 3WA1225                                  | 5                    | A                                  | E      | 0              | 1                   | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0 | A | A | 0 | Z... |
|                                                |                                                                   | 3200 A                          | 3WA1232                                  | 5                    | A                                  | E      | 0              | 1                   | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0 | A | A | 0 | Z... |
|                                                |                                                                   | 4000 A                          | 3WA1240                                  | 5                    | A                                  | E      | 0              | 1                   | 2        | 1          | 2                 |                                          | 5                                        | 6                        | 0 | A | A | 0 | Z... |
| 2                                              | 130/100 kA at 500 V/690 V<br>C                                    | 2000 A                          | 3WA1220                                  | 6                    | A                                  | E      | 0              | 1                   | 2        | 1          | 2                 |                                          | 5                                        | 6                        | 0 | A | A | 0 | Z... |
|                                                |                                                                   | 2500 A                          | 3WA1225                                  | 6                    | A                                  | E      | 0              | 1                   | 2        | 1          | 2                 |                                          | 5                                        | 6                        | 0 | A | A | 0 | Z... |
|                                                |                                                                   | 3200 A                          | 3WA1232                                  | 6                    | A                                  | E      | 0              | 1                   | 2        | 1          | 2                 |                                          | 5                                        | 6                        | 0 | A | A | 0 | Z... |
| For higher voltages and in the 690-V IT system |                                                                   |                                 |                                          |                      |                                    |        |                |                     |          |            |                   |                                          |                                          |                          |   |   |   |   |      |
| 2                                              | 85/50/50/70 kA<br>at 690 V/690-V IT system/<br>1000 V/1150 V<br>E | 2000 A                          | 3WA1220                                  | 8                    | A                                  | E      | 0              | 1                   | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0 | A | A | 0 | Z... |
|                                                |                                                                   | 2500 A                          | 3WA1225                                  | 8                    | A                                  | E      | 0              | 1                   | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0 | A | A | 0 | Z... |
|                                                |                                                                   | 3200 A                          | 3WA1232                                  | 8                    | A                                  | E      | 0              | 1                   | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0 | A | A | 0 | Z... |
|                                                |                                                                   | 4000 A                          | 3WA1240                                  | 8                    | A                                  | E      | 0              | 1                   | 2        | 1          | 2                 |                                          | 5                                        | 6                        | 0 | A | A | 0 | Z... |

Reduction of the rated current up to  $I_n = 250$  A possible with option plug (Z = B02 – B20)

Protective and metering functions for circuit breakers, from page 1/34 onwards

Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards

1

**Quick selection guide, pages 1/4 and 1/8**

# Structure of the article numbers



## Basic configuration for AC circuit breakers, fixed-mounted, size 3

The structure shown below is intended as an overview of each position and its meaning.

For a complete and valid configuration of your air circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

| Size | Short-circuit breaking capacity $I_{cu}/I_{cs}$ | Max. rated current $I_{n\ max}$ | Short-circuit breaking capacity $I_{cu}$ | Application packages | ETU and basic protective functions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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Reduction of the rated current up to  $I_n = 250$  A possible with option plug (Z = B02 – B20)

Protective and metering functions for circuit breakers, from page 1/34 onwards

Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards



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# Structure of the article numbers



## Basic configuration for AC circuit breakers, withdrawable, size 1

The structure shown below is intended as an overview of each position and its meaning.

For a complete and valid configuration of your air circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

| Size | Short-circuit breaking capacity $I_{cu}/I_{cs}$ |  | Max. rated current $I_{n,max}$ |  | Short-circuit breaking capacity $I_{cu}$ |  | Application packages |  | ETU and basic protective functions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | </ |  |
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Reduction of the rated current up to  $I_n = 250$  A possible with option plug (Z = B02 – B20)

Position signaling switch (PSS) for circuit breakers without ready4COM:  
3 × connected position, 2 × test position, 1 × disconnected position

Position signaling switch (PSS) for circuit breakers with ready4COM:

1 × connected position, 1 × test position, 1 × disconnected position + message through communications interface for disconnected position and for "not available".

1

Protective and metering functions for circuit breakers, from page 1/34 onwards  
Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards

# Structure of the article numbers



## Basic configuration for AC circuit breakers, withdrawable, size 2

The structure shown below is intended as an overview of each position and its meaning.

For a complete and valid configuration of your air circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

| Size                                                        | Short-circuit breaking capacity $I_{cu}/I_{cs}$ | Max. rated current $I_{n,max}$ | Short-circuit breaking capacity $I_{cu}$ | Application packages | ETU and basic protective functions | 3-pole, without PSS | 4-pole, N left, without PSS | 4-pole, right, without PSS <b>new</b> | 3-pole, with PSS | 4-pole, N left, with PSS | 4-pole, N right, with PSS <b>new</b> | Without guide frame | Vertical | Horizontal | Front double hole | Flange | Vertical on top/horizontal at the bottom | Horizontal on top/vertical at the bottom | Flange on top/horizontal at the bottom | Horizontal on top/flange at the bottom |   |   |   |   |      |
|-------------------------------------------------------------|-------------------------------------------------|--------------------------------|------------------------------------------|----------------------|------------------------------------|---------------------|-----------------------------|---------------------------------------|------------------|--------------------------|--------------------------------------|---------------------|----------|------------|-------------------|--------|------------------------------------------|------------------------------------------|----------------------------------------|----------------------------------------|---|---|---|---|------|
| Stelle                                                      | 1–7                                             | 8                              | 9                                        | 10                   | 11                                 | 12                  | 13                          | 14                                    | 15               | 16                       | 17                                   |                     |          |            |                   |        |                                          |                                          |                                        |                                        |   |   |   |   |      |
| Up to 690 V                                                 |                                                 |                                |                                          |                      |                                    |                     |                             |                                       |                  |                          |                                      |                     |          |            |                   |        |                                          |                                          |                                        |                                        |   |   |   |   |      |
| 2 66/50 kA at 500 V/690 V S                                 | 2000 A                                          | 3WA1220                        | 3                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          | 3                 | 4      | 5                                        | 6                                        | 7                                      | 8                                      | 0 | A | A | 0 | Z... |
|                                                             | 2500 A                                          | 3WA1225                        | 3                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          | 3                 | 4      | 5                                        | 6                                        | 7                                      | 8                                      | 0 | A | A | 0 | Z... |
|                                                             | 3200 A                                          | 3WA1232                        | 3                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          | 3                 | 4      | 5                                        | 6                                        | 7                                      | 8                                      | 0 | A | A | 0 | Z... |
|                                                             | 3600 A                                          | 3WA1236                        | 3                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   |          |            |                   | 4      |                                          |                                          |                                        |                                        | 0 | A | A | 0 | Z... |
|                                                             | 4000 A                                          | 3WA1240                        | 3                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          |                   |        | 5                                        | 6                                        |                                        |                                        | 0 | A | A | 0 | Z... |
| 2 85/66 kA at 500 V/690 V M                                 | 2000 A                                          | 3WA1220                        | 4                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          | 3                 | 4      | 5                                        | 6                                        | 7                                      | 8                                      | 0 | A | A | 0 | Z... |
|                                                             | 2500 A                                          | 3WA1225                        | 4                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          | 3                 | 4      | 5                                        | 6                                        | 7                                      | 8                                      | 0 | A | A | 0 | Z... |
|                                                             | 3200 A                                          | 3WA1232                        | 4                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          | 3                 | 4      | 5                                        | 6                                        | 7                                      | 8                                      | 0 | A | A | 0 | Z... |
|                                                             | 3600 A                                          | 3WA1236                        | 4                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   |          |            |                   | 4      |                                          |                                          |                                        |                                        | 0 | A | A | 0 | Z... |
|                                                             | 4000 A                                          | 3WA1240                        | 4                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          |                   |        | 5                                        | 6                                        |                                        |                                        | 0 | A | A | 0 | Z... |
| 2 100/85 kA at 500 V/690 V H                                | 2000 A                                          | 3WA1220                        | 5                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          | 3                 | 4      | 5                                        | 6                                        | 7                                      | 8                                      | 0 | A | A | 0 | Z... |
|                                                             | 2500 A                                          | 3WA1225                        | 5                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          | 3                 | 4      | 5                                        | 6                                        | 7                                      | 8                                      | 0 | A | A | 0 | Z... |
|                                                             | 3200 A                                          | 3WA1232                        | 5                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          | 3                 | 4      | 5                                        | 6                                        | 7                                      | 8                                      | 0 | A | A | 0 | Z... |
|                                                             | 3600 A                                          | 3WA1236                        | 5                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   |          |            |                   | 4      |                                          |                                          |                                        |                                        | 0 | A | A | 0 | Z... |
|                                                             | 4000 A                                          | 3WA1240                        | 5                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          |                   |        | 5                                        | 6                                        |                                        |                                        | 0 | A | A | 0 | Z... |
| 2 130/100 kA at 500 V/690 V C                               | 2000 A                                          | 3WA1220                        | 6                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          |                   | 4      | 5                                        | 6                                        |                                        |                                        | 0 | A | A | 0 | Z... |
|                                                             | 2500 A                                          | 3WA1225                        | 6                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          |                   | 4      | 5                                        | 6                                        |                                        |                                        | 0 | A | A | 0 | Z... |
|                                                             | 3200 A                                          | 3WA1232                        | 6                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          |                   | 4      | 5                                        | 6                                        |                                        |                                        | 0 | A | A | 0 | Z... |
| For higher voltages and in the 690-V IT system              |                                                 |                                |                                          |                      |                                    |                     |                             |                                       |                  |                          |                                      |                     |          |            |                   |        |                                          |                                          |                                        |                                        |   |   |   |   |      |
| 2 85/50/50/70 kA at 690 V/ 690-V IT system/ 1000 V/1150 V E | 2000 A                                          | 3WA1220                        | 8                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          | 3                 | 4      | 5                                        | 6                                        | 7                                      | 8                                      | 0 | A | A | 0 | Z... |
|                                                             | 2500 A                                          | 3WA1225                        | 8                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          | 3                 | 4      | 5                                        | 6                                        | 7                                      | 8                                      | 0 | A | A | 0 | Z... |
|                                                             | 3200 A                                          | 3WA1232                        | 8                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          | 3                 | 4      | 5                                        | 6                                        | 7                                      | 8                                      | 0 | A | A | 0 | Z... |
|                                                             | 3600 A                                          | 3WA1236                        | 8                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   |          |            |                   | 4      |                                          |                                          |                                        |                                        | 0 | A | A | 0 | Z... |
|                                                             | 4000 A                                          | 3WA1240                        | 8                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          |                   |        | 5                                        | 6                                        |                                        |                                        | 0 | A | A | 0 | Z... |

Reduction of the rated current up to  $I_n = 250$  A possible with option plug (Z = B02 – B20)

Position signaling switch (PSS) for circuit breakers without ready4COM:

3 × connected position, 2 × test position, 1 × disconnected position

Position signaling switch (PSS) for circuit breakers with ready4COM:

1 × connected position, 1 × test position, 1 × disconnected position + message through communications interface for disconnected position and for “not available”.

Protective and metering functions for circuit breakers, from page 1/34 onwards

Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards

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# Structure of the article numbers



## Basic configuration for AC circuit breakers, withdrawable, size 3

The structure shown below is intended as an overview of each position and its meaning.

For a complete and valid configuration of your air circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

| Size                                                                                                                                   | Short-circuit breaking capacity $I_{cu}/I_{cs}$ | Max. rated current $I_{nmax}$ | Short-circuit breaking capacity $I_{cu}$ | Application packages | ETU and basic protective functions | 3-pole, without PSS | 4-pole, N left, without PSS | 4-pole, right, without PSS <b>new</b> | 3-pole, with PSS | 4-pole, N left, with PSS | 4-pole, N right, with PSS <b>new</b> | Without guide frame | Vertical | Horizontal | Front double hole | Flange | Vertical on top/horizontal at the bottom | Horizontal on top/vertical at the bottom | Flange on top/horizontal at the bottom | Horizontal on top/flange at the bottom | Connection withdrawable |   |   |   |      |
|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-------------------------------|------------------------------------------|----------------------|------------------------------------|---------------------|-----------------------------|---------------------------------------|------------------|--------------------------|--------------------------------------|---------------------|----------|------------|-------------------|--------|------------------------------------------|------------------------------------------|----------------------------------------|----------------------------------------|-------------------------|---|---|---|------|
| Stelle                                                                                                                                 | 1–7                                             | 8                             | 9                                        | 10                   | 11                                 | 12                  | 13                          | 14                                    | 15               | 16                       | 17                                   |                     |          |            |                   |        |                                          |                                          |                                        |                                        |                         |   |   |   |      |
|                                                                                                                                        |                                                 |                               |                                          |                      |                                    |                     |                             |                                       |                  |                          |                                      |                     |          |            |                   |        |                                          |                                          |                                        |                                        |                         |   |   |   |      |
| Up to 690 V                                                                                                                            |                                                 |                               |                                          |                      |                                    |                     |                             |                                       |                  |                          |                                      |                     |          |            |                   |        |                                          |                                          |                                        |                                        |                         |   |   |   |      |
| 3 100/85 kA at 500 V/690 V H                                                                                                           | 4000 A                                          | 3WA1340                       | 5                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          | 3                 | 4      | 5                                        | 6                                        | 7                                      | 8                                      | 0                       | A | A | 0 | Z... |
|                                                                                                                                        | 5000 A                                          | 3WA1350                       | 5                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          |                   |        | 5                                        | 6                                        |                                        |                                        | 0                       | A | A | 0 | Z... |
|                                                                                                                                        | 6300 A                                          | 3WA1363                       | 5                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        |            |                   |        |                                          |                                          |                                        |                                        | 0                       | A | A | 0 | Z... |
| 3 3-pole: 150/150 kA at 500 V/690 V<br>4-pole: 130/130 kA at 500 V/690 V C                                                             | 4000 A                                          | 3WA1340                       | 6                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          |                   | 4      | 5                                        | 6                                        |                                        |                                        | 0                       | A | A | 0 | Z... |
|                                                                                                                                        | 5000 A                                          | 3WA1350                       | 6                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          |                   |        | 5                                        | 6                                        |                                        |                                        | 0                       | A | A | 0 | Z... |
|                                                                                                                                        | 6300 A                                          | 3WA1363                       | 6                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        |            |                   |        |                                          |                                          |                                        |                                        | 0                       | A | A | 0 | Z... |
| For higher voltages and in the 690-V IT system                                                                                         |                                                 |                               |                                          |                      |                                    |                     |                             |                                       |                  |                          |                                      |                     |          |            |                   |        |                                          |                                          |                                        |                                        |                         |   |   |   |      |
| 3 3-pole: 150/50/125/70 kA at 690 V/690-V IT system/1000 V/1150 V<br>4-pole: 130/50/125/70 kA at 690 V/690-V IT system/1000 V/1150 V E | 4000 A                                          | 3WA1340                       | 8                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          |                   | 4      | 5                                        | 6                                        |                                        |                                        | 0                       | A | A | 0 | Z... |
|                                                                                                                                        | 5000 A                                          | 3WA1350                       | 8                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        | 2          |                   |        | 5                                        | 6                                        |                                        |                                        | 0                       | A | A | 0 | Z... |
|                                                                                                                                        | 6300 A                                          | 3WA1363                       | 8                                        | A                    | E                                  | 3                   | 4                           | 5                                     | 6                | 7                        | 8                                    | 0                   | 1        |            |                   |        |                                          |                                          |                                        |                                        | 0                       | A | A | 0 | Z... |

Reduction of the rated current up to  $I_n = 250$  A possible with option plug (Z = B02 – B20)

Position signaling switch (PSS) for circuit breakers without ready4COM:

3 × connected position, 2 × test position, 1 × disconnected position

Position signaling switch (PSS) for circuit breakers with ready4COM:

1 × connected position, 1 × test position, 1 × disconnected position + message through communications interface for disconnected position and for "not available".

Protective and metering functions for circuit breakers, from page 1/34 onwards

Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards

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Quick selection guide, pages 1/4 and 1/8

# Structure of the article numbers



## Basic configuration for AC non-automatic circuit breakers, fixed-mounted, size 1

The structure shown below is intended as an overview of each position and its meaning.

For a complete and valid configuration of your air circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

| Size                                           | Short-circuit breaking capacity $I_{cu}/I_{cs}$         | Max. rated current $I_{n\max}$ | Rated conditional short-circuit current $I_{cc}$ | Communication capability | AC non-automatic circuit breakers | 3-pole | 4-pole, N left | 4-pole, N right <b>new</b> | Vertical | Horizontal | Front double hole | Vertical on top/horizontal at the bottom | Horizontal on top/vertical at the bottom | Connection fixed-mounted |    |   |   |   |      |
|------------------------------------------------|---------------------------------------------------------|--------------------------------|--------------------------------------------------|--------------------------|-----------------------------------|--------|----------------|----------------------------|----------|------------|-------------------|------------------------------------------|------------------------------------------|--------------------------|----|---|---|---|------|
| Digit                                          |                                                         |                                | 1–7                                              | 8                        | 9                                 | 10     | 11             |                            | 12       |            | 13                | 14                                       | 15                                       | 16                       | 17 |   |   |   |      |
|                                                |                                                         |                                |                                                  | –                        |                                   |        |                |                            |          |            | –                 |                                          |                                          |                          | –  |   |   |   |      |
| Up to 690 V                                    |                                                         |                                |                                                  |                          |                                   |        |                |                            |          |            |                   |                                          |                                          |                          |    |   |   |   |      |
| 1                                              | 55/42 kA<br>at 500 V/690 V<br>N                         | 630 A                          | 3WA1106                                          | 2                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 800 A                          | 3WA1108                                          | 2                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 1000 A                         | 3WA1110                                          | 2                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 1250 A                         | 3WA1112                                          | 2                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 1600 A                         | 3WA1116                                          | 2                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 2000 A                         | 3WA1120                                          | 2                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 2500 A                         | 3WA1125                                          | 2                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 |                                          | 5                                        | 6                        | 0  | A | A | 0 | Z... |
| 1                                              | 66/50 kA<br>at 500 V/690 V<br>S                         | 630 A                          | 3WA1106                                          | 3                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 800 A                          | 3WA1108                                          | 3                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 1000 A                         | 3WA1110                                          | 3                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 1250 A                         | 3WA1112                                          | 3                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 1600 A                         | 3WA1116                                          | 3                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 2000 A                         | 3WA1120                                          | 3                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 2500 A                         | 3WA1125                                          | 3                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 |                                          | 5                                        | 6                        | 0  | A | A | 0 | Z... |
| 1                                              | 85/66 kA<br>at 500 V/690 V<br>M                         | 630 A                          | 3WA1106                                          | 4                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 800 A                          | 3WA1108                                          | 4                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 1000 A                         | 3WA1110                                          | 4                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 1250 A                         | 3WA1112                                          | 4                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 1600 A                         | 3WA1116                                          | 4                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 2000 A                         | 3WA1120                                          | 4                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 2500 A                         | 3WA1125                                          | 4                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 |                                          | 5                                        | 6                        | 0  | A | A | 0 | Z... |
| For higher voltages and in the 690-V IT system |                                                         |                                |                                                  |                          |                                   |        |                |                            |          |            |                   |                                          |                                          |                          |    |   |   |   |      |
| 1                                              | 85/50/50 kA<br>at 690 V/690-V IT system/<br>1000 V<br>E | 630 A                          | 3WA1106                                          | 8                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 800 A                          | 3WA1108                                          | 8                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 1000 A                         | 3WA1110                                          | 8                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 1250 A                         | 3WA1112                                          | 8                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 1600 A                         | 3WA1116                                          | 8                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 2000 A                         | 3WA1120                                          | 8                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 | 3                                        | 5                                        | 6                        | 0  | A | A | 0 | Z... |
|                                                |                                                         | 2500 A                         | 3WA1125                                          | 8                        | A                                 | A      | 0              | 1                          | 2        | 1          | 2                 |                                          | 5                                        | 6                        | 0  | A | A | 0 | Z... |

Non-automatic circuit breakers with and without ready4COM, from page 1/35 onwards  
Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards



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**Quick selection guide, pages 1/4 and 1/8**

# Structure of the article numbers



## Basic configuration for AC non-automatic circuit breakers, fixed-mounted, size 2

The structure shown below is intended as an overview of each position and its meaning.

