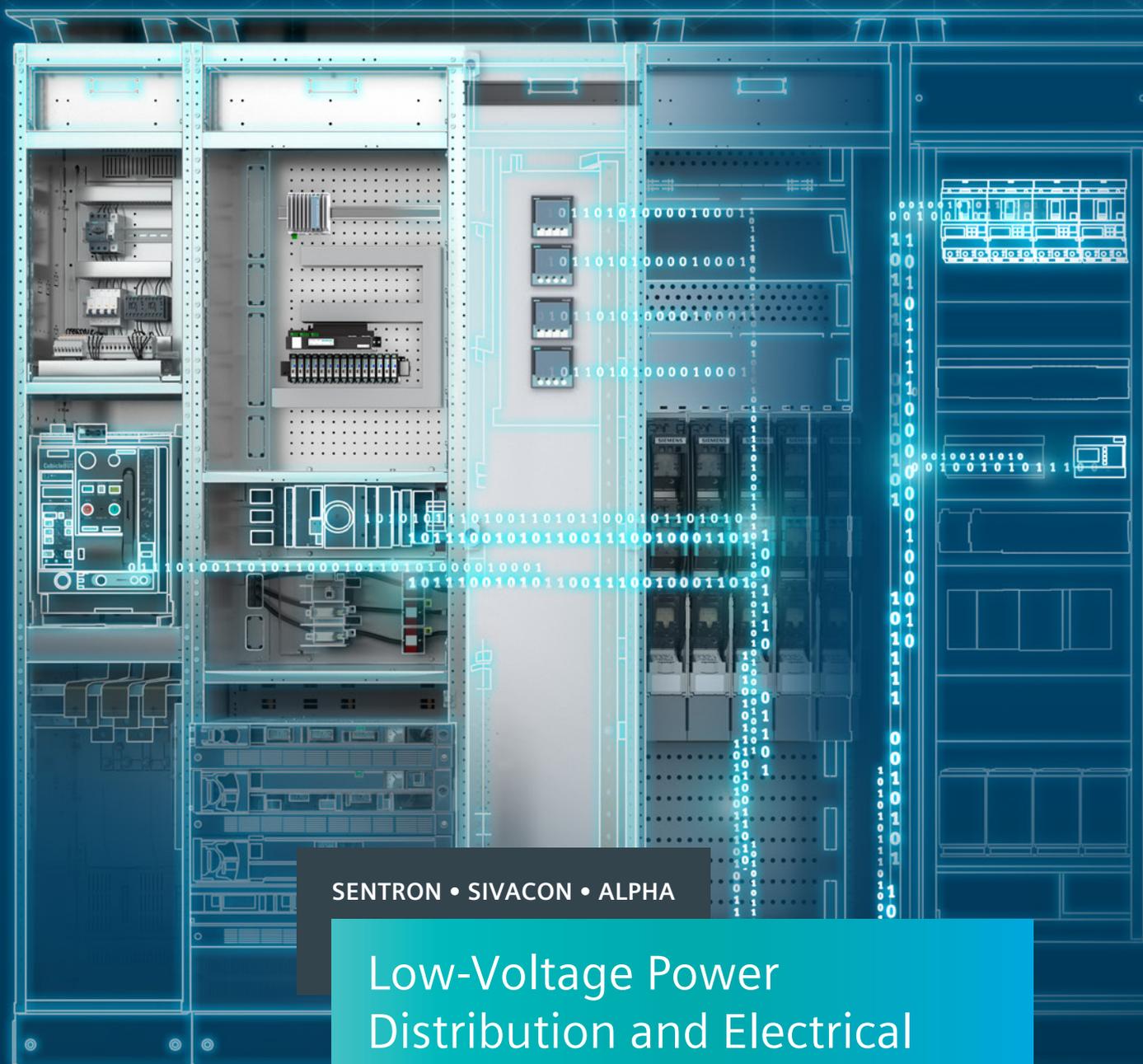


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# Low-Voltage Power Distribution and Electrical Installation Technology

Molded Case Circuit Breakers

Catalog  
Extract  
LV 10

Edition  
04/2020

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

# Making sure power makes its way

Consistent, safe and intelligent low-voltage power distribution and electrical installation technology

Whether industries, infrastructures or buildings: Each environment depends on a reliable power supply.