For a complete and valid configuration of your air circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

| Size                                           | Short-circuit breaking capacity $I_{cu}/I_{cs}$          | Max. rated current $I_n \text{ max}$ | Rated conditional short-circuit current $I_{cc}$ |   |   | Communication capability | AC non-automatic circuit breakers | Connection fixed-mounted |    |   | Vertical |   |    | Horizontal |    |    | Front double hole |   |      | Vertical on top/horizontal at the bottom |  |  | Horizontal on top/vertical at the bottom |    |  |
|------------------------------------------------|----------------------------------------------------------|--------------------------------------|--------------------------------------------------|---|---|--------------------------|-----------------------------------|--------------------------|----|---|----------|---|----|------------|----|----|-------------------|---|------|------------------------------------------|--|--|------------------------------------------|----|--|
| Digit                                          |                                                          |                                      | 1–7                                              | 8 | 9 | 10                       |                                   |                          | 11 |   | 12       |   | 13 | 14         | 15 | 16 |                   |   |      |                                          |  |  |                                          | 17 |  |
| Up to 690 V                                    |                                                          |                                      |                                                  |   |   |                          |                                   |                          |    |   |          |   |    |            |    |    |                   |   |      |                                          |  |  |                                          |    |  |
| 2                                              | 66/50 kA at 500 V/690 V S                                | 2000 A                               | 3WA1220                                          | 3 | A | A                        | 0                                 | 1                        | 2  | 1 | 2        | 3 | 5  | 6          | 0  | A  | A                 | 0 | Z... |                                          |  |  |                                          |    |  |
|                                                |                                                          | 2500 A                               | 3WA1225                                          | 3 | A | A                        | 0                                 | 1                        | 2  | 1 | 2        | 3 | 5  | 6          | 0  | A  | A                 | 0 | Z... |                                          |  |  |                                          |    |  |
|                                                |                                                          | 3200 A                               | 3WA1232                                          | 3 | A | A                        | 0                                 | 1                        | 2  | 1 | 2        | 3 | 5  | 6          | 0  | A  | A                 | 0 | Z... |                                          |  |  |                                          |    |  |
|                                                |                                                          | 4000 A                               | 3WA1240                                          | 3 | A | A                        | 0                                 | 1                        | 2  | 1 | 2        |   | 5  | 6          | 0  | A  | A                 | 0 | Z... |                                          |  |  |                                          |    |  |
| 2                                              | 85/66 kA at 500 V/690 V M                                | 2000 A                               | 3WA1220                                          | 4 | A | A                        | 0                                 | 1                        | 2  | 1 | 2        | 3 | 5  | 6          | 0  | A  | A                 | 0 | Z... |                                          |  |  |                                          |    |  |
|                                                |                                                          | 2500 A                               | 3WA1225                                          | 4 | A | A                        | 0                                 | 1                        | 2  | 1 | 2        | 3 | 5  | 6          | 0  | A  | A                 | 0 | Z... |                                          |  |  |                                          |    |  |
|                                                |                                                          | 3200 A                               | 3WA1232                                          | 4 | A | A                        | 0                                 | 1                        | 2  | 1 | 2        | 3 | 5  | 6          | 0  | A  | A                 | 0 | Z... |                                          |  |  |                                          |    |  |
|                                                |                                                          | 4000 A                               | 3WA1240                                          | 4 | A | A                        | 0                                 | 1                        | 2  | 1 | 2        |   | 5  | 6          | 0  | A  | A                 | 0 | Z... |                                          |  |  |                                          |    |  |
| 2                                              | 100/85 kA at 500 V/690 V H                               | 2000 A                               | 3WA1220                                          | 5 | A | A                        | 0                                 | 1                        | 2  | 1 | 2        | 3 | 5  | 6          | 0  | A  | A                 | 0 | Z... |                                          |  |  |                                          |    |  |
|                                                |                                                          | 2500 A                               | 3WA1225                                          | 5 | A | A                        | 0                                 | 1                        | 2  | 1 | 2        | 3 | 5  | 6          | 0  | A  | A                 | 0 | Z... |                                          |  |  |                                          |    |  |
|                                                |                                                          | 3200 A                               | 3WA1232                                          | 5 | A | A                        | 0                                 | 1                        | 2  | 1 | 2        | 3 | 5  | 6          | 0  | A  | A                 | 0 | Z... |                                          |  |  |                                          |    |  |
|                                                |                                                          | 4000 A                               | 3WA1240                                          | 5 | A | A                        | 0                                 | 1                        | 2  | 1 | 2        |   | 5  | 6          | 0  | A  | A                 | 0 | Z... |                                          |  |  |                                          |    |  |
| 2                                              | 130/100 kA at 500 V/690 V C                              | 2000 A                               | 3WA1220                                          | 6 | A | A                        | 0                                 | 1                        | 2  | 1 | 2        |   | 5  | 6          | 0  | A  | A                 | 0 | Z... |                                          |  |  |                                          |    |  |
|                                                |                                                          | 2500 A                               | 3WA1225                                          | 6 | A | A                        | 0                                 | 1                        | 2  | 1 | 2        |   | 5  | 6          | 0  | A  | A                 | 0 | Z... |                                          |  |  |                                          |    |  |
|                                                |                                                          | 3200 A                               | 3WA1232                                          | 6 | A | A                        | 0                                 | 1                        | 2  | 1 | 2        |   | 5  | 6          | 0  | A  | A                 | 0 | Z... |                                          |  |  |                                          |    |  |
| For higher voltages and in the 690-V IT system |                                                          |                                      |                                                  |   |   |                          |                                   |                          |    |   |          |   |    |            |    |    |                   |   |      |                                          |  |  |                                          |    |  |
| 2                                              | 85/50/50/70 kA at 690 V/690-V IT system/ 1000 V/1150 V E | 2000 A                               | 3WA1220                                          | 8 | A | A                        | 0                                 | 1                        | 2  | 1 | 2        | 3 | 5  | 6          | 0  | A  | A                 | 0 | Z... |                                          |  |  |                                          |    |  |
|                                                |                                                          | 2500 A                               | 3WA1225                                          | 8 | A | A                        | 0                                 | 1                        | 2  | 1 | 2        | 3 | 5  | 6          | 0  | A  | A                 | 0 | Z... |                                          |  |  |                                          |    |  |
|                                                |                                                          | 3200 A                               | 3WA1232                                          | 8 | A | A                        | 0                                 | 1                        | 2  | 1 | 2        | 3 | 5  | 6          | 0  | A  | A                 | 0 | Z... |                                          |  |  |                                          |    |  |
|                                                |                                                          | 4000 A                               | 3WA1240                                          | 8 | A | A                        | 0                                 | 1                        | 2  | 1 | 2        |   | 5  | 6          | 0  | A  | A                 | 0 | Z... |                                          |  |  |                                          |    |  |

Non-automatic circuit breakers with and without ready4COM, from page 1/35 onwards  
Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards

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**Quick selection guide, pages 1/4 and 1/8**

# Structure of the article numbers



## Basic configuration for AC non-automatic circuit breakers, fixed-mounted, size 3

The structure shown below is intended as an overview of each position and its meaning.

For a complete and valid configuration of your air circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

| Size                                           |                                                                                                                                                       |        | Short-circuit breaking capacity $I_{cu}/I_{cs}$ | Max. rated current $I_n \text{ max}$ | Rated conditional short-circuit current $I_{cc}$ | Communication capability | AC non-automatic circuit breakers | Connection fixed-mounted |                |                            |          |            |                   |                                          |                                          |    |    |   |      |
|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------------------------------------------------|--------------------------------------|--------------------------------------------------|--------------------------|-----------------------------------|--------------------------|----------------|----------------------------|----------|------------|-------------------|------------------------------------------|------------------------------------------|----|----|---|------|
| Digit                                          | 1–7                                                                                                                                                   |        |                                                 | 8                                    | 9                                                | 10                       | 11                                |                          |                | 12                         |          |            | 13                | 14                                       | 15                                       | 16 | 17 |   |      |
|                                                |                                                                                                                                                       |        |                                                 | –                                    |                                                  |                          |                                   | 3-pole                   | 4-pole, N left | 4-pole, N right <b>new</b> | Vertical | Horizontal | Front double hole | Vertical on top/horizontal at the bottom | Horizontal on top/vertical at the bottom |    |    |   |      |
| Up to 690 V                                    |                                                                                                                                                       |        |                                                 |                                      |                                                  |                          |                                   |                          |                |                            |          |            |                   |                                          |                                          |    |    |   |      |
| 3                                              | 100/85 kA<br>at 500 V/690 V<br>H                                                                                                                      | 4000 A | 3WA1340                                         | 5                                    | A                                                | A                        | 0                                 | 1                        | 2              | 1                          | 2        | 3          | 5                 | 6                                        | 0                                        | A  | A  | 0 | Z... |
|                                                |                                                                                                                                                       | 5000 A | 3WA1350                                         | 5                                    | A                                                | A                        | 0                                 | 1                        | 2              | 1                          | 2        |            | 5                 | 6                                        | 0                                        | A  | A  | 0 | Z... |
|                                                |                                                                                                                                                       | 6300 A | 3WA1363                                         | 5                                    | A                                                | A                        | 0                                 | 1                        | 2              | 1                          |          |            |                   |                                          | 0                                        | A  | A  | 0 | Z... |
| 3                                              | 3-pole: 130/130 kA<br>at 500 V/690 V<br>4-pole: 120/120 kA<br>at 500 V/690 V<br>C                                                                     | 4000 A | 3WA1340                                         | 6                                    | A                                                | A                        | 0                                 | 1                        | 2              | 1                          | 2        |            | 5                 | 6                                        | 0                                        | A  | A  | 0 | Z... |
|                                                |                                                                                                                                                       | 5000 A | 3WA1350                                         | 6                                    | A                                                | A                        | 0                                 | 1                        | 2              | 1                          | 2        |            | 5                 | 6                                        | 0                                        | A  | A  | 0 | Z... |
|                                                |                                                                                                                                                       | 6300 A | 3WA1363                                         | 6                                    | A                                                | A                        | 0                                 | 1                        | 2              | 1                          |          |            |                   |                                          | 0                                        | A  | A  | 0 | Z... |
| For higher voltages and in the 690-V IT system |                                                                                                                                                       |        |                                                 |                                      |                                                  |                          |                                   |                          |                |                            |          |            |                   |                                          |                                          |    |    |   |      |
| 3                                              | 3-pole: 150/50/125/70 kA<br>at 690 V/690-V IT system/<br>1000 V/1150 V<br>4-pole: 130/50/125/70 kA<br>at 690 V/690-V IT system/<br>1000 V/1150 V<br>E | 4000 A | 3WA1340                                         | 8                                    | A                                                | A                        | 0                                 | 1                        | 2              | 1                          | 2        |            | 5                 | 6                                        | 0                                        | A  | A  | 0 | Z... |
|                                                |                                                                                                                                                       | 5000 A | 3WA1350                                         | 8                                    | A                                                | A                        | 0                                 | 1                        | 2              | 1                          | 2        |            | 5                 | 6                                        | 0                                        | A  | A  | 0 | Z... |
|                                                |                                                                                                                                                       | 6300 A | 3WA1363                                         | 8                                    | A                                                | A                        | 0                                 | 1                        | 2              | 1                          |          |            |                   |                                          | 0                                        | A  | A  | 0 | Z... |

Non-automatic circuit breakers with and without ready4COM, from page 1/35 onwards  
Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards

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**Quick selection guide, pages 1/4 and 1/8**

# Structure of the article numbers



## Basic configuration for AC non-automatic circuit breakers, withdrawable, size 1

The structure shown below is intended as an overview of each position and its meaning.

For a complete and valid configuration of your air circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

| Size                                           | Short-circuit breaking capacity $I_{cu}/I_{cs}$                | Max. rated current $I_{n\max}$ | Short-circuit breaking capacity $I_{cu}$ | Communication capability | AC non-automatic circuit breakers | 3-pole, without PSS | 4-pole, N left, without PSS | 4-pole, right, without PSS <b>new</b> | 3-pole, with PSS | 4-pole, N left, with PSS | 4-pole, N right, with PSS <b>new</b> | Without guide frame     | Vertical | Horizontal | Front double hole | Flange | Vertical on top/horizontal at the bottom | Horizontal on top/vertical at the bottom | Flange on top/horizontal at the bottom | Horizontal on top/flange at the bottom |   |
|------------------------------------------------|----------------------------------------------------------------|--------------------------------|------------------------------------------|--------------------------|-----------------------------------|---------------------|-----------------------------|---------------------------------------|------------------|--------------------------|--------------------------------------|-------------------------|----------|------------|-------------------|--------|------------------------------------------|------------------------------------------|----------------------------------------|----------------------------------------|---|
| Digit                                          | 1–7                                                            | 8                              | 9                                        | 10                       | 11                                | 12                  | 13                          | 14                                    | 15               | 16                       | 17                                   | Connection withdrawable |          |            |                   |        |                                          |                                          |                                        |                                        |   |
| Up to 690 V                                    |                                                                |                                |                                          |                          |                                   |                     |                             |                                       |                  |                          |                                      |                         |          |            |                   |        |                                          |                                          |                                        |                                        |   |
| 1                                              | 55/42 kA<br>at<br>500 V/690 V<br>N                             | 630 A                          | 3WA1106                                  | 2                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 800 A                          | 3WA1108                                  | 2                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 1000 A                         | 3WA1110                                  | 2                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 1250 A                         | 3WA1112                                  | 2                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 1600 A                         | 3WA1116                                  | 2                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 2000 A                         | 3WA1120                                  | 2                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 2500 A                         | 3WA1125                                  | 2                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          |                   |        |                                          |                                          |                                        |                                        |   |
| 1                                              | 66/50 kA<br>at<br>500 V/690 V<br>S                             | 630 A                          | 3WA1106                                  | 3                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 800 A                          | 3WA1108                                  | 3                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 1000 A                         | 3WA1110                                  | 3                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 1250 A                         | 3WA1112                                  | 3                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 1600 A                         | 3WA1116                                  | 3                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 2000 A                         | 3WA1120                                  | 3                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 2500 A                         | 3WA1125                                  | 3                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          |                   |        |                                          |                                          |                                        |                                        |   |
| 1                                              | 85/66 kA<br>at<br>500 V/690 V<br>M                             | 630 A                          | 3WA1106                                  | 4                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 800 A                          | 3WA1108                                  | 4                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 1000 A                         | 3WA1110                                  | 4                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 1250 A                         | 3WA1112                                  | 4                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 1600 A                         | 3WA1116                                  | 4                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 2000 A                         | 3WA1120                                  | 4                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 2500 A                         | 3WA1125                                  | 4                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          |                   |        |                                          |                                          |                                        |                                        |   |
| For higher voltages and in the 690-V IT system |                                                                |                                |                                          |                          |                                   |                     |                             |                                       |                  |                          |                                      |                         |          |            |                   |        |                                          |                                          |                                        |                                        |   |
| 1                                              | 85/50/50 kA<br>at 690 V/<br>690-V IT<br>system/<br>1000 V<br>E | 630 A                          | 3WA1106                                  | 8                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 800 A                          | 3WA1108                                  | 8                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 1000 A                         | 3WA1110                                  | 8                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 1250 A                         | 3WA1112                                  | 8                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 1600 A                         | 3WA1116                                  | 8                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 2000 A                         | 3WA1120                                  | 8                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          | 2                 | 3      | 4                                        | 5                                        | 6                                      | 7                                      | 8 |
|                                                |                                                                | 2500 A                         | 3WA1125                                  | 8                        | A                                 | A                   | 3                           | 4                                     | 5                | 6                        | 7                                    | 8                       | 0        | 1          |                   |        |                                          |                                          |                                        |                                        |   |

Position signaling switch (PSS) for circuit breakers without ready4COM:

3 × connected position, 2 × test position, 1 × disconnected position

Position signaling switch (PSS) for circuit breakers with ready4COM:

1 × connected position, 1 × test position, 1 × disconnected position + message through communications interface for disconnected position and for "not available".

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Prices in €A 4x4 grid of squares. The grid is composed of 16 squares arranged in 4 rows and 4 columns. The colors of the squares follow a repeating 2x2 pattern: the top-left square is light gray, the top-right is dark gray, the bottom-left is white, and the bottom-right is medium gray. This pattern repeats across the entire 4x4 grid.

**Quick selection guide, pages 1/4 and 1/8**

# Structure of the article numbers



## Basic configuration for AC non-automatic circuit breakers, withdrawable, size 2

The structure shown below is intended as an overview of each position and its meaning.

For a complete and valid configuration of your air circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

| Size                                                  | Short-circuit breaking capacity $I_{cu}/I_{cs}$           | Max. rated current $I_n$ max | Short-circuit breaking capacity $I_{cu}$ | Communication capability | AC non-automatic circuit breakers | Connection withdrawable |          |            |                   |        |                                          |                                          |                                        |                                        |   |   |   |   |   |   |   |   |   |   |   |      |
|-------------------------------------------------------|-----------------------------------------------------------|------------------------------|------------------------------------------|--------------------------|-----------------------------------|-------------------------|----------|------------|-------------------|--------|------------------------------------------|------------------------------------------|----------------------------------------|----------------------------------------|---|---|---|---|---|---|---|---|---|---|---|------|
|                                                       |                                                           |                              |                                          |                          |                                   | Without guide frame     | Vertical | Horizontal | Front double hole | Flange | Vertical on top/horizontal at the bottom | Horizontal on top/vertical at the bottom | Flange on top/horizontal at the bottom | Horizontal on top/flange at the bottom |   |   |   |   |   |   |   |   |   |   |   |      |
| Digit                                                 | 1–7                                                       | 8                            | 9                                        | 10                       | 11                                | 12                      | 13       | 14         | 15                | 16     | 17                                       |                                          |                                        |                                        |   |   |   |   |   |   |   |   |   |   |   |      |
|                                                       |                                                           |                              |                                          |                          |                                   |                         |          |            |                   |        |                                          |                                          |                                        |                                        |   |   |   |   |   |   |   |   |   |   |   |      |
| <b>Up to 690 V</b>                                    |                                                           |                              |                                          |                          |                                   |                         |          |            |                   |        |                                          |                                          |                                        |                                        |   |   |   |   |   |   |   |   |   |   |   |      |
| 2                                                     | 66/50 kA at 500 V/690 V S                                 | 2000 A                       | 3WA1220                                  | 3                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      | 1                                      | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 | A | A | 0 | Z... |
|                                                       |                                                           | 2500 A                       | 3WA1225                                  | 3                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      | 1                                      | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 | A | A | 0 | Z... |
|                                                       |                                                           | 3200 A                       | 3WA1232                                  | 3                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      | 1                                      | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 | A | A | 0 | Z... |
|                                                       |                                                           | 3600 A                       | 3WA1236                                  | 3                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      |                                        |   |   | 4 |   |   |   |   | 0 | A | A | 0 | Z... |
|                                                       |                                                           | 4000 A                       | 3WA1240                                  | 3                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      | 1                                      | 2 |   |   | 5 | 6 |   |   | 0 | A | A | 0 | Z... |
| 2                                                     | 85/66 kA at 500 V/690 V M                                 | 2000 A                       | 3WA1220                                  | 4                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      | 1                                      | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 | A | A | 0 | Z... |
|                                                       |                                                           | 2500 A                       | 3WA1225                                  | 4                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      | 1                                      | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 | A | A | 0 | Z... |
|                                                       |                                                           | 3200 A                       | 3WA1232                                  | 4                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      | 1                                      | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 | A | A | 0 | Z... |
|                                                       |                                                           | 3600 A                       | 3WA1236                                  | 4                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      |                                        |   |   | 4 |   |   |   |   | 0 | A | A | 0 | Z... |
|                                                       |                                                           | 4000 A                       | 3WA1240                                  | 4                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      | 1                                      | 2 |   |   | 5 | 6 |   |   | 0 | A | A | 0 | Z... |
| 2                                                     | 100/85 kA at 500 V/690 V H                                | 2000 A                       | 3WA1220                                  | 5                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      | 1                                      | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 | A | A | 0 | Z... |
|                                                       |                                                           | 2500 A                       | 3WA1225                                  | 5                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      | 1                                      | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 | A | A | 0 | Z... |
|                                                       |                                                           | 3200 A                       | 3WA1232                                  | 5                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      | 1                                      | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 | A | A | 0 | Z... |
|                                                       |                                                           | 3600 A                       | 3WA1236                                  | 5                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      |                                        |   |   | 4 |   |   |   |   | 0 | A | A | 0 | Z... |
|                                                       |                                                           | 4000 A                       | 3WA1240                                  | 5                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      | 1                                      | 2 |   |   | 5 | 6 |   |   | 0 | A | A | 0 | Z... |
| 2                                                     | 130/100 kA at 500 V/690 V C                               | 2000 A                       | 3WA1220                                  | 6                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      | 1                                      | 2 |   | 4 | 5 | 6 |   |   | 0 | A | A | 0 | Z... |
|                                                       |                                                           | 2500 A                       | 3WA1225                                  | 6                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      | 1                                      | 2 |   | 4 | 5 | 6 |   |   | 0 | A | A | 0 | Z... |
|                                                       |                                                           | 3200 A                       | 3WA1232                                  | 6                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      | 1                                      | 2 |   | 4 | 5 | 6 |   |   | 0 | A | A | 0 | Z... |
| <b>For higher voltages and in the 690-V IT system</b> |                                                           |                              |                                          |                          |                                   |                         |          |            |                   |        |                                          |                                          |                                        |                                        |   |   |   |   |   |   |   |   |   |   |   |      |
| 2                                                     | 85/50/50/70 kA at 690 V/ 690-V IT system/ 1000 V/1150 V E | 2000 A                       | 3WA1220                                  | 8                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      | 1                                      | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 | A | A | 0 | Z... |
|                                                       |                                                           | 2500 A                       | 3WA1225                                  | 8                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      | 1                                      | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 | A | A | 0 | Z... |
|                                                       |                                                           | 3200 A                       | 3WA1232                                  | 8                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      | 1                                      | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 | A | A | 0 | Z... |
|                                                       |                                                           | 3600 A                       | 3WA1236                                  | 8                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      |                                        |   |   | 4 |   |   |   |   | 0 | A | A | 0 | Z... |
|                                                       |                                                           | 4000 A                       | 3WA1240                                  | 8                        | A                                 | A                       | 3        | 4          | 5                 | 6      | 7                                        | 8                                        | 0                                      | 1                                      | 2 |   |   | 5 | 6 |   |   | 0 | A | A | 0 | Z... |

Position signaling switch (PSS) for circuit breakers without ready4COM:

3 × connected position, 2 × test position, 1 × disconnected position

Position signaling switch (PSS) for circuit breakers with ready4COM:

1 × connected position, 1 × test position, 1 × disconnected position + message through communications interface for disconnected position and for "not available".



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[illegible]

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# Structure of the article numbers



## Basic configuration for AC non-automatic circuit breakers, withdrawable, size 3

The structure shown below is intended as an overview of each position and its meaning.

For a complete and valid configuration of your air circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

| Size                                           | Short-circuit breaking capacity $I_{cu}/I_{cs}$                   | Max. rated current $I_n$ max | Short-circuit breaking capacity $I_{cu}$ | Communication capability | AC non-automatic circuit breakers | Connection withdrawable |   |   |   |   |    |   |   |   |   |   |    |    |    |    |    |   |   |   |   |      |
|------------------------------------------------|-------------------------------------------------------------------|------------------------------|------------------------------------------|--------------------------|-----------------------------------|-------------------------|---|---|---|---|----|---|---|---|---|---|----|----|----|----|----|---|---|---|---|------|
| Digit                                          | 1–7                                                               | 8                            | 9                                        | 10                       | 11                                |                         |   |   |   |   | 12 |   |   |   |   |   | 13 | 14 | 15 | 16 | 17 |   |   |   |   |      |
|                                                |                                                                   |                              |                                          |                          |                                   |                         |   |   |   |   |    |   |   |   |   |   |    |    |    |    |    |   |   |   |   |      |
| Up to 690 V                                    |                                                                   |                              |                                          |                          |                                   |                         |   |   |   |   |    |   |   |   |   |   |    |    |    |    |    |   |   |   |   |      |
| 3                                              | 100/85 kA                                                         | 4000 A                       | 3WA1340                                  | 5                        | A                                 | A                       | 3 | 4 | 5 | 6 | 7  | 8 | 0 | 1 | 2 | 3 | 4  | 5  | 6  | 7  | 8  | 0 | A | A | 0 | Z... |
|                                                | at 500 V/690 V                                                    | 5000 A                       | 3WA1350                                  | 5                        | A                                 | A                       | 3 | 4 | 5 | 6 | 7  | 8 | 0 | 1 | 2 |   |    | 5  | 6  |    |    | 0 | A | A | 0 | Z... |
|                                                | H                                                                 | 6300 A                       | 3WA1363                                  | 5                        | A                                 | A                       | 3 | 4 | 5 | 6 | 7  | 8 | 0 | 1 |   |   |    |    |    |    |    | 0 | A | A | 0 | Z... |
| 3                                              | 3-pole: 130/130 kA                                                | 4000 A                       | 3WA1340                                  | 6                        | A                                 | A                       | 3 | 4 | 5 | 6 | 7  | 8 | 0 | 1 | 2 |   | 4  | 5  | 6  |    |    | 0 | A | A | 0 | Z... |
|                                                | at 500 V/690 V                                                    | 5000 A                       | 3WA1350                                  | 6                        | A                                 | A                       | 3 | 4 | 5 | 6 | 7  | 8 | 0 | 1 | 2 |   |    | 5  | 6  |    |    | 0 | A | A | 0 | Z... |
|                                                | 4-pole: 120/120 kA                                                | 6300 A                       | 3WA1363                                  | 6                        | A                                 | A                       | 3 | 4 | 5 | 6 | 7  | 8 | 0 | 1 |   |   |    |    |    |    |    | 0 | A | A | 0 | Z... |
| For higher voltages and in the 690-V IT system |                                                                   |                              |                                          |                          |                                   |                         |   |   |   |   |    |   |   |   |   |   |    |    |    |    |    |   |   |   |   |      |
| 3                                              | 3-pole: 150/50/125/70 kA at 690 V/ 690-V IT system/ 1000 V/1150 V | 4000 A                       | 3WA1340                                  | 8                        | A                                 | A                       | 3 | 4 | 5 | 6 | 7  | 8 | 0 | 1 | 2 |   | 4  | 5  | 6  |    |    | 0 | A | A | 0 | Z... |
|                                                | 4-pole: 130/50/125/70 kA at 690 V/ 690-V IT system/ 1000 V/1150 V | 5000 A                       | 3WA1350                                  | 8                        | A                                 | A                       | 3 | 4 | 5 | 6 | 7  | 8 | 0 | 1 | 2 |   |    | 5  | 6  |    |    | 0 | A | A | 0 | Z... |
|                                                | E                                                                 | 6300 A                       | 3WA1363                                  | 8                        | A                                 | A                       | 3 | 4 | 5 | 6 | 7  | 8 | 0 | 1 |   |   |    |    |    |    |    | 0 | A | A | 0 | Z... |

Position signaling switch (PSS) for circuit breakers without ready4COM:

3 × connected position, 2 × test position, 1 × disconnected position

Position signaling switch (PSS) for circuit breakers with ready4COM:

1 × connected position, 1 × test position, 1 × disconnected position + message through communications interface for disconnected position and for "not available".

Non-automatic circuit breakers with and without ready4COM, from page 1/35 onwards

Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards

1

**Quick selection guide, pages 1/4 and 1/8**

# Structure of the article numbers



## Basic configuration for DC non-automatic circuit breakers, fixed-mounted, size 2

The structure shown below is intended as an overview of each position and its meaning.  
For a complete and valid configuration of your air circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

| Baugröße<br>Bedingter Bemessungskurzschlussstrom $I_{cc}$ |                                                       |        | Max. rated current $I_{n\ max}$ |   |   | Rated conditional short-circuit current $I_{cc}$<br>Communication capability<br>DC non-automatic circuit breakers |    |    | 3-pole<br>4-pole |    | Connection fixed-mounted<br>Vertical<br>Horizontal<br>Front double hole<br>Vertical on top/horizontal at the bottom<br>Horizontal on top/vertical at the Bottom |    |    |   |   |   |   |      |
|-----------------------------------------------------------|-------------------------------------------------------|--------|---------------------------------|---|---|-------------------------------------------------------------------------------------------------------------------|----|----|------------------|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|---|---|---|---|------|
| Digit                                                     |                                                       |        | 1–7                             | 8 | 9 | 10                                                                                                                | 11 | 12 | 13               | 14 | 15                                                                                                                                                              | 16 | 17 |   |   |   |   |      |
|                                                           |                                                       |        |                                 | – |   |                                                                                                                   |    |    | –                |    |                                                                                                                                                                 |    |    |   |   |   |   |      |
| 2                                                         | 25 kA at 600 V<br>D                                   | 1000 A | 3WA1210                         | 1 | A | U                                                                                                                 | 0  | 1  | 1                | 2  | 3                                                                                                                                                               | 5  | 6  | 0 | A | A | 0 | Z... |
|                                                           |                                                       | 2000 A | 3WA1220                         | 1 | A | U                                                                                                                 | 0  | 1  | 1                | 2  | 3                                                                                                                                                               | 5  | 6  | 0 | A | A | 0 | Z... |
|                                                           |                                                       | 4000 A | 3WA1240                         | 1 | A | U                                                                                                                 | 0  | 1  | 1                | 2  |                                                                                                                                                                 | 5  | 6  | 0 | A | A | 0 | Z... |
| 2                                                         | 20 kA at 1000 V<br>E<br>20 kA at 1500 V <sup>1)</sup> | 1000 A | 3WA1210                         | 8 | A | U                                                                                                                 | 0  | 1  | 1                | 2  | 3                                                                                                                                                               | 5  | 6  | 0 | A | A | 0 | Z... |
|                                                           |                                                       | 2000 A | 3WA1220                         | 8 | A | U                                                                                                                 | 0  | 1  | 1                | 2  | 3                                                                                                                                                               | 5  | 6  | 0 | A | A | 0 | Z... |
|                                                           |                                                       | 4000 A | 3WA1240                         | 8 | A | U                                                                                                                 | 0  | 1  | 1                | 2  |                                                                                                                                                                 | 5  | 6  | 0 | A | A | 0 | Z... |

<sup>1)</sup> 1500 V DC only for 4-pole circuit breakers and for breaking capacity E

**Non-automatic circuit breakers with and without ready4COM, from page 1/35 onwards**  
**Operating mechanism, auxiliary switch and auxiliary release, from page 1/36 onwards**

The structure shown below shows how the price is formed depending on digits 11 and 12 of the article number (price group 1CE). You will find varying price changes updated on a daily basis in SiePortal [www.siemens.com/lowvoltage/product-catalog](http://www.siemens.com/lowvoltage/product-catalog)

1

|                | 3-pole<br>Digit 11 = 0 |   |   |     | 4-pole<br>Digit 11 = 1 |   |   |     |
|----------------|------------------------|---|---|-----|------------------------|---|---|-----|
| Digit<br>Value | 12                     |   |   |     | 12                     |   |   |     |
|                | 1                      | 2 | 3 | 5/6 | 1                      | 2 | 3 | 5/6 |
| Prices in €    |                        |   |   |     |                        |   |   |     |
|                |                        |   |   |     |                        |   |   |     |
|                |                        |   |   |     |                        |   |   |     |
|                |                        |   |   |     |                        |   |   |     |
|                |                        |   |   |     |                        |   |   |     |
|                |                        |   |   |     |                        |   |   |     |
|                |                        |   |   |     |                        |   |   |     |



The structure shown below shows how the price is formed depending on digits 11 and 12 of the article number (price group 1CE). You will find varying price changes updated on a daily basis in SiePortal [www.siemens.com/lowvoltage/product-catalog](http://www.siemens.com/lowvoltage/product-catalog)

1

|             | 3-pole without PSS<br>Digit 11 = 3 |   |         |   |     | 3-pole with PSS<br>Digit 11 = 6 |         |   |     |   | 4-pole, without PSS<br>Digit 11 = 4 |         |   |     |   | 4-pole, with PSS<br>Digit 11 = 4 |   |     |  |  |
|-------------|------------------------------------|---|---------|---|-----|---------------------------------|---------|---|-----|---|-------------------------------------|---------|---|-----|---|----------------------------------|---|-----|--|--|
| Digit       | 12                                 |   |         |   |     | 12                              |         |   |     |   | 12                                  |         |   |     |   | 12                               |   |     |  |  |
| Value       | 0                                  | 1 | 2/4/7/8 | 3 | 5/6 | 1                               | 2/4/7/8 | 3 | 5/6 | 0 | 1                                   | 2/4/7/8 | 3 | 5/6 | 1 | 2/4/7/8                          | 3 | 5/6 |  |  |
| Prices in € |                                    |   |         |   |     |                                 |         |   |     |   |                                     |         |   |     |   |                                  |   |     |  |  |
|             |                                    |   |         |   |     |                                 |         |   |     |   |                                     |         |   |     |   |                                  |   |     |  |  |
|             |                                    |   |         |   |     |                                 |         |   |     |   |                                     |         |   |     |   |                                  |   |     |  |  |
|             |                                    |   |         |   |     |                                 |         |   |     |   |                                     |         |   |     |   |                                  |   |     |  |  |
|             |                                    |   |         |   |     |                                 |         |   |     |   |                                     |         |   |     |   |                                  |   |     |  |  |

# Accessory options

For a complete and valid configuration of your air circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

1

To specify the options, add “-Z” to the complete article number and indicate the appropriate order code(s).

3WA....-.....-Z

| Order code | Surcharge in € per PU | Price group |
|------------|-----------------------|-------------|
|------------|-----------------------|-------------|

## Option plug for electronic trip unit

- To reduce the rated current of the circuit breaker
- Only one module is possible per circuit breaker. As standard, the electronic trip unit is equipped with an option plug which is equal to the maximum rated breaker current ( $I_{n \max}$ ).  
The rated current of the selected option plug must be less than  $I_{n \max}$ .

| Option plug | Rated current $I_n$ | SZ1 | SZ2 | SZ3 | Order code | Surcharge in € per PU | Price group |
|-------------|---------------------|-----|-----|-----|------------|-----------------------|-------------|
|             | 250 A               | ■   | ■   | -   | B02        |                       | 1CE         |
|             | 315 A               | ■   | ■   | -   | B03        |                       | 1CE         |
|             | 400 A               | ■   | ■   | -   | B04        |                       | 1CE         |
|             | 500 A               | ■   | ■   | -   | B05        |                       | 1CE         |
|             | 630 A               | ■   | ■   | -   | B06        |                       | 1CE         |
|             | 800 A               | ■   | ■   | ■   | B08        |                       | 1CE         |
|             | 1000 A              | ■   | ■   | ■   | B10        |                       | 1CE         |
|             | 1250 A              | ■   | ■   | ■   | B12        |                       | 1CE         |
|             | 1600 A              | ■   | ■   | ■   | B16        |                       | 1CE         |
|             | 2000 A              | ■   | ■   | ■   | B20        |                       | 1CE         |
|             | 2500 A              | -   | ■   | ■   | B25        |                       | 1CE         |
|             | 3200 A              | -   | ■   | ■   | B32        |                       | 1CE         |
|             | 4000 A              | -   | -   | ■   | B40        |                       | 1CE         |
|             | 5000 A              | -   | -   | ■   | B50        |                       | 1CE         |

## IOM230 digital input/output module <sup>1)</sup>

|                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |     |  |     |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--|-----|
| <b>Module with 2 inputs and 3 outputs</b> | A module including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, connecting cables and <b>CubicleBUS</b> <sup>2</sup> terminating resistor; five modules can be operated at the same time. Further modules must be ordered separately as 3WA9111-0EC11, which includes the adapter for mounting on the secondary disconnect terminal system of the circuit breaker and the adapter for external mounting on a DIN rail. | F23 |  | 1CE |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--|-----|

## ZSI200 zone-selective interlocking module <sup>1)</sup>

|                                                |                                                                                                                                                                                                                          |     |  |     |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--|-----|
| <b>Zone-selective interlocking with ETU600</b> | A module, circuit breaker internal. Module including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, connecting cables and <b>CubicleBUS</b> <sup>2</sup> terminating resistor. | F20 |  | 1CE |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--|-----|

## COM190 communications module <sup>1) 2)</sup>

- The precondition for connection is a circuit breaker or non-automatic circuit breaker with the ready4COM feature

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                      |     |  |     |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--|-----|
| <b>PROFINET IO/Modbus TCP <sup>2)</sup></b> | A module including 2 Switched Ethernet ports, circuit breaker internal. A module including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, connecting cables and <b>CubicleBUS</b> <sup>2</sup> terminating resistor; two communications modules can be run at the same time. The second communications module must be ordered separately as 3WA9111-0EC13. | F19 |  | 1CE |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--|-----|

## COM150 communications module <sup>1)</sup>

- The precondition for connection is a circuit breaker or non-automatic circuit breaker with the ready4COM feature

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |  |     |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--|-----|
| <b>Modbus RTU</b> | A module with terminal connection and optional internal terminating resistor, circuit breaker internal. A module including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, connecting cables and <b>CubicleBUS</b> <sup>2</sup> terminating resistor; two communications modules can be run at the same time. The second communications module must be ordered separately as 3WA9111-0EC15. | F15 |  | 1CE |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--|-----|

## ready4COM circuit breakers without communication-capable closing coils/shunt trips

|             |                                                                                            |     |  |     |
|-------------|--------------------------------------------------------------------------------------------|-----|--|-----|
| <b>Note</b> | If this option is used, remote switching directly via communication is no longer possible. | M71 |  | 1CE |
|-------------|--------------------------------------------------------------------------------------------|-----|--|-----|

<sup>1)</sup> When ordering this option for a circuit breaker or a non-automatic air circuit breaker of the installation type “withdrawable version without guide frame”, this must be used as the order option for the guide frame.

<sup>2)</sup> For connecting the Ethernet cable, connectors angled 90° to the right are recommended, e.g. PROFINET connector 6GK1901-1BB20-2AA0.



For a complete and valid configuration of your air circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

3WA....-.....-.... -Z

| Order code | Surcharge in € per PU | Price group |
|------------|-----------------------|-------------|
|------------|-----------------------|-------------|

### Automatic reset

- Only possible for circuit breakers with an electronic trip unit

| Automatic reset | Automatic reset of the reclosing lockout after ETU tripping; this option is not required when ordering a circuit breaker with a remote trip alarm reset coil RR. | K01 |  | 1CE |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--|-----|
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--|-----|

### Circuit breakers with a metering function for connection of an external voltage transformer

- The circuit breaker is equipped with a metering function. The scope of measured values is the same as for the PMF metering function. Unlike the metering function with internal voltage tap, this version is not certified according to IEC 61557-12.
- External voltage transformers are required for the function.
- Only possible for circuit breakers of frame sizes 2 and 3 with ETU600 and A or C in position 9 of the article number.

| Scope of measured values | PMF-I   | V61 |
|--------------------------|---------|-----|
| Metering function        | PMF-II  | V62 |
|                          | PMF-III | V63 |

### Special approval according to UL 489b in addition to IEC 60947

DC non-automatic circuit breakers up to 1500 V

Sizes 2, 4-pole, 2000 A with  $I_{cc} = 20$  kA

Available for:

|                     |  |
|---------------------|--|
| 3WA1220-8AU12-_____ |  |
| 3WA1220-8AU42-_____ |  |
| 3WA1220-8AU72-_____ |  |
| 3WA1220-8CU12-_____ |  |
| 3WA1220-8CU42-_____ |  |
| 3WA1220-8CU72-_____ |  |

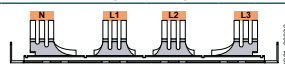
U09

### Rear vertical main connections (top and bottom) with equal pole spacing of the phases (only possible for 4-pole circuit breakers with N pole, left)

AC circuit breakers/AC non-automatic circuit breakers and AC guide frames

Sizes 2, 4-pole, 4000 A, breaking capacity S/M/H/E

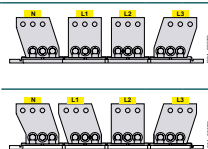
Rear vertical



| Standard | N – L1 160 mm  |
|----------|----------------|
|          | L1 – L2 130 mm |
|          | L2 – L3 160 mm |

| Option | N – L1 130 mm  |
|--------|----------------|
|        | L1 – L2 160 mm |
|        | L2 – L3 160 mm |

Rear horizontal



| Standard | N – L1 160 mm  |
|----------|----------------|
|          | L1 – L2 130 mm |
|          | L1 – L3 160 mm |

| Option | N – L1 130 mm  |
|--------|----------------|
|        | L1 – L2 160 mm |
|        | L2 – L3 160 mm |

D04

### Tinned version of the main circuit connections on the guide frame

- Only for circuit breakers in withdrawable version with horizontal connection or flange connection
- Cannot be ordered for circuit breakers without a guide frame
- The normal delivery time increases to 15 work days

Tinned connections

Size 1, 2, 3

3-pole

D08

|        |  |        |  |     |
|--------|--|--------|--|-----|
|        |  |        |  | 1CE |
|        |  | 4-pole |  | 1CE |
| Size 2 |  | 3-pole |  | 1CE |
|        |  | 4-pole |  | 1CE |
| Size 3 |  | 3-pole |  | 1CE |
|        |  | 4-pole |  | 1CE |

# Accessory options

For a complete and valid configuration of your air circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

1

To specify the options, add “-Z” to the complete article number and indicate the appropriate order code(s).

3WA....-.....-Z

| Order code | Surcharge in € per PU | Price group |
|------------|-----------------------|-------------|
|------------|-----------------------|-------------|

## Broadened vertical main circuit connection

- Only possible on complete order for a withdrawable circuit breaker or when ordering the guide frame separately

| Main circuit connection | For 3WA1, 4000 A, size 2 | Compatible with 3WL1240 for retrofit | D01 |  | 1CE |
|-------------------------|--------------------------|--------------------------------------|-----|--|-----|
|-------------------------|--------------------------|--------------------------------------|-----|--|-----|

## Circuit breakers without Bluetooth function

| Circuit breakers without Bluetooth function | In this version of the circuit breaker, Bluetooth is not provided. Neither can Bluetooth be retrofitted by replacing the electronic trip unit. | D80 |  | 1CE |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----|--|-----|
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----|--|-----|

## Secondary disconnect terminal system

- Can be ordered for circuit breakers with guide frames and for guide frames

| Manual connector with screw terminal | With screw connection instead of push-in connection (standard) | N03 |  | 1CE |
|--------------------------------------|----------------------------------------------------------------|-----|--|-----|
|--------------------------------------|----------------------------------------------------------------|-----|--|-----|

| Manual connector for ring lugs | With screw connection for ring lugs instead of push-in connection (standard) | N05 |  | 1CE |
|--------------------------------|------------------------------------------------------------------------------|-----|--|-----|
|--------------------------------|------------------------------------------------------------------------------|-----|--|-----|

## Mechanical operating cycles counters

| Mechanical operating cycles counter, 5-digit | Can be used with all circuit breakers and non-automatic circuit breakers including those without a spring charging motor | C01 |  | 1CE |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-----|--|-----|
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-----|--|-----|

## Signaling switches

| Trip alarm switch | 2nd trip alarm switch (S25)<br>1st trip alarm switch included as standard for circuit breakers<br>Can only be used with circuit breakers with an electronic trip unit without ready4COM. | 1 NO | K06 |  | 1CE |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----|--|-----|
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----|--|-----|

## Pushbuttons/disconnect switches/closing lockouts/special packaging/arc chute cover

| Emergency OPEN button | Mushroom pushbutton instead of the mechanical OFF pushbutton | C25 |  | 1CE |
|-----------------------|--------------------------------------------------------------|-----|--|-----|
|-----------------------|--------------------------------------------------------------|-----|--|-----|

| Local electric close on operator panel (S10) | This prevents unauthorized electrical closing from the operator panel. Mechanical closing and remote closing remain possible. Only possible in combination with a closing coil (CC) | With sealing cap | C11 |  | 1CE |
|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----|--|-----|
|                                              |                                                                                                                                                                                     | With CES lock    | C12 |  | 1CE |

| Motor disconnect switch on operator panel (S12) | This prevents automatic charging of the stored energy mechanism by the spring charging motor | C24 |  | 1CE |
|-------------------------------------------------|----------------------------------------------------------------------------------------------|-----|--|-----|
|-------------------------------------------------|----------------------------------------------------------------------------------------------|-----|--|-----|

| Cardboard packaging with water-repellent coating on corrugated cardboard (moisture protection) |  | P61 |  | 1CE |
|------------------------------------------------------------------------------------------------|--|-----|--|-----|
|------------------------------------------------------------------------------------------------|--|-----|--|-----|

| Arc chute cover mounted on the guide frame<br>Not available for:<br>• Fixed-mounted<br>• Breaking capacity C, E and D<br>• 3600/4000 A size 2 | Size 1 | 3-pole | R10 |  | 1CE |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|-----|--|-----|
|                                                                                                                                               |        | 4-pole |     |  | 1CE |
|                                                                                                                                               | Size 2 | 3-pole |     |  | 1CE |
|                                                                                                                                               |        | 4-pole |     |  | 1CE |
|                                                                                                                                               | Size 3 | 3-pole |     |  | 1CE |
|                                                                                                                                               |        | 4-pole |     |  | 1CE |

| Cover for electronic trip unit | Top cover with safety lock (The lower sealable cover of the rotary coding switch is included in the scope of supply of the circuit breaker) | F40 |  | 1CE |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-----|--|-----|
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-----|--|-----|

## Internal current sensors without energy core for applications with frequency converters

- Used in converter applications with high harmonic components; can only be used for circuit breakers with an ETU600 electronic trip unit
  - External 24 V DC supply required
  - Undervoltage release required
  - Additionally contains a relay for monitoring the 24 V DC and warning labels
  - If Z option = K60 is provided, an optional PMF-I to PMF-III metering function is feasible. The accuracy of this metering function is in accordance with the manufacturer's specifications. A certificate according to IEC 61557-12 cannot be provided for this version.

| Internal current sensors | Size 1, 2, 3 | K60 |  | 1CE |
|--------------------------|--------------|-----|--|-----|
|--------------------------|--------------|-----|--|-----|

For a complete and valid configuration of your air circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

3WA....-.....-.... -Z

| Order code | Surcharge in € per PU | Price group |
|------------|-----------------------|-------------|
|------------|-----------------------|-------------|

### Mechanical interlocks

- Interlocking module with Bowden cable 2 m

|                              |                                                                  |     |  |     |
|------------------------------|------------------------------------------------------------------|-----|--|-----|
| <b>Mechanical interlocks</b> | For fixed-mounted breakers                                       | S55 |  | 1CE |
|                              | For withdrawable circuit breakers with guide frame <sup>1)</sup> | R55 |  | 1CE |
|                              | For guide frames (ordered separately)                            | R56 |  | 1CE |
|                              | For withdrawable circuit breakers (ordered separately)           | R57 |  | 1CE |

### Locking provisions (for fixed-mounted and withdrawable circuit breakers)

|                           |                                                                                                                                                                                |                                                |     |  |     |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|-----|--|-----|
| <b>Locking provisions</b> | Against unauthorized closing from the operator panel of the circuit breaker. The disconnecter unit fulfills the requirements for main circuit breakers according to EN 60204-1 | Made by CES                                    | S01 |  | 1CE |
|                           |                                                                                                                                                                                | Made by IKON                                   | S03 |  | 1CE |
|                           |                                                                                                                                                                                | Assembly kit FORTRESS or CASTELL <sup>2)</sup> | S05 |  | 1CE |
|                           |                                                                                                                                                                                | Assembly kit for padlocks <sup>3)</sup>        | S07 |  | 1CE |
|                           |                                                                                                                                                                                | Made by RONIS                                  | S08 |  | 1CE |
|                           |                                                                                                                                                                                | Made by PROFALUX                               | S09 |  | 1CE |
| <b>Locking provisions</b> | For charging handle with padlock <sup>3)</sup>                                                                                                                                 |                                                | S33 |  | 1CE |

### Locking provisions (for withdrawable circuit breaker)

|                                                                                  |                                                   |                  |     |  |     |
|----------------------------------------------------------------------------------|---------------------------------------------------|------------------|-----|--|-----|
| <b>Locking provision to prevent movement of the withdrawable circuit breaker</b> | Safety lock for mounting onto the circuit breaker | Made by CES      | S71 |  | 1CE |
|                                                                                  |                                                   | Made by PROFALUX | S75 |  | 1CE |
|                                                                                  |                                                   | Made by RONIS    | S76 |  | 1CE |

### Locking provisions against unauthorized closing, for withdrawable circuit breakers

- The disconnecter unit fulfills the requirements for main circuit breakers acc. to EN 60204-1, consisting of a lock in the guide frame, active in the connected position, function is retained when circuit breaker is replaced.
- Not possible in combination with order code "R81", "R85" or "R86".
- Only possible on complete order for a withdrawable circuit breaker or when ordering the guide frame separately

|                         |     |  |     |
|-------------------------|-----|--|-----|
| <b>Made by CES</b>      | R61 |  | 1CE |
| <b>Made by RONIS</b>    | R68 |  | 1CE |
| <b>Made by PROFALUX</b> | R60 |  | 1CE |

### Locking mechanisms

- R30 and R50 not possible in combination with order code "R81", "R85" or "R86".
- R30 and R50 only possible on complete order for a circuit breaker with a guide frame or when ordering the guide frame separately
- R40 can only be ordered with the circuit breaker

|                                           |                                                                           |     |  |     |
|-------------------------------------------|---------------------------------------------------------------------------|-----|--|-----|
| <b>For fixed-mounted circuit breakers</b> | To prevent opening of the control cabinet door in ON position             | S30 |  | 1CE |
| <b>For withdrawable circuit breakers</b>  | To prevent opening of the control cabinet door in connected position      | R30 |  | 1CE |
|                                           | To prevent activation when the control cabinet door is open <sup>4)</sup> | R40 |  | 1CE |
|                                           | To prevent movement when the control cabinet door is open <sup>1)</sup>   | R50 |  | 1CE |

### Locking provisions to prevent movement of the withdrawable circuit breaker in disconnected position

- Consisting of Bowden cable and lock in the control cabinet door
- Not possible in combination with order code "R30", "R50", "R61", "R68" or "R60"
- Only possible for a complete order for a circuit breaker with a guide frame or when ordering the guide frame separately

|                         |     |  |     |
|-------------------------|-----|--|-----|
| <b>Made by CES</b>      | R81 |  | 1CE |
| <b>Made by PROFALUX</b> | R85 |  | 1CE |
| <b>Made by RONIS</b>    | R86 |  | 1CE |

### Increased degree of protection for installation in a control cabinet

|                                                         |     |  |     |
|---------------------------------------------------------|-----|--|-----|
| <b>Door sealing frame for degree of protection IP41</b> | T40 |  | 1CE |
|---------------------------------------------------------|-----|--|-----|

<sup>1)</sup> Not available in combination with R40

<sup>2)</sup> Locks must be ordered from the manufacturer.