Which is why products and systems featuring maximum safety and optimum efficiency are in demand. This comprehensive portfolio for low-voltage power distribution and electrical installation technology covers every requirement – from the switchboard to the socket outlet.

## We are there when you need us

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## Catalog LV 10 · 04/2020

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

Refer to the Industry Mall for current prices  
[www.siemens.com/industrymall](http://www.siemens.com/industrymall)

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

### Technical data

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

All illustrations are not binding.

# Low-Voltage Power Distribution and Electrical Installation Technology

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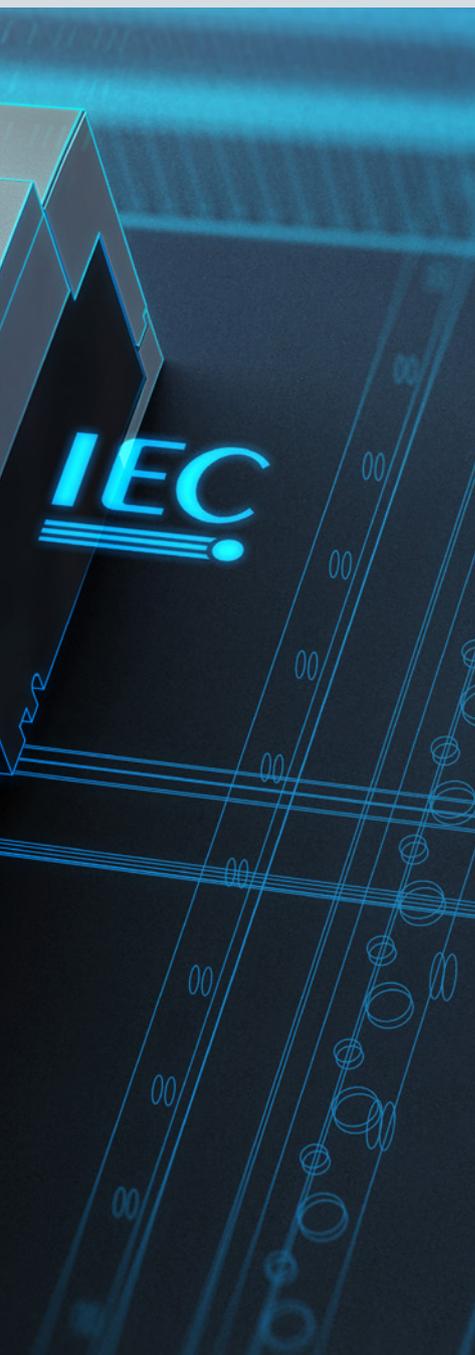
## One system. For all applications.

Requirements for cost- and energy-efficient operation of electrical power distribution are on the increase. Whether in industrial plants, in infrastructure or in buildings: As a modular, highly adaptable system, the 3VA series of molded case circuit breakers ensures fully reliable protection of personnel and plant, and supports every process phase – from planning to operation of electrical power distribution.

Comprehensively certified. Deployable worldwide.

3VA molded case circuit breakers are available in various ranges with IEC approval; other ranges are available that comply with standard IEC 60947 and standard UL 489. The system is therefore ideally suited for mechanical engineering companies and switchgear manufacturers. The full range of functionalities of molded case circuit breakers can be used for plant and equipment operating in Europe and North America, with absolute standards compliance assured.

# Molded Case Circuit Breakers



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# A multitude of additional information ...

## Information + ordering

### All the important things at a glance

#### Information to get you started

For information about molded case circuit breakers, please visit our website  
[www.siemens.com/3VA](http://www.siemens.com/3VA)

### Contact persons in your region

#### We are there when you need us

You can find your local contacts at  
[www.siemens.com/lowvoltage/contact](http://www.siemens.com/lowvoltage/contact)

### Your product in detail

The Siemens Industry Online Support portal provides comprehensive information  
[www.siemens.com/lowvoltage/product-support](http://www.siemens.com/lowvoltage/product-support)

- Technical basic information – 3VA molded case circuit breakers ([109766672](https://www.siemens.com/lowvoltage/109766672))

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

#### Our video range

- 3VA molded case circuit breakers (general)  
[bit.ly/2xNxIFA](https://bit.ly/2xNxIFA)

### Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Molded case circuit breakers [sie.ag/2mmLcAk](https://sie.ag/2mmLcAk)

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.