<sup>3)</sup> Padlock not included in the scope of supply.

<sup>4)</sup> Not available in combination with R50 and R55

# Accessory options

## Further technical specifications

### Manual operating mechanism

3WA11 – 3WA13

#### Switching on/charging energy store

|                                                  |         |
|--------------------------------------------------|---------|
| Maximum force required to operate the hand lever | ≤ 230 N |
| Required number of strokes on the hand lever     | 9       |

### Closing coils (CC/CC-COM)

3WA11 – 3WA13

#### Rated operational voltage

|                                    |                                   |
|------------------------------------|-----------------------------------|
| Rated control supply voltage $U_s$ | 24 ... 30 V DC                    |
|                                    | 48 ... 60 V DC                    |
|                                    | 110 ... 127 V AC/110 ... 125 V DC |
|                                    | 208 ... 240 V AC/220 ... 250 V DC |

#### Primary operating range

|                                                |                   |
|------------------------------------------------|-------------------|
| Primary operating range (acc. to IEC 60947-2)  | 75 ... 110% $U_s$ |
| Extended operating range for battery operation | 75 ... 126% $U_s$ |
| Integrated freewheeling diode                  | Yes               |

#### Operation

|                                                   |       |            |              |
|---------------------------------------------------|-------|------------|--------------|
| Version                                           |       | 100% OP    | 5% OP        |
| Opening power                                     | AC/DC | 60 W/60 VA | 300 VA/300 W |
| Continuous power                                  | AC/DC | 8 W/8 VA   | –            |
| Minimum command duration at 100% $U_s$            |       | 60 ms      | 60 ms        |
| Maximum command duration at 100% $U_s$            |       | –          | 2000 ms      |
| Opening time of the circuit breaker at 100% $U_s$ |       | 80 ms      | 50 ms        |

#### Fuse protection of the control circuit at $U_s$ for closing coil

|                                                 |                                   |     |      |
|-------------------------------------------------|-----------------------------------|-----|------|
| Fuse gG                                         | 24 ... 30 V DC                    | 2 A | 10 A |
|                                                 | 48 ... 60 V DC                    | 2 A | 10 A |
|                                                 | 110 ... 127 V AC/110 ... 125 V DC | 2 A | 4 A  |
|                                                 | 208 ... 240 V AC/220 ... 250 V DC | 2 A | 2 A  |
| Automatic circuit breaker with C characteristic | 24 ... 30 V DC                    | 2 A | 10 A |
|                                                 | 48 ... 60 V DC                    | 2 A | 10 A |
|                                                 | 110 ... 127 V AC/110 ... 125 V DC | 2 A | 4 A  |
|                                                 | 208 ... 240 V AC/220 ... 250 V DC | 2 A | 2 A  |

#### Fuse protection of the control circuit at $U_s$ for spring charging motor + closing coil <sup>1)</sup>

|                                                 |                                   |     |      |
|-------------------------------------------------|-----------------------------------|-----|------|
| Fuse gG                                         | 24 ... 30 V DC                    | 8 A | 10 A |
|                                                 | 48 ... 60 V DC                    | 8 A | 10 A |
|                                                 | 110 ... 127 V AC/110 ... 125 V DC | 4 A | 4 A  |
|                                                 | 208 ... 240 V AC/220 ... 250 V DC | 4 A | 2 A  |
| Automatic circuit breaker with C characteristic | 24 ... 30 V DC                    | 8 A | 10 A |
|                                                 | 48 ... 60 V DC                    | 8 A | 10 A |
|                                                 | 110 ... 127 V AC/110 ... 125 V DC | 4 A | 4 A  |
|                                                 | 208 ... 240 V AC/220 ... 250 V DC | 4 A | 2 A  |

<sup>1)</sup> With the same control circuit for the closing coil and spring charging motor

### Spring charging motors

3WA11 – 3WA13

#### Rated operational voltage

|                                    |                                   |
|------------------------------------|-----------------------------------|
| Rated control supply voltage $U_s$ | 24 ... 30 V DC                    |
|                                    | 48 ... 60 V DC                    |
|                                    | 110 ... 127 V AC/110 ... 125 V DC |
|                                    | 208 ... 240 V AC/220 ... 250 V DC |

#### Primary operating range

|                                                |                   |
|------------------------------------------------|-------------------|
| Primary operating range                        | 85 ... 110% $U_s$ |
| Extended operating range for battery operation | 85 ... 126% $U_s$ |

#### Operation

|                             |       |              |
|-----------------------------|-------|--------------|
| Opening power               | AC/DC | 135 VA/135 W |
| Continuous power            | AC/DC | 135 VA/135 W |
| Charging time at 100% $U_s$ |       | ≤ 10 s       |

## Spring charging motors

### 3WA11 – 3WA13

#### Fuse protection of the control circuit at $U_s$ spring charging motors

|                                                 |                                   |     |
|-------------------------------------------------|-----------------------------------|-----|
| Fuse gG                                         | 24 ... 30 V DC                    | 6 A |
|                                                 | 48 ... 60 V DC                    | 6 A |
|                                                 | 110 ... 127 V AC/110 ... 125 V DC | 2 A |
|                                                 | 208 ... 240 V AC/220 ... 250 V DC | 2 A |
| Automatic circuit breaker with C characteristic | 24 ... 30 V DC                    | 6 A |
|                                                 | 48 ... 60 V DC                    | 6 A |
|                                                 | 110 ... 127 V AC/110 ... 125 V DC | 2 A |
|                                                 | 208 ... 240 V AC/220 ... 250 V DC | 2 A |

## Undervoltage releases UVR and UVR-t

### 3WA11 – 3WA13

#### Rated voltage

|                                          |                                   |
|------------------------------------------|-----------------------------------|
| Rated control supply voltage $U_s$ (UVR) | 24 ... 30 V DC                    |
|                                          | 48 ... 60 V DC                    |
|                                          | 110 ... 127 V AC/110 ... 125 V DC |
|                                          | 208 ... 240 V AC/220 ... 250 V DC |
|                                          | 380 ... 415 V AC                  |

|                                                          |                                   |
|----------------------------------------------------------|-----------------------------------|
| Rated control supply voltage $U_s$ : UVR-t <sup>1)</sup> | 48 V DC                           |
|                                                          | 60 V DC                           |
|                                                          | 110 ... 127 V AC/110 ... 125 V DC |
|                                                          | 208 ... 240 V AC/220 ... 250 V DC |
|                                                          | 380 ... 415 V AC                  |

|                  |                 |                   |
|------------------|-----------------|-------------------|
| Operating limits | Operate voltage | < 70% $U_s$       |
|                  | Pick-up voltage | 85 ... 126% $U_s$ |

|                               |     |
|-------------------------------|-----|
| Integrated freewheeling diode | Yes |
|-------------------------------|-----|

|               |       |            |
|---------------|-------|------------|
| Closing power | AC/DC | 60 VA/50 W |
|---------------|-------|------------|

|                  |       |          |
|------------------|-------|----------|
| Continuous power | AC/DC | 5 VA/5 W |
|------------------|-------|----------|

#### Break time

|                                  |       |
|----------------------------------|-------|
| $U_s = 0$ with UVR instantaneous | 80 ms |
|----------------------------------|-------|

|                                       |          |
|---------------------------------------|----------|
| $U_s = 0$ with UVR short-time delayed | ≤ 200 ms |
|---------------------------------------|----------|

|                              |               |
|------------------------------|---------------|
| $U_s = 0$ with UVR-t delayed | 0.2 ... 3.2 s |
|------------------------------|---------------|

|                                                                                                                  |                                                                                     |
|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| With UVR-t by disconnection at terminals X5.13 and X5.14 (EMERGENCY-STOP circuit) (quick shutdown) <sup>1)</sup> | ≤ 100 ms (maximum allowable cable length between the terminals)/cable length ≤ 50 m |
|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

#### Fuse protection of the control circuit

|         |                                   |    |
|---------|-----------------------------------|----|
| Fuse gG | 24 ... 30 V DC (UVR)              | 2A |
|         | 48 ... 60 V DC (UVR)              | 2A |
|         | 48 V DC (UVR-t)                   | 2A |
|         | 60 V DC (UVR-t)                   | 2A |
|         | 110 ... 127 V AC/110 ... 125 V DC | 2A |
|         | 208 ... 240 V AC/220 ... 250 V DC | 2A |
|         | 380 ... 415 V AC                  | 2A |

|                                                 |                                   |    |
|-------------------------------------------------|-----------------------------------|----|
| Automatic circuit breaker with C characteristic | 24 ... 30 V DC (UVR)              | 4A |
|                                                 | 48 ... 60 V DC (UVR)              | 4A |
|                                                 | 48 V DC (UVR-t)                   | 4A |
|                                                 | 60 V DC (UVR-t)                   | 4A |
|                                                 | 110 ... 127 V AC/110 ... 125 V DC | 4A |
|                                                 | 208 ... 240 V AC/220 ... 250 V DC | 6A |
|                                                 | 380 ... 415 V AC                  | 6A |

|                                                 |                                   |    |
|-------------------------------------------------|-----------------------------------|----|
| Automatic circuit breaker with D characteristic | 24 ... 30 V DC (UVR)              | 2A |
|                                                 | 48 ... 60 V DC (UVR)              | 2A |
|                                                 | 48 V DC (UVR-t)                   | 2A |
|                                                 | 60 V DC (UVR-t)                   | 2A |
|                                                 | 110 ... 127 V AC/110 ... 125 V DC | 2A |
|                                                 | 208 ... 240 V AC/220 ... 250 V DC | 4A |
|                                                 | 380 ... 415 V AC                  | 4A |

<sup>1)</sup> The maximum allowable cable length to the actuator for quick shutdown is currently ≤ 50 m (maximum allowable cable length between the terminals ≤ 100 m).

# Accessory options

## Further technical specifications

### Shunt trip (ST/ST-COM/ST2)

3WA11 – 3WA13

#### Rated operational voltage

Rated control supply voltage  $U_s$ 

24 ... 30 V DC  
 48 ... 60 V DC  
 110 ... 127 V AC/110 ... 125 V DC  
 208 ... 240 V AC/220 ... 250 V DC

#### Primary operating range

Primary operating range (acc. to IEC 60947-2)

75 ... 110%  $U_s$ 

Extended operating range for battery operation

75 ... 126%  $U_s$ 

Integrated freewheeling diode

Yes      No

#### Operation

Version

100% OP      5% OP

Opening power AC/DC

24 ... 30 V DC, 48 ... 60 V DC  
 110 ... 127 V AC/110 ... 125 V DC  
 208 ... 240 V AC/220 ... 250 V DC

60 VA/60 W      300 VA/300 W

Continuous power AC/DC

8 VA/8 W

Minimum command duration at 100%  $U_s$ 

60 ms

Maximum command duration at 100%  $U_s$ 

–      2000 ms

Opening time of the circuit breaker at  $U_s = 100\%$ 

80 ms      50 ms

#### Fuse protection of the control circuit

Fuse gG

24 ... 30 V DC  
 48 ... 60 V DC  
 110 ... 127 V AC/110 ... 125 V DC  
 208 ... 240 V AC/220 ... 250 V DC

2 A      10 A  
 2 A      10 A  
 2 A      4 A  
 2 A      2 A

Automatic circuit breaker with C characteristic

24 ... 30 V DC  
 48 ... 60 V DC  
 110 ... 127 V AC/110 ... 125 V DC  
 208 ... 240 V AC/220 ... 250 V DC

2 A      10 A  
 2 A      10 A  
 2 A      4 A  
 2 A      2 A

### Remote reset magnet for mechanical tripped indicator (F7)

3WA11 – 3WA13

#### Rated operational voltage

Rated control supply voltage  $U_s$ 

24 ... 30 V DC  
 48 ... 60 V DC  
 110 ... 127 V AC/110 ... 125 V DC  
 208 ... 240 V AC/220 ... 250 V DC

#### Primary operating range

Primary operating range (acc. to IEC 60947-2)

85 ... 110%  $U_s$ 

#### Operation

Power consumption

AC/DC

60 VA/60 W

Minimum command time at  $1 \times U_s$ 

60 ms

#### Fuse protection of the control circuit

Fuse gG

24 ... 30 V DC  
 48 ... 60 V DC  
 110 ... 127 V AC/110 ... 125 V DC  
 208 ... 240 V AC/220 ... 250 V DC

2 A  
 1 A

Automatic circuit breaker with C characteristic

24 ... 30 V DC  
 48 ... 60 V DC  
 110 ... 127 V AC/110 ... 125 V DC  
 208 ... 240 V AC/220 ... 250 V DC

2 A  
 1 A

### Contact position-driven auxiliary switches (S1 to S8)

3WA11 – 3WA13

Type

NO or NC

Contact reliability

From 1 mA at 5 V DC

Rated insulation voltage  $U_i$ 

660 V DC/660 V AC 50/60 Hz

Rated impulse withstand voltage  $U_{imp}$ 

6 kV

## Contact position-driven auxiliary switches (S1 to S8)

## 3WA11 – 3WA13

## Breaking capacity

|                                          |      |           |       |
|------------------------------------------|------|-----------|-------|
| Rated operational current I <sub>e</sub> | DC12 | 24 V      | 10 A  |
|                                          |      | 48 V      | 8 A   |
|                                          |      | 110 V     | 3.5 A |
|                                          |      | 220/240 V | 1 A   |
|                                          | DC13 | 24 V      | 6 A   |
|                                          |      | 48 V      | 4 A   |
|                                          |      | 110 V     | 1.2 A |
|                                          |      | 220/240 V | 0.4 A |
|                                          |      | 440 V     | 0.2 A |
|                                          | AC12 | ≤ 660 V   | 10 A  |
|                                          | AC15 | ≤ 230 V   | 6 A   |
|                                          |      | 400 V     | 4 A   |
|                                          |      | 500 V     | 3 A   |
| 690 V                                    |      | 2 A       |       |

Ready-to-close signaling switches (S20)  
(acc. to DIN VDE 0630)

## 3WA11 – 3WA13

|                                 |                                   |               |        |
|---------------------------------|-----------------------------------|---------------|--------|
| Type                            | NO contact                        |               |        |
| Contact reliability             | From 1 mA at 5 V DC <sup>1)</sup> |               |        |
| Rated insulation voltage $U_i$  | 250 V DC/250 V AC                 |               |        |
| Breaking capacity               |                                   |               |        |
| Rated operational current $I_e$ | DC12                              | 24 V          | 5 A    |
|                                 |                                   | 60 V          | 0.4 A  |
|                                 |                                   | 110/127 V     | 0.4 A  |
|                                 |                                   | 220/240 V     | 0.2 A  |
|                                 | DC13                              | 24 V          | 2.5 A  |
|                                 |                                   | 60 V          | 0.22 A |
|                                 |                                   | 110/127 V     | 0.22 A |
|                                 |                                   | 220/240 V     | 0.1 A  |
|                                 | AC12                              | ≤ 240 V       | 6 A    |
|                                 | A300 AC                           | ≤ 250 V       | 6 A    |
|                                 | R300 DC                           | 110 ... 125 V | 0.22 A |
|                                 |                                   | 220 ... 250 V | 0.11 A |
|                                 | AC15                              | 220 V         | 5 A    |
|                                 |                                   | 240 V         | 4 A    |

## Trip alarm switches (S24, S25)

## 3WA11 – 3WA12

|                                 |         |                                   |        |
|---------------------------------|---------|-----------------------------------|--------|
| 1st trip alarm switch S24       |         | CO contact                        |        |
| 2nd trip alarm switch S25       |         | NO contact                        |        |
| Contact reliability             |         | From 1 mA at 5 V DC <sup>1)</sup> |        |
| Rated insulation voltage $U_i$  |         | 250 V DC/250 V AC 50/60 Hz        |        |
| Breaking capacity               |         |                                   |        |
| Rated operational current $I_e$ | DC12    | 24 V                              | 5 A    |
|                                 |         | 60 V                              | 0.4 A  |
|                                 |         | 110/127 V                         | 0.4 A  |
|                                 |         | 220/240 V                         | 0.2 A  |
|                                 | DC13    | 24 V                              | 2.5 A  |
|                                 |         | 60 V                              | 0.2 A  |
|                                 |         | 110/127 V                         | 0.2 A  |
|                                 |         | 220/240 V                         | 0.1 A  |
|                                 | AC12    | ≤ 240 V                           | 6 A    |
|                                 | A300 AC | ≤ 250 V                           | 6 A    |
|                                 | R300 DC | 110 ... 125 V                     | 0.22 A |
|                                 |         | 220 ... 250 V                     | 0.11 A |
|                                 | AC15    | 220 V                             | 5 A    |
|                                 |         | 240 V                             | 4 A    |

<sup>1)</sup> To ensure contact reliability at 1 mA, the contacts are gold-plated. If 1 mA is exceeded, the gold-plating is eroded. As a consequence, contact reliability at 1 mA can no longer be ensured.

# Accessory options

## Further technical specifications

### Position signaling switches on guide frame <sup>1)</sup>

#### 3WA11 – 3WA13

|                                                           |                                                                                                                                     |      |            |        |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------|------------|--------|
| Type                                                      | CO (not COM)                                                                                                                        |      |            |        |
| Contact reliability                                       | From 1 mA at 5 V DC <sup>1)</sup>                                                                                                   |      |            |        |
| Rated insulation voltage $U_i$                            | 250 V DC/250 V 50 AC/60 Hz                                                                                                          |      |            |        |
| Rated impulse withstand voltage $U_{imp}$                 | 4 kV                                                                                                                                |      |            |        |
| Connection type                                           |                                                                                                                                     |      |            |        |
| PSS321                                                    | Spring-loaded terminal or push-in (depending on version)                                                                            |      |            |        |
| PSS600                                                    | Push-in                                                                                                                             |      |            |        |
| PSS111 COM                                                | <ul style="list-style-type: none"><li>• COM contacts: Push-in</li><li>• Other contacts: Spring-loaded terminal or push-in</li></ul> |      |            |        |
| PSS400 COM                                                | Push-in                                                                                                                             |      |            |        |
| Conductor cross-section that can be connected by customer |                                                                                                                                     |      |            |        |
| Spring-type terminals                                     | 1 × 0.2 mm <sup>2</sup> (AWG 28) ... 1 × 2.5 mm <sup>2</sup> (AWG 14)                                                               |      |            |        |
| Push-in solid                                             | 1 × 0.5 mm <sup>2</sup> (AWG 20) ... 1 × 2.5 mm <sup>2</sup> (AWG 14)                                                               |      |            |        |
| Push-in finely stranded with end sleeve                   | 1 × 0.5 mm <sup>2</sup> (AWG 20) ... 1 × 1.5 mm <sup>2</sup> (AWG 16)                                                               |      |            |        |
| Breaking capacity                                         |                                                                                                                                     |      |            |        |
| Rated operational current $I_e$                           | Utilization category according to IEC 60947-5                                                                                       | DC12 | 24 V       | 5 A    |
|                                                           |                                                                                                                                     |      | 60 V       | 0.4 A  |
|                                                           |                                                                                                                                     |      | 127 V      | 0.4 A  |
|                                                           |                                                                                                                                     |      | 220/240 V  | 0.2 A  |
|                                                           |                                                                                                                                     | DC13 | 24 V       | 2.5 A  |
|                                                           |                                                                                                                                     |      | 60 V       | 0.22 A |
|                                                           |                                                                                                                                     |      | 127 V      | 0.22 A |
|                                                           |                                                                                                                                     |      | 250 V      | 0.2 A  |
|                                                           |                                                                                                                                     | AC12 | ≤ 240 V AC | 6 A    |
|                                                           |                                                                                                                                     |      | AC15       | 250 V  |
|                                                           |                                                                                                                                     |      | 220 V      | 5 A    |

The COM (X89) contacts may only be connected to the communications module.

<sup>1)</sup> To ensure contact reliability at 1 mA, the contacts are gold-plated. If 1 mA is exceeded, the gold-plating is eroded. As a consequence, contact reliability at 1 mA can no longer be ensured.