[www.siemens.com/product?Article No.](http://www.siemens.com/product?Article No.)

### Configurators

#### Exactly the right circuit breaker for your application

The configurator reduces the time and effort required in the planning and ordering process, and allows for individual adaptations. Configure your 3VA molded case circuit breaker at

[www.siemens.com/lowvoltage/3va-configurator](http://www.siemens.com/lowvoltage/3va-configurator)  
[www.siemens.com/lowvoltage/3va27-configurator](http://www.siemens.com/lowvoltage/3va27-configurator)

For your configured 3VA molded case circuit breaker, you can additionally find

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

# ... can be found in our online services

## Commissioning + operation

### Configuration software

#### powerconfig

The combined commissioning and service tool for communication-capable measuring devices and circuit breakers from the SENTRON family.

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

### Your product in detail

The Siemens Industry Online Support portal provides detailed technical information

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

- Operating instructions
- Characteristic curves
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at

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

### Manuals

Manuals are available for downloading in Siemens Industry Online Support at

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

- Configuration manual – 3VA selectivity ([109743975](#))
- Communication manual – 3VA molded case circuit breakers with IEC and UL certification ([98746267](#))
- Equipment manual – 3VA molded case circuit breakers with IEC certificate ([90318775](#))
- Equipment manual – 3VA27 molded case circuit breakers & 3WL10 air circuit breakers ([109753821](#))
- Communication manual – 3WL10 air circuit breakers & 3VA27 molded case circuit breakers ([109760220](#))

### The fast track to the experts

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

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You can find further information on services at

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

### Training and tutorials

Our training courses can be found at

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

- Protection systems in low-voltage power distribution (WT-LVAPS)
- 3VA molded case circuit breaker (WT-LVA3VA)
- Communication with SENTRON components (LV-COM)

## Technical overview – Molded case circuit breakers



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

This page provides you with comprehensive information and links on molded case circuit breakers

[www.siemens.com/lowvoltage/product-support](http://www.siemens.com/lowvoltage/product-support) ([109767421](#))

# Molded case circuit breakers for all applications

2



3VA10 ... 3VA15 molded case circuit breakers

## Setting standards for standard applications

The 3VA1 molded case circuit breaker is ideally suited for your standard applications in infrastructure and industrial facilities. It is equipped with a thermal-magnetic trip unit, and offers reliable protection for plants and generators.

With its compact dimensions and depth of just 70 mm, the 3VA1 molded case circuit breaker can even fit into locations where space is limited. Thanks to its cover size of 45 mm, it is also ideally suited for use in distribution boards up to 250 A.

### Special features

- Compact design
- AC/DC applications
- No derating up to +50 °C
- Optimized for distribution boards (45 mm cover size)
- Universal platform of accessories
- 1, 2, 3 or 4-pole versions



3VA20 ... 3VA26 molded case circuit breakers

## The power to deliver in demanding applications

If you are looking for a solution that lets you handle your most technically demanding projects in industrial and infrastructure applications with ease, the 3VA2 molded case circuit breaker has the special capabilities you need. It combines high breaking capacity, a range of electronic trip units (ETUs), very good selectivity properties, and various additional functionalities.

### Special features

- Very good selective protection response
- AC applications
- No derating up to +50 °C
- Integrated metering function
- Connection to a communication system
- Rate current range 25 to 1250 A



3VA27 molded case circuit breaker

Depending on the application, the 3VA27 molded case circuit breaker handles line/motor and starter protection for low-voltage electrical power distribution, and supplements the existing IEC portfolio with a rated current of 1600 A.