### ETU600

#### 3WA11 – 3WA13

| Power supply                        |    |                      |
|-------------------------------------|----|----------------------|
| Method of power supply              |    | DC power supply unit |
| DC power supply unit                |    | IEC 61558 SELV/PELV  |
| Rated control supply voltage $U_s$  | DC | 24 V                 |
| Primary operating range             |    | $U_s \pm 20\%$       |
| Power consumption                   |    | 2.9 W                |
| Max. current consumption            |    | 0.12 A               |
| Max. starting current               |    | 0.35 A               |
| Overvoltage category                |    | CAT I                |
| Integrated short-circuit protection |    | Yes                  |
| Protected against polarity reversal |    | Yes                  |



# Summary of power consumption data

| Composants                        | Voltage                           | Power consumption |
|-----------------------------------|-----------------------------------|-------------------|
| ETU600                            | 24 V DC                           | 2.9 W             |
| Closing coil CC/CC-COM 100% OP    | 24 ... 30 V DC                    | 60 W              |
|                                   | 48 ... 60 V DC                    | 60 W              |
|                                   | 110 ... 127 V AC/110 ... 125 V DC | 60 VA/60 W        |
|                                   | 208 ... 240 V AC/220 ... 250 V DC | 60 VA/60 W        |
| Closing coil CC/CC-COM 5% OP      | 24 ... 30 V DC                    | 300 W             |
|                                   | 48 ... 60 V DC                    | 300 W             |
|                                   | 110 ... 127 V AC/110 ... 125 V DC | 300 VA/300 W      |
|                                   | 208 ... 240 V AC/220 ... 250 V DC | 300 VA/300 W      |
| Shunt trip ST/ST-COM 100% OP      | 24 ... 30 V DC                    | 60 W              |
|                                   | 48 ... 60 V DC                    | 60 W              |
|                                   | 110 ... 127 V AC/110 ... 125 V DC | 60 VA/60 W        |
|                                   | 208 ... 240 V AC/220 ... 250 V DC | 60 VA/60 W        |
| Shunt trip ST/ST-COM 5% OP        | 24 ... 30 V DC                    | 300 W             |
|                                   | 48 ... 60 V DC                    | 300 W             |
|                                   | 110 ... 127 V AC/110 ... 125 V DC | 300 VA/300 W      |
|                                   | 208 ... 240 V AC/220 ... 250 V DC | 300 VA/300 W      |
| Spring charging motors            | 24 ... 30 V DC                    | 135 W             |
|                                   | 48 ... 60 V DC                    | 135 W             |
|                                   | 110 ... 127 V AC/110 ... 125 V DC | 135 VA/135 W      |
|                                   | 208 ... 240 V AC/220 ... 250 V DC | 135 VA/135 W      |
| Remote trip alarm reset coils     | 24 ... 30 V DC                    | 60 W              |
|                                   | 48 ... 60 V DC                    | 60 W              |
|                                   | 110 ... 127 V AC/110 ... 125 V DC | 60 VA/60 W        |
|                                   | 208 ... 240 V AC/220 ... 250 V DC | 60 VA/60 W        |
| Undervoltage releases (UVR/UVR-t) | 24 V DC                           | 50 W              |
|                                   | 30 V DC                           | 50 W              |
|                                   | 48 V DC                           | 50 W              |
|                                   | 60 V DC                           | 50 W              |
|                                   | 110 ... 127 V AC/110 ... 125 V DC | 60 VA/50 W        |
|                                   | 208 ... 240 V AC/220 ... 250 V DC | 60 VA/50 W        |
|                                   | 380 ... 415 V AC                  | 60 VA             |
| IOM230                            | 24 V DC                           | 1.25 W            |
| IOM350                            | 24 V DC                           | 1.25 W            |
| COM190/COM150                     | 24 V DC                           | 1.7 W             |

# Guide frames for AC

The structure shown below is intended as an overview of each position and its meaning.  
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[www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

| 3WA8                                                                                                                         |                      |   |   |   | 5    | 6                                                    | 7    | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|------------------------------------------------------------------------------------------------------------------------------|----------------------|---|---|---|------|------------------------------------------------------|------|---|---|----|----|----|----|----|----|----|
|                                                                                                                              |                      |   |   |   |      |                                                      |      | — | A | A  |    |    | —  |    |    |    |
| Guide frames                                                                                                                 |                      |   |   |   |      |                                                      |      |   |   |    |    |    |    |    |    |    |
| Size                                                                                                                         | 1                    |   |   |   | 1    |                                                      |      |   |   |    |    |    |    |    |    |    |
|                                                                                                                              | 2                    |   |   |   | 2    |                                                      |      |   |   |    |    |    |    |    |    |    |
|                                                                                                                              | 3                    |   |   |   | 3    |                                                      |      |   |   |    |    |    |    |    |    |    |
|                                                                                                                              |                      |   |   |   | SZ 1 | SZ 2                                                 | SZ 3 |   |   |    |    |    |    |    |    |    |
| Max. rated current $I_{n \max}$<br><br>(Generate the selection of positions 6, 7 and 8 according to the list below)          | 630 ... 1000 A       | ■ | — | — |      | 1                                                    | 0    |   |   |    |    |    |    |    |    |    |
|                                                                                                                              | 1250 ... 1600 A      | ■ | — | — |      | 1                                                    | 6    |   |   |    |    |    |    |    |    |    |
|                                                                                                                              | 2000 A               | ■ | ■ | — |      | 2                                                    | 0    |   |   |    |    |    |    |    |    |    |
|                                                                                                                              | 2500 A               | ■ | ■ | — |      | 2                                                    | 5    |   |   |    |    |    |    |    |    |    |
|                                                                                                                              | 2000 ... 3200 A      | — | ■ | — |      | 3                                                    | 2    |   |   |    |    |    |    |    |    |    |
|                                                                                                                              | 4000 A               | — | ■ | ■ |      | 4                                                    | 0    |   |   |    |    |    |    |    |    |    |
|                                                                                                                              | 4000 ... 5000 A      | — | — | ■ |      | 5                                                    | 0    |   |   |    |    |    |    |    |    |    |
|                                                                                                                              | 6300 A               | — | — | ■ |      | 6                                                    | 3    |   |   |    |    |    |    |    |    |    |
| Short-circuit breaking capacity $I_{cu}$<br><br>(Generate the selection of positions 6, 7 and 8 according to the list below) | At 500/690 V         | N | ■ | — | —    | 55/42 kA                                             | 2    |   |   |    |    |    |    |    |    |    |
|                                                                                                                              |                      | S | ■ | ■ | —    | 66/50 kA                                             | 3    |   |   |    |    |    |    |    |    |    |
|                                                                                                                              |                      | M | ■ | ■ | —    | 85/66 kA                                             | 4    |   |   |    |    |    |    |    |    |    |
|                                                                                                                              |                      | H | ■ | — | —    | 100/66 kA                                            | 5    |   |   |    |    |    |    |    |    |    |
|                                                                                                                              |                      | C | — | ■ | ■    | 100/85 kA                                            | 5    |   |   |    |    |    |    |    |    |    |
|                                                                                                                              |                      |   | — | — | ■    | 3-pole: 150/150 kA<br>4-pole: 130/130 kA             | 8    |   |   |    |    |    |    |    |    |    |
|                                                                                                                              | At 690/1000/1150 V   | E | ■ | — | —    | 80/50 kA/—                                           | 8    |   |   |    |    |    |    |    |    |    |
|                                                                                                                              |                      |   | — | ■ | —    | 85/85/50 kA                                          | 8    |   |   |    |    |    |    |    |    |    |
|                                                                                                                              |                      |   | — | — | ■    | 3-pole:<br>150/125/70 kA<br>4-pole:<br>130/125/70 kA | 8    |   |   |    |    |    |    |    |    |    |
|                                                                                                                              |                      |   |   |   |      |                                                      |      |   |   |    |    |    |    |    |    |    |
| Number of poles                                                                                                              | 3-pole               |   |   |   |      |                                                      |      |   |   |    |    |    |    |    |    | 3  |
|                                                                                                                              | 4-pole, Neutral left |   |   |   |      |                                                      |      |   |   |    |    |    |    |    |    | 4  |

The following combinations of positions 6, 7 and 8 of the article number are technically feasible

| Size                   | Breaking capacity at $I_{n \max}$ | 630 A | 800 A | 1000 A | 1250 A | 1600 A | 2000 A | 2500 A | 3200 A | 4000 A | 5000 A | 6300 A |
|------------------------|-----------------------------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Representation 6, 7, 8 |                                   |       |       |        |        |        |        |        |        |        |        |        |
| 1                      | N                                 | 10-2  | 10-2  | 10-2   | 16-2   | 16-2   | 20-3   | 25-3   | –      | –      | –      | –      |
|                        | S                                 | 10-3  | 10-3  | 10-3   | 16-3   | 16-3   | 20-3   | 25-3   | –      | –      | –      | –      |
|                        | M                                 | 20-4  | 20-4  | 20-4   | 20-4   | 20-4   | 20-4   | 25-4   | –      | –      | –      | –      |
|                        | H                                 | 20-5  | 20-5  | 20-5   | 20-5   | 20-5   | 20-5   | 25-5   | –      | –      | –      | –      |
|                        | E                                 | 20-8  | 20-8  | 20-8   | 20-8   | 20-8   | 20-8   | 25-8   | –      | –      | –      | –      |
| 2                      | S                                 | –     | –     | –      | –      | –      | 20-5   | 25-5   | 32-5   | 40-5   | –      | –      |
|                        | M                                 | –     | –     | –      | –      | –      | 20-5   | 25-5   | 32-5   | 40-5   | –      | –      |
|                        | H                                 | –     | –     | –      | –      | –      | 20-5   | 25-5   | 32-5   | 40-5   | –      | –      |
|                        | E                                 | –     | –     | –      | –      | –      | 20-8   | 25-8   | 32-8   | 40-8   | –      | –      |
|                        | C                                 | –     | –     | –      | –      | –      | 32-6   | 32-6   | 32-6   | –      | –      | –      |
| 3                      | H                                 | –     | –     | –      | –      | –      | –      | –      | –      | 40-5   | 50-5   | 63-5   |
|                        | E                                 | –     | –     | –      | –      | –      | –      | –      | –      | 50-8   | 50-8   | 63-8   |
|                        | C                                 | –     | –     | –      | –      | –      | –      | –      | –      | 50-8   | 50-8   | 63-8   |

3WA8

|   |   |   |   |   |    |    |    |    |    |    |    |
|---|---|---|---|---|----|----|----|----|----|----|----|
| 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|   |   |   |   | — | A  | A  |    | —  |    |    |    |

## Connection

## Withdrawable

| Vertical | Horizontal | Front double hole | Flange | Vertical on top/horizontal at the bottom | Horizontal on top/vertical at the bottom | Flange on top/horizontal at the bottom | Horizontal on top/flange at the bottom |
|----------|------------|-------------------|--------|------------------------------------------|------------------------------------------|----------------------------------------|----------------------------------------|
|----------|------------|-------------------|--------|------------------------------------------|------------------------------------------|----------------------------------------|----------------------------------------|

## Size 1

|                                    |            |        |   |   |   |   |   |   |   |   |
|------------------------------------|------------|--------|---|---|---|---|---|---|---|---|
| Short-circuit<br>Breaking capacity | N, S, M, E | 630 A  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|                                    |            | 800 A  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|                                    |            | 1000 A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|                                    |            | 1250 A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|                                    |            | 1600 A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|                                    |            | 2000 A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|                                    |            | 2500 A | 1 | – | – | – | – | – | – | – |
|                                    | H          | 630 A  | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
|                                    |            | 800 A  | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
|                                    |            | 1000 A | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
|                                    |            | 1250 A | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
|                                    |            | 1600 A | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
|                                    |            | 2000 A | 1 | 2 | – | 4 | 5 | 6 | 7 | 8 |
|                                    |            | 2500 A | 1 | – | – | – | – | – | – | – |

## Size 2

|                                    |            |        |                 |                 |   |   |   |   |   |   |
|------------------------------------|------------|--------|-----------------|-----------------|---|---|---|---|---|---|
| Short-circuit<br>Breaking capacity | S, M, H, E | 2000 A | 1               | 2               | 3 | 4 | 5 | 6 | 7 | 8 |
|                                    |            | 2500 A | 1               | 2               | 3 | 4 | 5 | 6 | 7 | 8 |
|                                    |            | 3200 A | 1               | 2               | 3 | 4 | 5 | 6 | 7 | 8 |
|                                    |            | 3600 A | –               | –               | – | 4 | – | – | – | – |
|                                    |            | 4000 A | 1 <sup>1)</sup> | 2 <sup>2)</sup> | – | – | 5 | 6 | – | – |
| C                                  | 2000 A     | 1      | 2               | –               | 4 | 5 | 6 | 7 | 8 |   |
|                                    | 2500 A     | 1      | 2               | –               | 4 | 5 | 6 | 7 | 7 |   |
|                                    | 3200 A     | 1      | 2               | –               | 4 | 5 | 6 | 7 | 7 |   |

## Size 3

|                                    |                    |        |   |   |   |   |   |   |   |   |
|------------------------------------|--------------------|--------|---|---|---|---|---|---|---|---|
| Short-circuit<br>Breaking capacity | H                  | 4000 A | 1 | 2 | 3 | 4 | 5 | 6 | — | — |
|                                    |                    | 5000 A | 1 | 2 | — | — | 5 | 6 | — | — |
|                                    |                    | 6300 A | 1 | — | — | — | — | — | — | — |
|                                    | E, C <sup>3)</sup> | 4000 A | 1 | 2 | — | 4 | 5 | 6 | — | — |
|                                    |                    | 5000 A | 1 | 2 | — | — | 5 | 6 | — | — |
|                                    |                    | 6300 A | 1 | — | — | — | — | — | — | — |

<sup>1)</sup> The 4000 A vertical connections for the 3WA1 have different dimensions from the 3WL1. Dimensionally compatible connections can be ordered with the additional Z option D01.

<sup>2)</sup> Also available for 4-pole circuit breakers with Z option D04: rear main connections (top and bottom) with same pole spacing of phases (only for N pole, left).

<sup>3)</sup> 130 kA for 4-pole circuit breakers

# Guide frames for AC

The structure shown below is intended as an overview of each position and its meaning.  
For a complete and valid configuration of your guide frame, please use our online configurator at [www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

|                                  |                                                                                                                                                     | 5                  | 6 | 7                                                                                    | 8 | – | 9 | 10 | 11 | 12 | – | 13 | 14 | 15 | 16 |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---|--------------------------------------------------------------------------------------|---|---|---|----|----|----|---|----|----|----|----|
|                                  |                                                                                                                                                     |                    |   |                                                                                      |   |   | A | A  |    |    |   | 1  |    |    | 1  |
| Push-in connection <sup>1)</sup> | SZ 1, SZ 2, SZ 3                                                                                                                                    | X7, X6, X5         |   | Non-automatic circuit breakers without ready4COM feature                             |   | A |   |    |    |    |   |    |    |    |    |
|                                  |                                                                                                                                                     | X8, X7, X6, X5     |   | Circuit breakers/non-automatic circuit breakers with ready4COM feature               |   | B |   |    |    |    |   |    |    |    |    |
|                                  | SZ 2, SZ 3                                                                                                                                          | X9, X8, X7, X6, X5 |   | Including external trip controller ETC600 for circuit breakers with ETU600 LSIG Hi-Z |   | K |   |    |    |    |   |    |    |    |    |
| Position signaling switch        | Without position signaling switch                                                                                                                   |                    |   |                                                                                      |   |   |   |    |    |    |   |    |    |    | A  |
|                                  | Position signaling switch PSS (3 × connected position, 2 × test position, 1 × disconnected position)                                                |                    |   |                                                                                      |   |   |   |    |    |    |   |    |    |    | C  |
|                                  | Position signaling switch PSS-COM (1 × connected position, 1 × test position, 1 × disconnected position) plus connection to a communications module |                    |   |                                                                                      |   |   |   |    |    |    |   |    |    |    | G  |

<sup>1)</sup> Conversion to screw connection is possible with Z option N03.

# Guide frames for DC

The structure shown below is intended as an overview of each position and its meaning.  
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[www.siemens.com/lowvoltage/3wa-configurator](http://www.siemens.com/lowvoltage/3wa-configurator)

| 3WA8                            |                                                                                                                                                     |                                          |                                  | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------|---|---|---|---|---|----|----|----|----|----|----|----|
|                                 |                                                                                                                                                     |                                          |                                  |   |   |   | — | A | U  |    |    | —  | 1  |    | 1  |
| Guide frames                    |                                                                                                                                                     |                                          |                                  |   |   |   |   |   |    |    |    |    |    |    |    |
| Size (SZ)                       | 2                                                                                                                                                   |                                          |                                  | 2 |   |   |   |   |    |    |    |    |    |    |    |
| Max. rated current $I_{n\ max}$ | 2000 A                                                                                                                                              |                                          |                                  | 2 | 0 |   |   |   |    |    |    |    |    |    |    |
|                                 | 4000 A                                                                                                                                              |                                          |                                  | 4 | 0 |   |   |   |    |    |    |    |    |    |    |
| Short-circuit breaking capacity | D                                                                                                                                                   | ≤ 600 V DC                               | 25 kA at 600 V DC                |   |   | 1 |   |   |    |    |    |    |    |    |    |
|                                 | E                                                                                                                                                   | ≤ 1000 V DC                              | 20 kA at 1000 V DC               |   |   | 8 |   |   |    |    |    |    |    |    |    |
|                                 |                                                                                                                                                     | ≤ 1500 V DC                              | 20 kA at 1500 V DC <sup>1)</sup> |   |   | 8 |   |   |    |    |    |    |    |    |    |
| Number of poles                 | 3-pole                                                                                                                                              |                                          |                                  |   |   |   |   |   |    | 3  |    |    |    |    |    |
|                                 | 4-pole                                                                                                                                              |                                          |                                  |   |   |   |   |   |    | 4  |    |    |    |    |    |
| Connection                      | Withdrawable                                                                                                                                        | Vertical                                 |                                  |   |   |   |   |   |    |    | 1  |    |    |    |    |
|                                 |                                                                                                                                                     | Horizontal                               |                                  |   |   |   |   |   |    |    | 2  |    |    |    |    |
|                                 |                                                                                                                                                     | Front double hole                        |                                  |   |   |   |   |   |    |    | 3  |    |    |    |    |
|                                 |                                                                                                                                                     | Flange                                   |                                  |   |   |   |   |   |    |    | 4  |    |    |    |    |
|                                 |                                                                                                                                                     | Vertical on top/horizontal at the bottom |                                  |   |   |   |   |   |    |    | 5  |    |    |    |    |
|                                 |                                                                                                                                                     | Horizontal on top/vertical at the bottom |                                  |   |   |   |   |   |    |    | 6  |    |    |    |    |
|                                 |                                                                                                                                                     | Flange on top/horizontal at the bottom   |                                  |   |   |   |   |   |    |    | 7  |    |    |    |    |
|                                 |                                                                                                                                                     | Horizontal on top/flange at the bottom   |                                  |   |   |   |   |   |    |    | 8  |    |    |    |    |
| Secondary disconnect terminal   | Push-in connection                                                                                                                                  | X7, X6, X5                               |                                  |   |   |   |   |   |    |    |    |    | A  |    |    |
|                                 |                                                                                                                                                     | X8, X7, X6, X5                           |                                  |   |   |   |   |   |    |    |    |    | B  |    |    |
| Position signaling switch       | Without position signaling switch                                                                                                                   |                                          |                                  |   |   |   |   |   |    |    |    |    |    |    | A  |
|                                 | Position signaling switch PSS (3 × connected position, 2 × test position, 1 × disconnected position)                                                |                                          |                                  |   |   |   |   |   |    |    |    |    |    |    | C  |
|                                 | Position signaling switch PSS-COM (1 × connected position, 1 × test position, 1 × disconnected position) plus connection to a communications module |                                          |                                  |   |   |   |   |   |    |    |    |    |    |    | G  |

<sup>1)</sup> 1500 V DC applications only for 4-pole circuit breakers and for breaking capacity E

# Accessories and spare parts

## Accessories for electronic trip unit

### Electronic trip unit



- Note:** The electronic trip unit is supplied without an option plug. The option plug must be ordered separately. The range of functions of the ETU600 corresponds to the "Current metering" application package.