### Special features

- Choice between two ranges of electronic trip units with a number of equipment versions
- Variable and versatile connections
- Connection to a communication system
- Can be used as a platform circuit breaker with the 3WL10 ACB, with an extensive range of common accessories
- Rate current range 800 to 1600 A

# Basic units and accessories

2



Protective functions	3VA10	3VA11	3VA12	3VA13	3VA14	3VA15 new
Size	100 A	160 A	250 A	400 A	630 A	1000 A
<b>Switch disconnectors</b>						
No protection	–	■	■	■	■	–
<b>Thermal-magnetic</b>						
Line protection	■	■	■	■	■	■
Starter protection	–	■	■	■	■	■
<b>Electronic</b>						
Line protection	–	–	–	–	–	–
Line and generator protection	–	–	–	–	–	–
Line and generator protection, with display	–	–	–	–	–	–
Line and generator protection, with display, with metering function	–	–	–	–	–	–
Motor protection	–	–	–	–	–	–
Motor protection, with display	–	–	–	–	–	–
Motor protection, with display, with metering function	–	–	–	–	–	–
Starter protection	–	–	–	–	–	–

## Accessories

Size	100 A	160 A	250 A	400 A	630 A	1000 A
<b>Accessories</b>						
Auxiliary switches and signaling switches	■	■	■	■	■	■
Auxiliary releases	■	■	■	■	■	■
Connection technology	■	■	■	■	■	■
Plug-in version	–	■	■	■	■	–
Draw-out version	–	–	■	■	■	–
Front rotary operator	■	■	■	■	■	■
Door mounted rotary operator	■	■	■	■	■	■
Side wall mounted rotary operator	■	■	■	■	■	–
MO310 motor operator (mounted onto the side)	–	■	–	–	–	–
MO320 motor operator (mounted onto the front)	–	■	■	■	■	–
Motor operator with SEO520 stored energy operator	–	–	–	–	–	–
Motor operator (MO), integrable	–	–	–	–	–	–
Locking, blocking and interlocking	■	■	■	■	■	■
Residual current device (mounted onto the side)	–	■	■	–	–	–
Residual current device (mounted underneath)	–	■	■	–	–	–
Communications interface	–	–	–	–	–	–
EFB300	–	–	–	–	–	–
TD300, TD400 and TD500	–	–	–	–	–	–
Cover frame	■	■	■	■	■	■
DIN rail adapter	■	■	–	–	–	–
Busbar adapter	■	■	■	■	■	–

■ Available – Not available/not present

\* On request



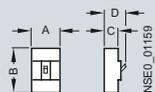
# 3VA1 basic units up to 1000 A

## Technical data

2



			3VA10	3VA11	3VA11						
<b>Electrical characteristics according to IEC 60947-2</b>											
Number of poles			3/4-pole	1-pole	2-pole						
Size			100 A	160 A	160 A						
Rated operational current $I_n$ at 50 °C ambient temperature			16 ... 100 A	16 ... 160 A	16 ... 160 A						
Rated operational voltage $U_n$ 50/60 Hz AC			690 V	415 V	415 V						
Rated insulation voltage $U_i$			800 V	500 V	500 V						
Rated impulse withstand voltage $U_{pulse}$			8 kV	8 kV	8 kV						
Use in IT networks			■	■	■						
Frequency			0 ... 400 Hz	0 ... 400 Hz	0 ... 400 Hz						
<b>Breaking capacity (line protection)</b>											
<b>Rated ultimate short-circuit breaking capacity <math>I_{cu}</math></b>											
50/60 Hz AC	220 ... 240 V	kA	25	36	55	25	36	55	36	55	85
	380 ... 415 V	kA	16	25	36	5	6	6	25	36	55
	440 V	kA	8	16	25	–	–	–	–	–	–
	500 V	kA	5	5	7	–	–	–	–	–	–
	690 V	kA	5	5	7	–	–	–	–	–	–
DC	125 V (1 switching pole)	kA	–	–	–	16	25	30	16	25	30
	250 V (2 switching poles)	kA	25	36	55	–	–	–	36	55	85
	500 V (3 switching poles)	kA	25	36	55	–	–	–	–	–	–
	600 V (4 switching poles)	kA	8	16	25	–	–	–	–	–	–
<b>Rated operational short-circuit breaking capacity <math>I_{cs}</math></b>											
50/60 Hz AC	220 ... 240 V	kA	25	36	55	25	35	55	36	55	85
	380 ... 415 V	kA	16	25	36	5	6	6	25	36	55
	440 V	kA	8	16	25	–	–	–	–	–	–
	500 V	kA	5	5	5	–	–	–	–	–	–
	690 V	kA	5	5	5	–	–	–	–	–	–
DC	125 V (1 switching pole)	kA	–	–	–	16	25	30	16	25	30
	250 V (2 switching poles)	kA	25	36	55	–	–	–	36	55	85
	500 V (3 switching poles)	kA	25	36	55	–	–	–	–	–	–
	600 V (4 switching poles)	kA	8	16	25	–	–	–	–	–	–
<b>Dimensions</b>											
	A	mm	76.2 (3P)   101.6 (4P)			25.4		50.8			
	B	mm	130			130		130			
	C	mm	70			70		70			
	D	mm	88			88		88			