#### Basic Protective functions

|                 | Article No.   | Price € |
|-----------------|---------------|---------|
| ETU300 LSI/LSIG | 3WA9111-0EE32 |         |
| ETU600 LSI/LSIG | 3WA9111-0EE62 |         |
| ETU600 LSI Hi-Z | 3WA9111-0EE63 |         |

### Spare part battery for ETU600



|  | Article No.   | Price € |
|--|---------------|---------|
|  | 3WA9111-0EE81 |         |

### Option plug



| Basic configuration                                                                                 | Rated current $I_n$ | SZ 1 | SZ 2 | SZ 3 | Article No. | Price € |
|-----------------------------------------------------------------------------------------------------|---------------------|------|------|------|-------------|---------|
| Protective function LSI: LT, ST, INST                                                               |                     |      |      |      | 3WA9111-0EB | ..      |
| Protective function LSIG: LT, ST, INST, GF<br>(ground-fault protection with extended setting range) |                     |      |      |      | 3WA9111-0EX | ..      |
|                                                                                                     | 250 A               | ■    | ■    | –    |             | 02      |
|                                                                                                     | 315 A               | ■    | ■    | –    |             | 03      |
|                                                                                                     | 400 A               | ■    | ■    | –    |             | 04      |
|                                                                                                     | 500 A               | ■    | ■    | –    |             | 05      |
|                                                                                                     | 630 A               | ■    | ■    | –    |             | 06      |
|                                                                                                     | 800 A               | ■    | ■    | ■    |             | 08      |
|                                                                                                     | 1000 A              | ■    | ■    | ■    |             | 10      |
|                                                                                                     | 1250 A              | ■    | ■    | ■    |             | 12      |
|                                                                                                     | 1600 A              | ■    | ■    | ■    |             | 16      |
|                                                                                                     | 2000 A              | ■    | ■    | ■    |             | 20      |
|                                                                                                     | 2500 A              | ■    | ■    | ■    |             | 25      |
|                                                                                                     | 3200 A              | –    | ■    | ■    |             | 32      |
|                                                                                                     | 4000 A              | –    | ■    | ■    |             | 40      |
|                                                                                                     | 5000 A              | –    | –    | ■    |             | 50      |
|                                                                                                     | 6300 A              | –    | –    | ■    |             | 63      |

### Function packages for ETU600



| Protective and alarm functions                                                                                                                             | Article No.   | Price € |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------|
| Ground fault alarm (GF alarm)                                                                                                                              | 3WA9111-0ES01 |         |
| Directional short-time-delayed short-circuit protection (dST) and reverse power protection (RP) <sup>1)</sup><br>(requires an optional voltage tap module) | 3WA9111-0ES05 |         |
| Enhanced Protective functions (EPF) <sup>1)</sup>                                                                                                          | Article No.   | Price € |
| Full package with unbalance, voltage, active power, frequency, THD and phase sequence detection                                                            | 3WA9111-0ES11 |         |
| Phase unbalance current and phase unbalance voltage                                                                                                        | 3WA9111-0ES12 |         |
| Undervoltage and overvoltage                                                                                                                               | 3WA9111-0ES13 |         |
| Active power import and active power export                                                                                                                | 3WA9111-0ES14 |         |
| Underfrequency and overfrequency                                                                                                                           | 3WA9111-0ES15 |         |
| Total harmonic distortion for current and voltage                                                                                                          | 3WA9111-0ES16 |         |
| Phase sequence detection                                                                                                                                   | 3WA9111-0ES17 |         |
| Functional expansions                                                                                                                                      | Article No.   | Price € |
| Second protection parameter set                                                                                                                            | 3WA9111-0ES21 |         |
| Waveform memory                                                                                                                                            | 3WA9111-0ES24 |         |
| Extended metering function <sup>1)</sup>                                                                                                                   | Article No.   | Price € |
| Upgrade to metering values from the PMF-II Basic Power Monitoring metering function<br>(metering values, see catalog page 1/25)                            | 3WA9111-0ES52 |         |
| Upgrade to metering values from the PMF-III Advanced Power Monitoring metering function<br>(metering values, see catalog page 1/25)                        | 3WA9111-0ES53 |         |

### Licenses to activate test function in SENTRON Powerconfig software

| Version                                                                                                                                                                                        | Article No.        | Price € |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------|
| Standard test license for testing the protective functions of SENTRON circuit breakers.<br>The license is time-limited to 365 days.                                                            | 7KN2720-0CE00-1YC1 |         |
| Advanced test license for testing the protective functions and the enhanced protective functions<br>(EPF) of the SENTRON circuit breakers. The license is time-limited to 365 days. <b>new</b> | 7KN2720-0CE00-2YC1 |         |

<sup>1)</sup> Requires an internal voltage tap and a voltage tap module

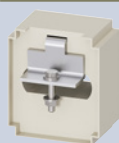
## Accessories for electronic trip unit

### Upgrading to ready4COM feature through BSS200 breaker status sensor for ETU600



| Version                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Article No.   | Price € |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------|
| <ul style="list-style-type: none"> <li>Gathers information about the statuses of the circuit breaker via signaling switches and transmits it to the <b>CubicleBUS<sup>2</sup></b></li> <li>Controls the communication-capable CC-COM closing coil and the ST-COM shunt trip in a circuit breaker with the ready4COM feature</li> <li>The BSS200 breaker status sensor is fitted in every circuit breaker with ETU600 of the ready4COM application package and with the PMF-I to PMF-III metering functions</li> </ul> | 3WA9111-0EC40 |         |

### External current sensors for the N conductor



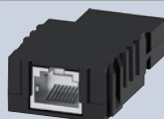
| Version                              | Size | Article No.   | Price € |
|--------------------------------------|------|---------------|---------|
| For mounting on busbar               | 1    | 3WA9111-0AA21 |         |
|                                      | 2    | 3WA9111-0AA22 |         |
|                                      | 3    | 3WA9111-0AA23 |         |
| For busbar connection DIN connection | 1    | 3WA9111-0AA31 |         |
|                                      | 2    | 3WA9111-0AA32 |         |
|                                      | 3    | 3WA9111-0AA33 |         |

### Cover for electronic trip unit



| <ul style="list-style-type: none"> <li>The scope of supply includes both the top cover with safety lock and the sealable bottom cover of the rotary coding switches.</li> </ul> |               |         |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------|--|
| Accessory for                                                                                                                                                                   | Article No.   | Price € |  |
| ETU300                                                                                                                                                                          | 3WA9111-0EM21 |         |  |
| ETU600                                                                                                                                                                          | 3WA9111-0EM22 |         |  |

### Adapter for connecting the ETU300 to the TD400



| Version                                                                                                                                                                        | Article No.   | Price € |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------|
| Via the adapter, the ETU300 can be connected to the TD400 to supply it with an external voltage. There is no parameterization or documentation option via SENTRON Powerconfig. | 3VW9011-0AT46 |         |

### Automatic reset of the reclosing lockout



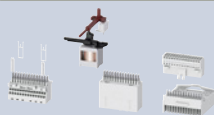
| Version                                       | Article No.   | Price € |
|-----------------------------------------------|---------------|---------|
| Spare part for option K01 or for retrofitting | 3WA9111-0EM31 |         |

### Remote trip alarm reset coils



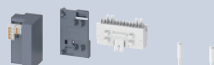
| <ul style="list-style-type: none"> <li>For mechanical tripped indicator</li> <li>Including automatic reset of the reclosing lockout 3WA9111-0EM31</li> </ul> |               |         |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------|--|
| Voltage                                                                                                                                                      | Article No.   | Price € |  |
| 24 ... 30 V DC                                                                                                                                               | 3WA9111-0EM42 |         |  |
| 48 ... 60 V DC                                                                                                                                               | 3WA9111-0EM44 |         |  |
| 110 ... 127 V AC/110 ... 125 V DC                                                                                                                            | 3WA9111-0EM45 |         |  |
| 208 ... 240 V AC/220 ... 250 V DC                                                                                                                            | 3WA9111-0EM46 |         |  |

### Second tripping solenoid (F6) with reclosing lockout



| Version                                                                                                                           | Article No.   | Price € |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------|---------|
| For external control via the external trip controller ETC600, including the necessary parts for the secondary disconnect terminal | 3WA9111-0EM61 |         |

### External trip controller ETC600

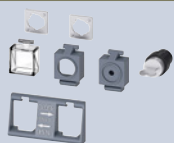


| Version                                                                                                                             | Article No.   | Price € |
|-------------------------------------------------------------------------------------------------------------------------------------|---------------|---------|
| Including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, adapter for mounting on DIN rail | 3WA9111-0EM62 |         |

# Accessories and spare parts

## Locking provisions and interlocks

### Interlocking sets for mechanical Open/Close



- Consisting of two transparent covers each for sealing or for attaching padlocks (padlocks not included in scope of supply)
- Cover with 6.35 mm hole (for tool actuation)
- Lock mount for safety lock for key operation

| Version             | Article No.   | Price € |
|---------------------|---------------|---------|
| Without safety lock | 3WA9111-0BA21 |         |
| Made by CES         | 3WA9111-0BA22 |         |
| Made by IKON        | 3WA9111-0BA23 |         |

### Locking provision against unauthorized closing from the operator panel



- The disconnecter unit fulfills the requirements for main circuit breakers acc. to EN 60204-1
- Spare part for options S01 to S09

| Type                                           | Scope of supply                          | Article No.   | Price € |
|------------------------------------------------|------------------------------------------|---------------|---------|
| Made by CES                                    | Locks, cylinders and keys included (S01) | 3WA9111-0BA35 |         |
| Made by IKON                                   | Locks, cylinders and keys included (S03) | 3WA9111-0BA36 |         |
| Assembly kit FORTRESS or CASTELL <sup>1)</sup> | Without locks, cylinders or keys (S05)   | 3WA9111-0BA31 |         |
| Made by KIRK-Key <sup>1)</sup>                 | Without locks, cylinders or keys (S06)   | 3WA9111-0BA33 |         |
| Assembly kit for padlocks                      | Without padlock (S07)                    | 3WA9111-0BA37 |         |
| Made by RONIS                                  | Locks, cylinders and keys included (S08) | 3WA9111-0BA32 |         |
| Made by PROFALUX                               | Locks, cylinders and keys included (S09) | 3WA9111-0BA34 |         |

### Locking provision against unauthorized closing of the withdrawable circuit breaker



- The disconnecter unit fulfills the requirements for main circuit breakers acc. to EN 60204-1
- Consisting of lock in the guide frame, active in connected position, function is retained when circuit breaker is replaced
- Spare part for option R60, R61, R68

| Type                           | Scope of supply                    | Article No.   | Price € |
|--------------------------------|------------------------------------|---------------|---------|
| Made by CES                    | Locks, cylinders and keys included | 3WA9111-0BA51 |         |
| Made by IKON                   | Locks, cylinders and keys included | 3WA9111-0BA53 |         |
| Made by KIRK-Key <sup>1)</sup> | Without locks, cylinders or keys   | 3WA9111-0BA57 |         |
| Made by RONIS                  | Locks, cylinders and keys included | 3WA9111-0BA58 |         |
| Made by PROFALUX               | Locks, cylinders and keys included | 3WA9111-0BA50 |         |

### Locking provisions for charging handle with padlock



| Version            | Scope of supply | Article No.   | Price € |
|--------------------|-----------------|---------------|---------|
| Spare part for S33 | Without padlock | 3WA9111-0BA71 |         |

### Locking provision to prevent movement of the withdrawable circuit breaker



- Safety lock for mounting onto the circuit breaker
- Spare part for option S71, S75, S76

| Type                           | Scope of supply                    | Article No.   | Price € |
|--------------------------------|------------------------------------|---------------|---------|
| Made by CES                    | Locks, cylinders and keys included | 3WA9111-0BA73 |         |
| Made by IKON                   | Locks, cylinders and keys included | 3WA9111-0BA75 |         |
| Made by PROFALUX               | Locks, cylinders and keys included | 3WA9111-0BA76 |         |
| Made by RONIS                  | Locks, cylinders and keys included | 3WA9111-0BA77 |         |
| Made by KIRK-Key <sup>1)</sup> | Without locks, cylinders or keys   | 3WA9111-0BA80 |         |

<sup>1)</sup> Locks, cylinders and keys must be ordered from the manufacturer.  
 Suitable cylinder lock KIRK Key C 900-301.  
 Suitable lock FORTRESS CLIS X005.  
 Suitable lock CASTELL FS2.



## Locking provisions and interlocks

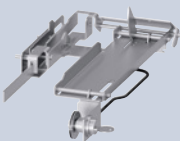
### Interlocking systems



- 2 of the same keys for 3 circuit breakers
- Locking provision in OFF position
- Lock in the operator panel
- A maximum of 2 circuit breakers can be switched on

| Type        | Article No.   | Price € |
|-------------|---------------|---------|
| Made by CES | 3WA9111-0BA43 |         |

### Locking mechanisms to prevent movement of the withdrawable circuit breakers in the disconnected position



- Consisting of Bowden cable and the breaker mechanism in the control cabinet door
- Spare part for option R81, R85, R86
- **Note:** Not possible in combination with "Locking mechanism to prevent opening of the control cabinet door" (order code "R30") or "Locking mechanism to prevent movement with the control cabinet door open" (order code "R50")

| Type             | Article No.   | Price € |
|------------------|---------------|---------|
| Made by CES      | 3WA9111-0BA81 |         |
| Made by IKON     | 3WA9111-0BA82 |         |
| Made by PROFALUX | 3WA9111-0BA83 |         |
| Made by RONIS    | 3WA9111-0BA84 |         |

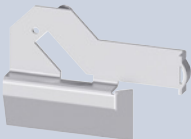
### Locking mechanisms to prevent opening of the control cabinet door when the circuit breaker is closed



- Defeatable
- **Note:** Not possible in combination with "Locking mechanisms to prevent movement of the withdrawable circuit breakers in the disconnected position" (order codes "R81", "R85" or "R86").

| Version                   | Article No.                   | Price €       |
|---------------------------|-------------------------------|---------------|
| Spare part for option S30 | Fixed-mounted circuit breaker | 3WA9111-0BB12 |
| Spare part for option R30 | Guide frames                  | 3WA9111-0BB13 |

### Locking mechanisms to prevent movement when the control cabinet door is open



- Mounted on guide frame
- **Note:** Not possible in combination with "Locking mechanisms to prevent movement of the withdrawable circuit breakers in the disconnected position" (order codes "R81", "R85" or "R86").

| Version                   | Article No.   | Price € |
|---------------------------|---------------|---------|
| Spare part for option R50 | 3WA9111-0BB15 |         |

### Mechanical interlocks



- With Bowden cable 2000 mm (one required for each circuit breaker)

| Type                                                      | Circuit breaker and guide frame when ordered separately | Spare part for           | Article No.   | Price € |
|-----------------------------------------------------------|---------------------------------------------------------|--------------------------|---------------|---------|
| Fixed-mounted circuit breaker                             | –                                                       | Option S55               | 3WA9111-0BB21 |         |
| Module for withdrawable circuit breakers with guide frame | –                                                       | Option R55 <sup>1)</sup> | 3WA9111-0BB22 |         |
| Module for guide frame                                    | ✓                                                       | Option R56               | 3WA9111-0BB23 |         |
| Module for withdrawable circuit breaker                   | ✓                                                       | Option R57               | 3WA9111-0BB24 |         |
| Adapter for size 3 withdrawable circuit breaker           | ✓                                                       | –                        | 3WA9111-0BB25 |         |

### Coupling on the circuit breaker for mutual interlocking with Bowden cable



- Can be used in all circuit breakers

| Article No.   | Price € |
|---------------|---------|
| 3WA9111-0BB31 |         |

### Bowden cable for mutual mechanical interlocking



| Length  | Article No.   | Price € |
|---------|---------------|---------|
| 2000 mm | 3WA9111-0BB41 |         |
| 3000 mm | 3WA9111-0BB42 |         |
| 4500 mm | 3WA9111-0BB43 |         |

<sup>1)</sup> Not available in combination with R40

# Accessories and spare parts

## Indicators and control elements

### Ready-to-close signaling switches (S20)



| Version                                               | Article No.   | Price € |
|-------------------------------------------------------|---------------|---------|
| Spare part for signaling switch installed as standard | 3WA9111-0AH01 |         |

### 1st trip alarm switch (S24)



| Version                                               | Article No.   | Price € |
|-------------------------------------------------------|---------------|---------|
| Spare part for signaling switch installed as standard | 3WA9111-0AH02 |         |

### 2nd trip alarm switch (S25)



- Can only be used with a circuit breaker with an electronic trip unit without ready4COM
- The 1st trip alarm switch (1 changeover contact) is installed in every circuit breaker with a trip unit as standard

| Version                   | Contacts | Article No.   | Price € |
|---------------------------|----------|---------------|---------|
| Spare part for option K06 | 1 NO     | 3WA9111-0AH03 |         |

### Mechanical operating cycles counter (5-digit)



| Version                   | For circuit breakers/non-automatic circuit breakers | Article No.   | Price € |
|---------------------------|-----------------------------------------------------|---------------|---------|
| Spare part for option C01 | With manual operating mechanism                     | 3WA9111-0AH04 |         |
|                           | With spring charging motor                          | 3WA9111-0AH05 |         |

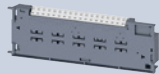
### Spring charge signaling switch (S21)



- Standard when a spring charging motor is installed to charge the stored energy mechanism
- When a spring charging motor is retrofitted, the spring charge signaling switch can also be retrofitted

| Contacts | Article No.   | Price € |
|----------|---------------|---------|
| 1 NO     | 3WA9111-0AH06 |         |

### Position signaling switch for withdrawable circuit breakers



- All conventional contacts are implemented as changeover contacts

| Contacts              | Article No.                                                                                                                                                                  | Price €       |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| PSS321                | 3 × connected position, 2 × test position, 1 × disconnected position                                                                                                         | 3WA9111-0AH11 |
| PSS111-COM            | 1 × connected position, 1 × test position, 1 × disconnected position and option for connection to a communications module COM (Signal: "disconnected position" and "absent") | 3WA9111-0AH12 |
| PSS400-COM <b>new</b> | 4 × connected position and option for connection to a communications module COM (Signal: "disconnected position" and "absent")                                               | 3WA9111-0AH13 |
| PSS600 <b>new</b>     | 6 × connected position                                                                                                                                                       | 3WA9111-0AH14 |
| PSS111 <b>new</b>     | 1 × connected position, 1 × test position, 1 × disconnected position                                                                                                         | 3WA9111-0AH15 |

### Local electric close (S10) for operator panel



- Scope of supply: Button + wiring
- Not possible with motor disconnect switch
- **Note:** Possible only for circuit breakers with closing coil



| Version                                          | Article No.   | Price € |
|--------------------------------------------------|---------------|---------|
| With sealing cap, spare part for option C11      | 3WA9111-0AH21 |         |
| With CES assembly kit, Spare part for option C12 | 3WA9111-0AH22 |         |
| With IKON assembly kit                           | 3WA9111-0AH23 |         |

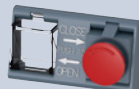
### Motor disconnect switch (S12)



- Mounting onto operator panel
- Only in combination with the spring charging motor for charging the stored energy mechanism
- Not available in combination with local electric close

| Version                   | Article No.   | Price € |
|---------------------------|---------------|---------|
| Spare part for option C25 | 3WA9111-0AH24 |         |

### Emergency OPEN button

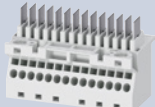
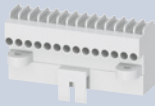


- Mushroom pushbutton instead of local mechanical open

| Version                   | Article No.   | Price € |
|---------------------------|---------------|---------|
| Spare part for option C24 | 3WA9111-0AH25 |         |

## Secondary disconnect terminals for circuit breakers and guide frames

- For size 1, up to 4 secondary disconnect terminal blocks are possible; for sizes 2 and 3, up to 5 secondary disconnect terminal blocks are possible
- Circuit breakers and non-automatic circuit breakers with secondary disconnect terminal blocks are supplied from the factory:
  - Non-automatic circuit breakers with 3 blocks
  - Non-automatic circuit breakers with ready4COM feature with 4 blocks
  - Circuit breakers with ETU600 LSI or LSI with 4 blocks
  - Circuit breakers with ETU600 LSI-HiZ with 5 blocks

| Secondary disconnect terminal                                                       |                                |                                                                                      |               |         |
|-------------------------------------------------------------------------------------|--------------------------------|--------------------------------------------------------------------------------------|---------------|---------|
|                                                                                     | Version                        | Type                                                                                 | Article No.   | Price € |
|    | Base part ①                    |                                                                                      | 3WA9111-0AB01 |         |
|                                                                                     | 1000 V extension <sup>1)</sup> |                                                                                      | 3WA9111-0AB02 |         |
|    | Manual connector ②             | Screw connection                                                                     | 3WA9111-0AB03 |         |
|                                                                                     |                                | Push-in connection                                                                   | 3WA9111-0AB04 |         |
|                                                                                     |                                | Ring lug connection                                                                  | 3WA9111-0AB05 |         |
|  | Coding kits ③                  | For secondary disconnect terminal blocks X5 to X9 for fixed-mounted circuit breakers | 3WA9111-0AB07 |         |
|  | Sliding contact module ④       | For guide frames                                                                     | 3WA9111-0AB08 |         |
|  | Blanking block                 |                                                                                      | 3WA9111-0AB12 |         |

For a complete secondary disconnect terminal block, you must order:

Fixed-mounted version: ① + ② + ③

Withdrawable version: ① + ④ + ②

<sup>1)</sup> Secondary disconnect terminal for circuit breakers with breaking capacity C and E must be ordered separately

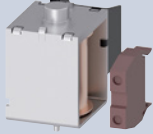
## Auxiliary releases

| Closing coil (CC)/shunt trip (ST)                                                   |                                                                                    |                                   |               |         |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------|---------------|---------|
|  | • Suitable for uninterrupted duty                                                  |                                   |               |         |
|                                                                                     | Version                                                                            | Voltage                           | Article No.   | Price € |
|                                                                                     | 100% OP                                                                            | 24 ... 30 V DC                    | 3WA9111-0AD02 |         |
|                                                                                     | Switching time ≤ 80 ms                                                             | 48 ... 60 V DC                    | 3WA9111-0AD04 |         |
|                                                                                     |                                                                                    | 110 ... 127 V AC/110 ... 125 V DC | 3WA9111-0AD05 |         |
|                                                                                     |                                                                                    | 208 ... 240 V AC/220 ... 250 V DC | 3WA9111-0AD06 |         |
| Closing coil (CC-COM)/shunt trip (ST-COM)                                           |                                                                                    |                                   |               |         |
|  | • Suitable for uninterrupted duty                                                  |                                   |               |         |
|                                                                                     | Version                                                                            | Voltage                           | Article No.   | Price € |
|                                                                                     | For circuit breakers and non-automatic circuit breakers with the ready4com feature | 24 ... 30 V DC                    | 3WA9111-0AD32 |         |
|                                                                                     |                                                                                    | 48 ... 60 V DC                    | 3WA9111-0AD34 |         |
|                                                                                     |                                                                                    | 110 ... 127 V AC/110 ... 125 V DC | 3WA9111-0AD35 |         |
|                                                                                     | Switching time ≤ 80 ms                                                             | 208 ... 240 V AC/220 ... 250 V DC | 3WA9111-0AD36 |         |
|                                                                                     | Switching time via COM ≤ 120 ms                                                    |                                   |               |         |

# Accessories and spare parts

## Auxiliary releases

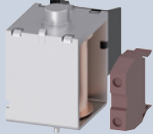
### Closing coils (CC)



- For momentary duty, with cut-off switch S15 (NC)

| Version              | Voltage                           | Article No.   | Price € |
|----------------------|-----------------------------------|---------------|---------|
| 5% OP                | 24 ... 30 V DC                    | 3WA9111-0AD12 |         |
| Switching time 50 ms | 48 ... 60 V DC                    | 3WA9111-0AD14 |         |
|                      | 110 ... 127 V AC/110 ... 125 V DC | 3WA9111-0AD15 |         |
|                      | 208 ... 240 V AC/220 ... 250 V DC | 3WA9111-0AD16 |         |

### Shunt trips (ST)



- For momentary duty, with cut-off switch S14 (NO)

| Version              | Voltage                           | Article No.   | Price € |
|----------------------|-----------------------------------|---------------|---------|
| 5% OP                | 24 ... 30 V DC                    | 3WA9111-0AD22 |         |
| Switching time 50 ms | 48 ... 60 V DC                    | 3WA9111-0AD24 |         |
|                      | 110 ... 127 V AC/110 ... 125 V DC | 3WA9111-0AD25 |         |
|                      | 208 ... 240 V AC/220 ... 250 V DC | 3WA9111-0AD26 |         |

### Capacitor trip device



- For shunt trips
- Storage time 5 min
- Also suitable for 3VL, 3VA, 3WL and 3WN circuit breakers
- Note:** Rated control supply voltage must match the rated control supply voltage of the shunt trips

| Rated control supply voltage/rated operational voltage | Article No.   | Price €       |
|--------------------------------------------------------|---------------|---------------|
| 50/60 Hz AC                                            | DC            |               |
| 220 ... 240 V                                          | 220 ... 250 V | 3WA9111-0AD81 |

### Undervoltage release (UVR)



| Version                                                               | Voltage                           | Article No.   | Price € |
|-----------------------------------------------------------------------|-----------------------------------|---------------|---------|
| Instantaneous $\leq 0.08$ s (UVR) and short-time delayed $\leq 0.2$ s | 24 ... 30 V DC                    | 3WA9111-0AE02 |         |
|                                                                       | 48 ... 60 V DC                    | 3WA9111-0AE04 |         |
|                                                                       | 110 ... 127 V AC/110 ... 125 V DC | 3WA9111-0AE05 |         |
|                                                                       | 208 ... 240 V AC/220 ... 250 V DC | 3WA9111-0AE06 |         |
|                                                                       | 380 ... 415 V AC                  | 3WA9111-0AE07 |         |
| Delayed (UVR-t) <sup>1)</sup> , adjustable delay 0.2 ... 3.2 s        | 48 V DC                           | 3WA9111-0AE13 |         |
|                                                                       | 60 V DC                           | 3WA9111-0AE14 |         |
|                                                                       | 110 ... 127 V AC/110 ... 125 V DC | 3WA9111-0AE15 |         |
|                                                                       | 208 ... 240 V AC/220 ... 250 V DC | 3WA9111-0AE16 |         |
|                                                                       | 380 ... 415 V AC                  | 3WA9111-0AE17 |         |

<sup>1)</sup> The maximum allowable cable length to the actuator for quick shutdown is currently  $\leq 50$  m (maximum allowable cable length between the terminals  $\leq 100$  m).

## Operating mechanism

### Spring charging motor to charge the stored energy mechanism



| Voltage                           | Article No.   | Price € |
|-----------------------------------|---------------|---------|
| 24 ... 30 V DC                    | 3WA9111-0AF02 |         |
| 48 ... 60 V DC                    | 3WA9111-0AF04 |         |
| 110 ... 127 V AC/110 ... 125 V DC | 3WA9111-0AF05 |         |
| 208 ... 240 V AC/220 ... 250 V DC | 3WA9111-0AF06 |         |

## Auxiliary contacts

### Auxiliary switches (AUX)

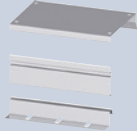


| Contacts    | Article No.   | Price € |
|-------------|---------------|---------|
| 2 NO + 2 NC | 3WA9111-0AG01 |         |
| 2 NO        | 3WA9111-0AG02 |         |
| 1 NO + 1 NC | 3WA9111-0AG03 |         |

## Door sealing frame, protective cover

| Door sealing frame                                                                |                                                                                                                                                                   |               |         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------|
|  | Version                                                                                                                                                           | Article No.   | Price € |
|                                                                                   | Spare part for option T40                                                                                                                                         | 3WA9111-0AP01 |         |
| Protective covers IP55                                                            |                                                                                                                                                                   |               |         |
|  | <ul style="list-style-type: none"><li>• Cannot be used in conjunction with door sealing frames</li><li>• Hood removable and can be opened on both sides</li></ul> |               |         |
|                                                                                   |                                                                                                                                                                   | Article No.   | Price € |
|                                                                                   |                                                                                                                                                                   | 3WA9111-0AP03 |         |

## Arc chute, arc chute cover

| Arc chute                                                                           |                                                                                                                                                                                                                                                   |      |                   |                                                    |         |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------------------|----------------------------------------------------|---------|
|    | Voltage                                                                                                                                                                                                                                           | Size | Breaking capacity | Article No.                                        | Price € |
|                                                                                     | 690 V AC                                                                                                                                                                                                                                          | 1    | N, S              | 3WA9111-0AS01                                      |         |
|                                                                                     |                                                                                                                                                                                                                                                   |      | M                 | 3WA9111-0AS02                                      |         |
|                                                                                     |                                                                                                                                                                                                                                                   | 2    | S, M, H           | 3WA9111-0AS10                                      |         |
|                                                                                     |                                                                                                                                                                                                                                                   |      | C                 | 3WA9111-0AS11                                      |         |
|                                                                                     |                                                                                                                                                                                                                                                   | 3    | H                 | 3WA9111-0AS17                                      |         |
|                                                                                     |                                                                                                                                                                                                                                                   |      | C                 | 3WA9111-0AS18                                      |         |
|                                                                                     | 1000 V AC                                                                                                                                                                                                                                         | 1    | E                 | For fixed-mounted breakers<br>3WA9111-0AS04        |         |
|                                                                                     |                                                                                                                                                                                                                                                   |      |                   | For withdrawable circuit breakers<br>3WA9111-0AS05 |         |
|                                                                                     |                                                                                                                                                                                                                                                   | 2    | E                 | 3WA9111-0AS12                                      |         |
|                                                                                     |                                                                                                                                                                                                                                                   | 3    | E                 | 3WA9111-0AS18                                      |         |
|                                                                                     | 600 V DC                                                                                                                                                                                                                                          | 2    | D                 | 3WA9111-0AS13                                      |         |
|                                                                                     | 1000 V DC                                                                                                                                                                                                                                         | 2    | E                 | 3WA9111-0AS14                                      |         |
| Arc chute cover                                                                     |                                                                                                                                                                                                                                                   |      |                   |                                                    |         |
|  | <ul style="list-style-type: none"> <li>Parts kit for guide frame</li> <li>Spare part for option R10</li> <li>Not available for: <ul style="list-style-type: none"> <li>Breaking capacity C, D and E</li> <li>4000 A size 2</li> </ul> </li> </ul> |      |                   |                                                    |         |
|                                                                                     | Number of poles                                                                                                                                                                                                                                   | Size |                   | Article No.                                        | Price € |
|                                                                                     | 3-pole                                                                                                                                                                                                                                            | 1    |                   | 3WA9111-0AS31                                      |         |
|                                                                                     |                                                                                                                                                                                                                                                   | 2    |                   | 3WA9111-0AS32                                      |         |
|                                                                                     |                                                                                                                                                                                                                                                   | 3    |                   | 3WA9111-0AS33                                      |         |
|                                                                                     | 4-pole                                                                                                                                                                                                                                            | 1    |                   | 3WA9111-0AS41                                      |         |
|                                                                                     |                                                                                                                                                                                                                                                   | 2    |                   | 3WA9111-0AS42                                      |         |
|                                                                                     |                                                                                                                                                                                                                                                   | 3    |                   | 3WA9111-0AS43                                      |         |

## Coding for withdrawable version

| Coding for withdrawable version                                                     |                                                       |               |         |
|-------------------------------------------------------------------------------------|-------------------------------------------------------|---------------|---------|
|  | Variant coding by the customer with 36 coding options |               |         |
|                                                                                     | Size                                                  | Article No.   | Price € |
|                                                                                     | 1, 2                                                  | 3WA9111-0AR11 |         |
|                                                                                     | 3                                                     | 3WA9111-0AR12 |         |

# Accessories and spare parts

## Grounding connection

### Grounding connection between the guide frame and the circuit breaker



- Up to 30 kA or 60 kA ground-fault current
- 2 modules must be used for up to 60 kA ground-fault current

| Contact module                    | Size               | Number of poles      | Article No.   | Price € |
|-----------------------------------|--------------------|----------------------|---------------|---------|
| For guide frames                  | 1, 2 <sup>1)</sup> |                      | 3WA9111-0BG01 |         |
|                                   | 3                  |                      | 3WA9111-0BG02 |         |
| For withdrawable circuit breakers | 1                  | 3-pole               | 3WA9111-0BG11 |         |
|                                   |                    | 4-pole               | 3WA9111-0BG21 |         |
|                                   | 2                  | 3-pole <sup>1)</sup> | 3WA9111-0BG12 |         |
|                                   |                    | 4-pole <sup>1)</sup> | 3WA9111-0BG22 |         |
|                                   | 3                  | 3-pole <sup>2)</sup> | 3WA9111-0BG13 |         |
|                                   |                    | 4-pole <sup>2)</sup> | 3WA9111-0BG23 |         |

<sup>1)</sup> Cannot be used for size 2 with breaking capacity C and size 2, 4000 A.

<sup>2)</sup> Not for breaking capacity E

## Support bracket

### Support bracket



- For mounting fixed-mounted circuit breakers on vertical plane
- Only for sizes 1 and 2 (1 set = 2 units)

| Article No.   | Price € |
|---------------|---------|
| 3WA9111-0BB50 |         |

## Modules of the CubicleBUS<sup>2</sup>

### COM190 PROFINET IO/Modbus TCP communications module <sup>1)</sup>



| Version                                                                                                                                                                                                                                          | Article No.   | Price € |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------|
| Circuit breaker internal or on DIN rail, including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, adapter for mounting on DIN rail, connecting cables and CubicleBUS <sup>2</sup> terminating resistor | 3WA9111-0EC13 |         |

### COM150 communications module Modbus RTU



| Version                                                                                                                                                                                                     | Article No.   | Price € |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------|
| Including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, adapter for mounting on DIN rail, connecting cables and terminating resistor for CubicleBUS <sup>2</sup> | 3WA9111-0EC15 |         |

### IOM230 digital input/output module (2 inputs and 3 outputs)



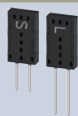
| Version                                                                                                                                                                                                     | Article No.   | Price € |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------|
| Including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, adapter for mounting on DIN rail, connecting cables and terminating resistor for CubicleBUS <sup>2</sup> | 3WA9111-0EC11 |         |
| <ul style="list-style-type: none"> <li>• Type of output contact: NO</li> <li>• Maximum uninterrupted current of an output at 110 ... 230 V AC: 0.2 A</li> </ul>                                             |               |         |

### IOM350 digital input/output module (3 inputs and 5 outputs)



| Version                                                                                                                                                        | Article No.   | Price € |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------|
| For mounting on DIN rail, including connecting cables and terminating resistor for CubicleBUS <sup>2</sup>                                                     | 3WA9111-0EC12 |         |
| <ul style="list-style-type: none"> <li>• Type of output contact: CO</li> <li>• Maximum uninterrupted current of an output at 110 ... 230 V AC: 10 A</li> </ul> |               |         |

### Terminating resistor for CubicleBUS<sup>2</sup>



| Version                                        | Article No.   | Price € |
|------------------------------------------------|---------------|---------|
| For CubicleBUS <sup>2</sup> on the last module | 3WA9111-0EC50 |         |

### Adapters



| Version                                                                                                                    | Article No.   | Price € |
|----------------------------------------------------------------------------------------------------------------------------|---------------|---------|
| For mounting the modules of the CubicleBUS <sup>2</sup> on the secondary disconnect terminal system of the circuit breaker | 3WA9111-0EC60 |         |
| For mounting the modules of the CubicleBUS <sup>2</sup> on DIN rail                                                        | 3WA9111-0EC61 |         |

### ZSI200 Zone-selective interlocking module



| Version                                                                                                                                                                                                     | Article No.   | Price € |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------|
| Including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, adapter for mounting on DIN rail, connecting cables and terminating resistor for CubicleBUS <sup>2</sup> | 3WA9111-0EC10 |         |

<sup>1)</sup> For connecting the Ethernet cable, connectors angled 90° to the right are recommended, e.g. PROFINET connector 6GK1901-1BB20-2AA0.

## Internal voltage tap

### Set of components for conversion of an existing internal voltage tap on the main conducting paths



| Conversion         | Circuit breaker | Size            | Article No.   | Price € |
|--------------------|-----------------|-----------------|---------------|---------|
| From bottom to top | 3-pole          | 1 <sup>1)</sup> | 3WA9111-OEK11 |         |
|                    |                 | 2               | 3WA9111-OEK12 |         |
|                    |                 | 3               | 3WA9111-OEK13 |         |
|                    | 4-pole          | 1 <sup>1)</sup> | 3WA9111-OEK21 |         |
|                    |                 | 2               | 3WA9111-OEK22 |         |
|                    |                 | 3               | 3WA9111-OEK23 |         |
| From top to bottom | 3-pole          | 1               | 3WA9111-OEK31 |         |
|                    |                 | 2               | 3WA9111-OEK32 |         |
|                    |                 | 3               | 3WA9111-OEK33 |         |
|                    | 4-pole          | 1               | 3WA9111-OEK41 |         |
|                    |                 | 2               | 3WA9111-OEK42 |         |
|                    |                 | 3               | 3WA9111-OEK43 |         |

### Retrofit of the internal voltage tap on the lower main conducting paths



| For breaking capacity                                                           | Set for circuit breaker | Size | Article No.   | Price € |
|---------------------------------------------------------------------------------|-------------------------|------|---------------|---------|
| N, S, M, H, C<br>with VTM680 voltage tap module,<br>with power supply of ETU600 | 3-pole                  | 1    | 3WA9111-OEK51 |         |
|                                                                                 |                         | 2    | 3WA9111-OEK52 |         |
|                                                                                 |                         | 3    | 3WA9111-OEK53 |         |
|                                                                                 | 4-pole                  | 1    | 3WA9111-OEK61 |         |
|                                                                                 |                         | 2    | 3WA9111-OEK62 |         |
|                                                                                 |                         | 3    | 3WA9111-OEK63 |         |
| E<br>with VTM640 voltage tap module                                             | 3-pole                  | 1    | 3WA9111-OEK55 |         |
|                                                                                 |                         | 2    | 3WA9111-OEK56 |         |
|                                                                                 |                         | 3    | 3WA9111-OEK57 |         |
|                                                                                 | 4-pole                  | 1    | 3WA9111-OEK65 |         |
|                                                                                 |                         | 2    | 3WA9111-OEK66 |         |
|                                                                                 |                         | 3    | 3WA9111-OEK67 |         |

### Retrofit kit to connect an external voltage transformer



| Size                                                                                | Article No.   | Price € |
|-------------------------------------------------------------------------------------|---------------|---------|
| 2, 3<br>including VTM640 voltage tap module and the necessary connection components | 3WA9111-OEK81 |         |

### Voltage tap module



| Version                                           | For breaking capacity | Article No.   | Price € |
|---------------------------------------------------|-----------------------|---------------|---------|
| VTM680, with power supply of ETU600 <sup>2)</sup> | N, S, M, H, C         | 3WA9111-OEM12 |         |
| VTM640                                            | E                     | 3WA9111-OEM11 |         |

<sup>1)</sup> For 3WA1 circuit breakers (frame size 1, fixed-mounted) with front terminals at the bottom, modification from voltage tap at the bottom to voltage tap at the top is not permissible.

<sup>2)</sup> When replacing the VTM680 voltage tap module in an 3WA air circuit breaker with an ID number lower than ID No. OE/230101500000, the internal cable harness of the voltage tap must also be replaced. In this case, the accessory "Retrofit of the internal voltage tap on the lower main conducting paths" is required.

# Accessories and spare parts

## Main conductor connections, fixed-mounted versions

### Front-accessible main connections according to DIN 43673, double hole for main connection at top

| Size | Breaking capacity   Rated current $I_n$                  | Article No.   | Price € |
|------|----------------------------------------------------------|---------------|---------|
| 1    | N, S   $\leq 1000$ A AC                                  | 3WA9111-0AL11 |         |
|      | N, S   1250 ... 2000 A AC; M, E   $\leq 2000$ A AC       | 3WA9111-0AL12 |         |
| 2    | S, M, H, E   2000 A AC; D, E   $\leq 2000$ A DC          | 3WA9111-0AL21 |         |
|      | S, M, H, E   2500 A AC                                   | 3WA9111-0AL22 |         |
|      | S, M, H, E   3200 A AC; D, E   4000 A DC                 | 3WA9111-0AL23 |         |
| 3    | 4000 A AC (up to a max. short-circuit current of 100 kA) | 3WA9111-0AL31 |         |

### Front-accessible main connections according to DIN 43673, double hole for main connection at bottom

| Size            | Breaking capacity   Rated current $I_n$                  | Article No.   | Price € |
|-----------------|----------------------------------------------------------|---------------|---------|
| 1 <sup>1)</sup> | N, S   $\leq 1000$ A AC                                  | 3WA9111-0AL13 |         |
|                 | N, S   1250 ... 2000 A AC; M, E   $\leq 2000$ A AC       | 3WA9111-0AL14 |         |
| 2               | S, M, H, E   2000 A AC; D, E   $\leq 2000$ A DC          | 3WA9111-0AL24 |         |
|                 | S, M, H, E   2500 A AC                                   | 3WA9111-0AL25 |         |
|                 | S, M, H, E   3200 A AC; D, E   4000 A DC                 | 3WA9111-0AL26 |         |
| 3               | 4000 A AC (up to a max. short-circuit current of 100 kA) | 3WA9111-0AL32 |         |

### Rear vertical main connections

| Size | Breaking capacity   Rated current $I_n$        | Article No.   | Price € |
|------|------------------------------------------------|---------------|---------|
| 1    | N, S, M, E   $\leq 2000$ A AC <sup>2)</sup>    | 3WA9111-0AM11 |         |
|      | N, S, M, E   2500 A AC                         | 3WA9111-0AM12 |         |
| 2    | S, M, H, C, E   $\leq 3200$ A AC <sup>3)</sup> | 3WA9111-0AM21 |         |
| 3    | H, C, E   $\leq 6300$ A AC                     | 3WA9111-0AM33 |         |

### Rear horizontal connection sets<sup>4)</sup> **new**

| Size | Breaking capacity   Rated current $I_n$   Number of poles | Article No.   | Price € |
|------|-----------------------------------------------------------|---------------|---------|
| 2    | S, M, H, E   4000 A, 3-pole                               | 3WA9111-0AX28 |         |
|      | S, M, H, E   4000 A, 4-pole                               | 3WA9111-0AX30 |         |
|      | S, M, H, E   4000 A, 4-pole (Spare part for Z option D04) | 3WA9111-0AX32 |         |

<sup>1)</sup> For 3WA1 circuit breakers (frame size 1, fixed-mounted) with front terminals at the bottom, modification from voltage tap at the bottom to voltage tap at the top is not permissible.

<sup>2)</sup> In the case of vertical connection size 1 with breaking capacity N and S, up to 1000 A one 3WA9111-0AM11 vertical connection is required for each connection, from 1250 A to 2000 A or with breaking capacity M or E two 3WA9111-0AM11 vertical connections are required for each connection.

<sup>3)</sup> In the case of vertical connection size 2, up to 2500 A one 3WA9111-0AM21 vertical connection is required for each connection for breaking capacity S, M, H, E, D, for 3200 A and always for breaking capacity C, two 3WA9111-0AM21 vertical connections are required for each connection.

<sup>4)</sup> A set contains top and bottom terminals and is approved only as a spare part for circuit breakers with the following article numbers: 3WL1240-3xxx2-xxxx, 3WL1240-4xxx2-xxxx, 3WL1240-5xxx2-xxxx 3WL1240-8xxx2-xxxx



## Main conductor connections for withdrawable units

| Front-accessible main connections according to DIN 43673, double hole at top or at bottom <sup>1)</sup> |                                       |                                                               |               |         |
|---------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------------|---------------|---------|
|                        | Size                                  | Breaking capacity   Rated current $I_n$                       | Article No.   | Price € |
|                                                                                                         | 1                                     | N, S   $\leq 1000$ A AC                                       | 3WA9111-0AN11 |         |
|                                                                                                         |                                       | N, S   1250 ... 2000 A AC; M, E   $\leq 2000$ A AC            | 3WA9111-0AN12 |         |
|                                                                                                         | 2                                     | N, S   1250 ... 2000 A AC; M, E   $\leq 2000$ A AC            | 3WA9111-0AN21 |         |
|                                                                                                         |                                       | S, M, H, E   2500 A AC                                        | 3WA9111-0AN22 |         |
|                                                                                                         |                                       | S, M, H, E   3200 A AC; D, E   4000 A DC                      | 3WA9111-0AN23 |         |
|                                                                                                         | 3                                     | H   4000 A AC                                                 | 3WA9111-0AN31 |         |
| Supports for front-accessible main connections according to DIN 43673                                   |                                       |                                                               |               |         |
|                        | Number of poles                       | Size                                                          | Article No.   | Price € |
|                                                                                                         | 3-pole, set for 3 bars, top or bottom | 1                                                             | 3WA9111-0AN81 |         |
|                                                                                                         |                                       | 2                                                             | 3WA9111-0AN82 |         |
|                                                                                                         |                                       | 3                                                             | 3WA9111-0AN83 |         |
|                                                                                                         | 4-pole, set for 4 bars, top or bottom | 1                                                             | 3WA9111-0AN84 |         |
|                                                                                                         |                                       | 2                                                             | 3WA9111-0AN85 |         |
|                                                                                                         |                                       | 3                                                             | 3WA9111-0AN86 |         |
| Rear vertical main connections                                                                          |                                       |                                                               |               |         |
|                        | Size                                  | Breaking capacity   Rated current $I_n$                       | Article No.   | Price € |
|                                                                                                         | 1                                     | N, S   $\leq 1000$ A AC                                       | 3WA9111-0AV11 |         |
|                                                                                                         |                                       | N, S   1250 ... 2000 A AC                                     | 3WA9111-0AV12 |         |
|                                                                                                         | 2                                     | S, M, H, E   2000 A AC; D, E   $\leq 2000$ A DC <sup>2)</sup> | 3WA9111-0AV21 |         |
|                                                                                                         |                                       | S, M, H, E   2500 A AC <sup>2)</sup>                          | 3WA9111-0AV22 |         |
|                                                                                                         |                                       | S, M, H, E   3200 A AC; D, E   4000 A DC <sup>2)</sup>        | 3WA9111-0AV23 |         |
|                                                                                                         | 3                                     | H, C, E   $\leq 5000$ A AC                                    | 3WA9111-0AV31 |         |
| Rear horizontal main connections                                                                        |                                       |                                                               |               |         |
|                      | Size                                  | Breaking capacity   Rated current $I_n$                       | Article No.   | Price € |
|                                                                                                         | 1                                     | N, S   $\leq 1000$ A AC                                       | 3WA9111-0AX11 |         |
|                                                                                                         |                                       | N, S   1250 ... 2000 A AC                                     | 3WA9111-0AX12 |         |
|                                                                                                         | 2                                     | S, M, H, E   2000 A AC; D, E   $\leq 2000$ A DC <sup>2)</sup> | 3WA9111-0AX21 |         |
|                                                                                                         |                                       | S, M, H, E   2500 A AC <sup>2)</sup>                          | 3WA9111-0AX22 |         |
|                                                                                                         |                                       | S, M, H, E   3200 A AC; D, E   4000 A DC <sup>2)</sup>        | 3WA9111-0AX23 |         |
|                                                                                                         | 3                                     | H, C, E   $\leq 5000$ A AC                                    | 3WA9111-0AX31 |         |
| Connecting flange                                                                                       |                                       |                                                               |               |         |
|                      | Size                                  | Breaking capacity   Rated current $I_n$                       | Article No.   | Price € |
|                                                                                                         | 1                                     | N, S   $\leq 1000$ A AC                                       | 3WA9111-0AW11 |         |
|                                                                                                         |                                       | N, S   1250 ... 2000 A AC; M, E   $\leq 2000$ A AC            | 3WA9111-0AW12 |         |
|                                                                                                         | 2                                     | S, M, H, E   2000 A AC; D, E   $\leq 2000$ A DC               | 3WA9111-0AW21 |         |
|                                                                                                         |                                       | S, M, H, E   2500 A AC                                        | 3WA9111-0AW22 |         |
|                                                                                                         |                                       | S, M, H, E   3200 A AC; D, E   4000 A DC                      | 3WA9111-0AW23 |         |
|                                                                                                         |                                       | C   2000 ... 3200 A <b>new</b>                                | 3WA9111-0AW24 |         |
|                                                                                                         | 3                                     | H   4000 A AC                                                 | 3WA9111-0AW31 |         |
|                                                                                                         |                                       | C, E   4000 A AC <b>new</b>                                   | 3WA9111-0AW32 |         |

<sup>1)</sup> When using front-accessible main connections (withdrawable circuit breakers) supports are required

<sup>2)</sup> Not for circuit breakers with very high breaking capacity C

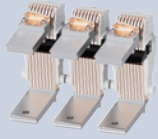
## Conversion kit

| Conversion kit for converting fixed-mounted circuit breakers into withdrawable circuit breakers |                                                                                                                                                                                                                                                                                         |      |               |         |
|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------------|---------|
|              | <ul style="list-style-type: none"> <li>Guide frames and sliding contact modules must be ordered separately</li> <li>Conversion from fixed-mounted to withdrawable circuit breakers is not possible for 3WA circuit breakers with breaking capacity C and breaking capacity E</li> </ul> |      |               |         |
|                                                                                                 | Number of poles                                                                                                                                                                                                                                                                         | Size | Article No.   | Price € |
| 3-pole                                                                                          |                                                                                                                                                                                                                                                                                         | 1    | 3WA9111-0BC11 |         |
|                                                                                                 |                                                                                                                                                                                                                                                                                         | 2    | 3WA9111-0BC12 |         |
|                                                                                                 |                                                                                                                                                                                                                                                                                         | 3    | 3WA9111-0BC13 |         |
|                                                                                                 | 4-pole                                                                                                                                                                                                                                                                                  | 1    | 3WA9111-0BC14 |         |
|                                                                                                 |                                                                                                                                                                                                                                                                                         | 2    | 3WA9111-0BC15 |         |
|                                                                                                 |                                                                                                                                                                                                                                                                                         | 3    | 3WA9111-0BC16 |         |

# Accessories and spare parts

## Main contact elements

### Main contact elements for AC circuit breakers



- Notes:**

- To be ordered only once for each circuit breaker
- On the following circuit breakers, the main contact elements can only be replaced in the factory:  
3WA1 size 1 breaking capacity M and E  
3WA1 size 2 breaking capacity C  
3WA1 size 3 breaking capacity C and E

| Number of poles | Size | Breaking capacity | Rated current $I_n$ | Article No.   | Price € |
|-----------------|------|-------------------|---------------------|---------------|---------|
| 3               | 1    | N                 | ≤ 1000 A            | 3WA9111-0AQ01 |         |
|                 |      |                   | 1250 A              | 3WA9111-0AQ02 |         |
|                 |      |                   | 1600 A              | 3WA9111-0AQ04 |         |
|                 |      | S                 | ≤ 1000 A            | 3WA9111-0AQ03 |         |
|                 |      |                   | 1250 ... 1600 A     | 3WA9111-0AQ04 |         |
|                 | 2    | S, M, H, E        | 2000 A              | 3WA9111-0AQ08 |         |
|                 |      |                   | 2500 A              | 3WA9111-0AQ11 |         |
|                 |      |                   | 3200 A              | 3WA9111-0AQ13 |         |
|                 |      |                   | 4000 A              | 3WA9111-0AQ15 |         |
|                 |      |                   | 4000 A              | 3WA9111-0AQ20 |         |
| 4               | 1    | N                 | ≤ 1000 A            | 3WA9111-0AQ51 |         |
|                 |      |                   | 1250 A              | 3WA9111-0AQ52 |         |
|                 |      |                   | 1600 A              | 3WA9111-0AQ54 |         |
|                 |      | S                 | ≤ 1000 A            | 3WA9111-0AQ53 |         |
|                 |      |                   | 1250 ... 1600 A     | 3WA9111-0AQ54 |         |
|                 | 2    | S, M, H, E        | 2000 A              | 3WA9111-0AQ58 |         |
|                 |      |                   | 2500 A              | 3WA9111-0AQ61 |         |
|                 |      |                   | 3200 A              | 3WA9111-0AQ63 |         |
|                 |      |                   | 4000 A              | 3WA9111-0AQ65 |         |
|                 |      |                   | 4000 A              | 3WA9111-0AQ70 |         |
|                 | 3    | H                 | 4000 A              | 3WA9111-0AQ70 |         |
|                 |      |                   | 5000 ... 6300 A     | 3WA9111-0AQ72 |         |

### Main contact elements for DC non-automatic circuit breakers



- Note:** To be ordered only once for each circuit breaker

| Number of poles | Size | Breaking capacity | Rated current $I_n$ | Article No.   | Price € |
|-----------------|------|-------------------|---------------------|---------------|---------|
| 3               | 2    | D, E              | 1000/2000 A         | 3WA9111-0AQ17 |         |
|                 |      |                   | 4000 A              | 3WA9111-0AQ18 |         |
| 4               | 2    | D, E              | 1000/2000 A         | 3WA9111-0AQ67 |         |
|                 |      |                   | 4000 A              | 3WA9111-0AQ68 |         |

## Interfaces

### Interface to the IEC 61850

- The SICAM A8000 smart data concentrator connects the circuit breakers from the SENTRON portfolio via the Modbus TCP/IP protocol and transmits data via communication protocols (e.g.: IEC 61850, IEC 60870-5-104, IEC 60870-5-101, Modbus and DNP) to higher-level systems.

| Type                        | Operational voltage     | Article No.   | Price € |
|-----------------------------|-------------------------|---------------|---------|
| SICAM CP-8021 <sup>1)</sup> | –                       | 6MF2802-1AA00 |         |
| SICAM CP-8031 <sup>2)</sup> | –                       | 6MF2803-1AA00 |         |
| SICAM CP-8050 <sup>3)</sup> | –                       | 6MF2805-0AA00 |         |
| SICAM PS-8620               | 24 ... 60 V DC (12 W)   | 6MF2862-0AA00 |         |
| SICAM PS-8622               | 110 ... 220 V DC (12 W) | 6MF2862-2AA00 |         |



<sup>1)</sup> Dimensioned for device quantities of max. 1 × 3WA and 1 × 3VA

<sup>2)</sup> Dimensioned for device quantities of max. 1 × 3WA and 8 × 3VA

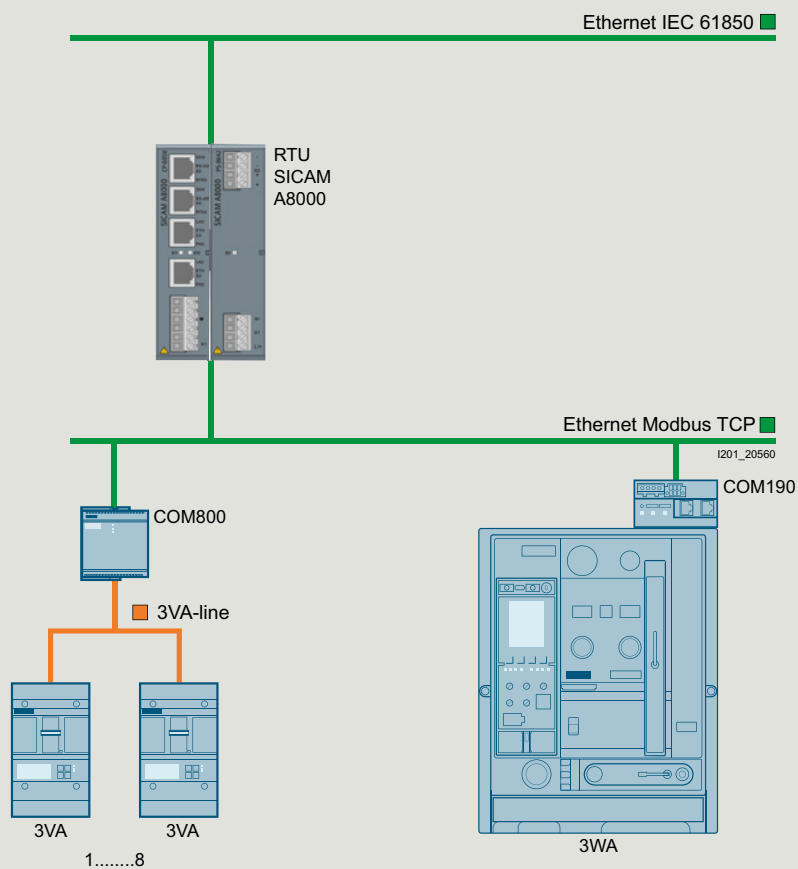
<sup>3)</sup> Dimensioned for device quantities of max. 3 × 3WA and 8 × 3VA or 2 × 3WA and 8 × 3VA and 1 × PAC4200

You will find further information at:

[www.siemens.com/sicam-a8000](http://www.siemens.com/sicam-a8000)

For the SICAM CP-8021 and SICAM CP-8050, predefined modules were created to reduce commissioning work to a minimum.

The modules can be obtained free of charge via SiePortal [www.siemens.com/lowvoltage/product-support](http://www.siemens.com/lowvoltage/product-support) (109816057).







# Appendix



|                                 |     |
|---------------------------------|-----|
| Conditions of sale and delivery | A/2 |
| Link directory                  | A/4 |

# Conditions of sale and delivery

## 1. General Provisions

By using this catalog you can purchase hard- and software products as well as services (together hereinafter referred to as "products") described therein from Siemens Aktiengesellschaft subject to the following Terms and Conditions of Sale and Delivery (hereinafter referred to as "T&C"). Note, for products purchased from any Siemens entity having a registered office outside of Germany, the respective terms and conditions of sale and delivery of the respective Siemens entity apply exclusively. The following T&C apply exclusively for orders placed with Siemens Aktiengesellschaft, Germany.

### 1.1 For customers with a seat or registered office in European Union

For customers with a seat or registered office in European Union, the following terms and conditions apply subordinate to T&C:

- for products, which include specific terms and conditions in the text of the product description, these specific terms and conditions shall apply and subordinate thereto,
- for stand-alone software products and software products forming a part of a product or project, the "General Conditions for Software Products for Infrastructure & Industry Business (German law)"<sup>1)</sup> and/or
- for consulting services the "Allgemeine Geschäftsbedingungen für Beratungsleistungen für Infrastructure & Industry Geschäft (Deutsches Recht)"<sup>1)</sup> (available only in German) and/or
- for other services, the "Supplementary Terms and Conditions for Services for Infrastructure & Industry Business (German Law) ("BL")"<sup>1)</sup> and/or
- for other products the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry"<sup>1)</sup>.

In case such products should contain Open Source Software, the conditions of which shall prevail over the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry"<sup>1)</sup>, the Product will be given a note as to which special conditions apply to this open source software. This shall apply mutatis mutandis for notices referring to other third-party software components.

### 1.2 For customers with a seat or registered office outside European Union

For customers with a seat or registered office outside European Union, the following terms and conditions apply subordinate to T&C:

- for products, which include specific terms and conditions in the description text, these specific terms and conditions shall apply and subordinate thereto,
- for consulting services the "Standard Terms and Conditions for Consulting Services for Infrastructure & Industry Business (Swiss Law)"<sup>1)</sup> and/or
- for other services the "International Terms & Conditions for Services"<sup>1)</sup> supplemented by "Software Licensing Conditions"<sup>1)</sup> and/or

- for other products the "International Terms & Conditions for Products"<sup>1)</sup> supplemented by "Software Licensing Conditions"<sup>1)</sup>

### 1.3 For customers with master or framework agreement

To the extent products offered are covered by an existing master or framework agreement, the terms and conditions of that agreement shall apply instead of T&C.

## 2. Prices

The prices are in € (Euro) ex point of delivery, exclusive of packaging.

The sales tax (value added tax) is not included in the prices. It shall be charged separately at the respective rate according to the applicable statutory legal regulations.

Prices are subject to change without prior notice. We will charge the prices valid at the time of delivery.

To compensate for variations in the price of raw materials (e.g. silver, copper, aluminum, lead, gold, dysprosium and neodym), surcharges are calculated on a daily basis using the so-called metal factor for products containing these raw materials. A surcharge for the respective raw material is calculated as a supplement to the price of a product if the basic official price of the raw material in question is exceeded.

The metal factor of a product indicates the basic official price (for those raw materials concerned) as of which the surcharges on the price of the product are applied, and with what method of calculation. The metal factor, provided it is relevant, can be found in the respective product description.

An exact explanation of the metal factor can be downloaded at:

[https://mall.industry.siemens.com/legal/ww/en/terms\\_of\\_trade\\_en.pdf](https://mall.industry.siemens.com/legal/ww/en/terms_of_trade_en.pdf)

To calculate the surcharge (except in the cases of copper, dysprosium and neodym), the official price from the day prior to that on which the order was received or the release order was effected is used.

To calculate the surcharge applicable to copper, the official price from two days prior to that on which the order was received or the release order was effected is used.

To calculate the surcharge applicable to dysprosium and neodym ("rare earths"), the corresponding three-month basic average price in the quarter prior to that in which the order was received or the release order was effected is used with a onemonth buffer (details on the calculation can be found in the explanation of the metal factor).

<sup>1)</sup> The text of the Terms and Conditions of Siemens AG can be downloaded at [https://mall.industry.siemens.com/legal/ww/en/terms\\_of\\_trade\\_en.pdf](https://mall.industry.siemens.com/legal/ww/en/terms_of_trade_en.pdf)

### 3. Additional Terms and Conditions

The dimensions are in mm. In Germany, according to the German law on units in measuring technology, data in inches apply only to devices for export.

Illustrations are not binding.

Insofar as there are no remarks on the individual pages of this catalog – especially with regard to data, dimensions and weights given – these are subject to change without prior notice.

## 4. Export Control and Sanctions Compliance

### 4.1 General

Customer shall comply with all applicable sanctions, embargoes and (re-)export control laws and regulations, and, in any event, with those of the European Union, the United States of America and any locally applicable jurisdiction (collectively "Export Regulations").

### 4.2 Checks for Products

Prior to any transaction by customer concerning products (including hardware, documentation and technology) delivered by Siemens, or products (including maintenance and technical support) performed by Siemens with a third party, customer shall check and certify by appropriate measures that

- (i) the customer's use, transfer, or distribution of such products, the brokering of contracts or the provision of other economic resources in connection with products will not be in violation of any Export Regulations, also taking into account any prohibitions to circumvent these (e.g., by undue diversion)
- (ii) the products are not intended or provided for prohibited or unauthorized non-civilian purposes (e.g. armaments, nuclear technology, weapons, or any other usage in the field of defense and military);
- (iii) customer has screened all direct and indirect parties involved in the receipt, use, transfer, or distribution of the products against all applicable restricted party lists of the Export Regulations concerning trading with entities, persons and organizations listed therein and
- (iv) products within the scope of items-related restrictions, as specified in the respective annexes to the Export Regulations, will not, unless permitted by the Export Regulations, be
  - (a) exported, directly or indirectly (e.g., via Eurasian Economic Union (EAEU) countries), to Russia or Belarus, or
  - (b) resold to any third party business partner that does not take a prior commitment not to export such products to Russia or Belarus.

### 4.3 Non-Acceptable Use of Software and Cloud Services

Customer shall not, unless permitted by the Export Regulations or respective governmental licenses or approvals,

- (i) download, install, access or use the products from or in any location prohibited by or subject to comprehensive sanctions or subject to license requirements according to the Export Regulations;

- (ii) grant access to, transfer, (re-)export (including any "deemed (re-)exports"), or otherwise make available the products to any entity, person, or organization identified on a restricted party list of the Export Regulations;
- (iii) use the products for any purpose prohibited by the Export Regulations (e.g. use in connection with armaments, nuclear technology or weapons);
- (iv) upload to a products platform any customer content unless it is non-controlled (e.g. in the EU: AL = N; in the U.S.: ECCN = N or EAR99);
- (v) facilitate any of the afore mentioned activities by any user. Customer shall provide all users with all information necessary to ensure compliance with the Export Regulations.

### 4.4 Semiconductor Development

Customer will not, without advance written authorization from Siemens, use offerings for the development or production of integrated circuits at any semiconductor fabrication facility located in China meeting the criteria specified in the U.S. Export Administration Regulations, 15 C.F.R. 744.23.

### 4.5 Information

Upon request by Siemens, customer shall promptly provide Siemens with all information pertaining to users, the intended use and the location of use or the final destination (in the case of hardware, documentation and technology) of the products. Customer will notify Siemens prior to customer disclosing any information to Siemens that is defense-related or requires controlled or special data handling pursuant to applicable government regulations, and will use the disclosure tools and methods specified by Siemens.

### 4.6 Reservation

Siemens shall not be obligated to fulfill this agreement if such fulfillment is prevented by any impediments arising out of national or international foreign trade or customs requirements or any embargoes or other sanctions. Customer acknowledges that Siemens may be obliged under the Export Regulations to limit or suspend access by customer and/or users to products.

## 5. Miscellaneous

Errors excepted and subject to change without prior notice.

# Link directory

## Catalog LV 13

### General information

|                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| Information on low-voltage power distribution and electrical installation technology | <a href="http://www.siemens.com/lowvoltage">www.siemens.com/lowvoltage</a>                                                                                                                                                                                                                                                                                                                                                                   |
| Tender specifications                                                                | <a href="http://www.siemens.com/tenderspecifications">www.siemens.com/tenderspecifications</a>                                                                                                                                                                                                                                                                                                                                               |
| Conversion tool                                                                      | <a href="http://www.siemens.com/conversion-tool">www.siemens.com/conversion-tool</a>                                                                                                                                                                                                                                                                                                                                                         |
| Image database                                                                       | <a href="http://www.siemens.com/lowvoltage/picturedb">www.siemens.com/lowvoltage/picturedb</a>                                                                                                                                                                                                                                                                                                                                               |
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| Siemens YouTube channel                                                              | <a href="http://www.youtube.com/Siemens">www.youtube.com/Siemens</a>                                                                                                                                                                                                                                                                                                                                                                         |
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| Brochures/catalogs                                                                   | <a href="http://www.siemens.com/lowvoltage/catalogs">www.siemens.com/lowvoltage/catalogs</a>                                                                                                                                                                                                                                                                                                                                                 |
| Operating instructions/manuals                                                       | <a href="http://www.siemens.com/lowvoltage/manuals">www.siemens.com/lowvoltage/manuals</a>                                                                                                                                                                                                                                                                                                                                                   |
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| SiePortal (knowledge base)                                                           | <a href="http://www.siemens.com/lowvoltage/product-support">www.siemens.com/lowvoltage/product-support</a>                                                                                                                                                                                                                                                                                                                                   |
| SiePortal (product catalog)                                                          | <a href="http://www.siemens.com/lowvoltage/product-catalog">www.siemens.com/lowvoltage/product-catalog</a>                                                                                                                                                                                                                                                                                                                                   |
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| Direct forwarding to SiePortal                                                       | <a href="http://www.siemens.com/product_catalog_SIEP?Article No.">www.siemens.com/product_catalog_SIEP?Article No.</a>                                                                                                                                                                                                                                                                                                                       |
| Training                                                                             | <a href="http://www.siemens.com/sitrain-lowvoltage">www.siemens.com/sitrain-lowvoltage</a>                                                                                                                                                                                                                                                                                                                                                   |
| Local contacts                                                                       | <a href="http://www.siemens.com/lowvoltage/contact">www.siemens.com/lowvoltage/contact</a><br><a href="http://www.siemens.com/lowvoltage/components/contact">www.siemens.com/lowvoltage/components/contact</a><br><a href="http://www.siemens.com/lowvoltage/systems/contact">www.siemens.com/lowvoltage/systems/contact</a><br><a href="http://www.siemens.com/lowvoltage/software/contact">www.siemens.com/lowvoltage/software/contact</a> |
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| Information on services                                                              | <a href="http://www.siemens.com/service-offers">www.siemens.com/service-offers</a>                                                                                                                                                                                                                                                                                                                                                           |
| Control panels for the North American market                                         | <a href="http://www.siemens.com/northamerican-standards">www.siemens.com/northamerican-standards</a>                                                                                                                                                                                                                                                                                                                                         |
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| Smart Control Panel Design                                                           | <a href="http://www.siemens.com/controlpanel/cpd">www.siemens.com/controlpanel/cpd</a>                                                                                                                                                                                                                                                                                                                                                       |
| Energy savings and amortization                                                      | <a href="http://www.automation.siemens.com/sinasave">www.automation.siemens.com/sinasave</a>                                                                                                                                                                                                                                                                                                                                                 |
| SIMATIC Energy Suite                                                                 | <a href="http://www.siemens.com/energysuite">www.siemens.com/energysuite</a>                                                                                                                                                                                                                                                                                                                                                                 |
| SITOP power supplies                                                                 | <a href="http://www.siemens.com/sitop">www.siemens.com/sitop</a>                                                                                                                                                                                                                                                                                                                                                                             |
| Power distribution with Totally Integrated Power                                     | <a href="http://www.siemens.com/tip">www.siemens.com/tip</a>                                                                                                                                                                                                                                                                                                                                                                                 |
| TIA Selection Tool                                                                   | <a href="http://www.siemens.com/tst">www.siemens.com/tst</a>                                                                                                                                                                                                                                                                                                                                                                                 |
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| Sustainability                                                                       | <a href="http://www.siemens.com/sustainability">www.siemens.com/sustainability</a>                                                                                                                                                                                                                                                                                                                                                           |
| Siemens EcoTech                                                                      | <a href="http://www.siemens.com/SiemensEcoTech">www.siemens.com/SiemensEcoTech</a><br><a href="http://www.siemens.com/lowvoltage/SiemensEcoTech">www.siemens.com/lowvoltage/SiemensEcoTech</a>                                                                                                                                                                                                                                               |
| SETRON product phase-out                                                             | <a href="http://www.siemens.com/info-sentron">www.siemens.com/info-sentron</a>                                                                                                                                                                                                                                                                                                                                                               |



# Catalogs and further information



**LV 10**  
**Low-Voltage Power Distribution and Electrical Installation Technology**  
 SENTRON • SIVACON • ALPHA  
 PDF (E86060-K8280-A101-B9-7600)



**ET D1**  
**Switches and Socket Outlets**  
 DELTA  
 PDF (SIEP-C10409-00-7600)



**LV 13**  
**3WA Air Circuit Breakers**  
 SENTRON  
 PDF (E86060-K8280-B101-A4-7600)



**SiePortal**  
 Information and Ordering Platform on the Internet:  
[sieportal.siemens.com](https://sieportal.siemens.com)



**LV 18**  
**Air Circuit Breakers and Molded Case Circuit Breakers with UL Certification**  
 SENTRON  
 PDF (E86060-K8280-E347-B2-7600)



**SITRAIN**  
 Digital Industry Academy  
[www.siemens.com/sitrain](https://www.siemens.com/sitrain)



**IC 10**  
**Industrial Controls**  
 SIRIUS  
 PDF (E86060-K1010-A101-B7-7600)



**Siemens TIA Selection Tool**  
 for the selection, configuration and ordering of TIA products and devices  
[www.siemens.com/tst](https://www.siemens.com/tst)

The catalogs listed above and additional catalogs are available in PDF format at  
[www.siemens.com/lowvoltage/catalogs](https://www.siemens.com/lowvoltage/catalogs)

Further information on low-voltage power distribution and electrical installation technology is available on the Internet at [www.siemens.com/lowvoltage](https://www.siemens.com/lowvoltage)

## Cybersecurity information

Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept.

Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place.

For additional information on industrial cybersecurity measures that may be implemented, please visit [www.siemens.com/cybersecurity-industry](http://www.siemens.com/cybersecurity-industry).

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under [www.siemens.com/cert](http://www.siemens.com/cert).

## Get more information

[www.siemens.com/lowvoltage](http://www.siemens.com/lowvoltage)

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