■ Available

– Not available/not present

\* On request

**3VA11****3VA12****3VA13****3VA14****3VA15 new**

<b>3VA11</b>				<b>3VA12</b>			<b>3VA13</b>				<b>3VA14</b>				<b>3VA15 new</b>		
3/4-pole				3/4-pole			3/4-pole				3/4-pole				3/4-pole		
160 A				250 A			400 A				630 A				1000 A		
16 ... 160 A				160 ... 250 A			320 ... 400 A				500 ... 630 A				630 ... 1000 A		
690 V				690 V			690 V				690 V				690 V		
800 V				800 V			800 V				800 V				800 V		
8 kV				8 kV			8 kV				8 kV				8 kV		
■				■			■				■				■		
0 ... 400 Hz				0 ... 400 Hz			0 ... 400 Hz				0 ... 400 Hz				0 ... 400 Hz		
N	S	M	H	S	M	H	S	M	H	C	S	M	H	C	M	H	C
36	55	85	100	55	85	100	55	85	100	200	55	85	100	200	85	110	200
25	36	55	70	36	55	70	36	55	70	110	36	55	70	110	55	70	110
16	25	36	55	25	36	36	*	*	*	*	*	*	*	*	*	*	*
7	7	10	10	10	15	15	25	36	55	70	25	36	55	70	36	55	70
7	7	10	10	7	10	10	7	7	10	10	7	7	10	10	25	35	35
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
36	55	85	100	55	85	100	8	16	25	25	8	16	25	25	–	–	–
36	55	85	100	55	85	100	8	16	25	25	8	16	25	25	–	–	–
16	25	36	55	25	36	55	8	16	25	25	8	16	25	25	–	–	–
36	55	85	100	55	85	100	55	85	100	200	55	85	100	200	85	110	150
25	36	55	70	36	55	70	36	55	70	110	36	55	70	110	55	70	110
16	25	36	40	25	36	36	*	*	*	*	*	*	*	*	*	*	*
5	5	5	5	10	10	10	25	36	55	70	25	36	55	70	36	55	65
5	5	5	5	5	5	5	5	5	6	6	5	5	6	6	19	19	19
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
36	55	85	100	55	85	100	8	16	25	25	8	16	25	25	–	–	–
36	55	85	100	55	85	100	8	16	25	25	8	16	25	25	–	–	–
16	25	36	55	25	36	55	8	16	25	25	8	16	25	25	–	–	–
76.2 (3P)   101.6 (4P)				105 (3P)   140 (4P)			138 (3P)   184 (4P)				138 (3P)   184 (4P)				210 (3P)   280 (4P)		
130				158			248				248				320		
70				70			110				110				120		
88				88			137				137				253		

# 3VA1 basic units up to 1000 A

## Application

2



		3VA10	3VA11	3VA11
<b>Electrical characteristics according to IEC 60947-2</b>				
Number of poles		3/4-pole	1-pole	2-pole
Size		100 A	160 A	160 A
Rated operational current $I_n$ at 50 °C ambient temperature		16 ... 100 A	16 ... 160 A	16 ... 160 A
<b>3VA1 molded case circuit breakers for line protection, standard applications (IEC 60947-2)</b>				
<b>Service life (make-break operations)</b>				
Mechanical (NO contact – NC contact)		20000	20000	20000
Electrical	380 ... 415 V	$I_n$ 9000	9000	9000
		$I_n/2$ 15000	15000	15000
	690 V	6300	6300	6300
<b>Trip Units</b>				
TM210	FTFM	■	■	■
TM220	ATFM	–	–	–
TM240	ATAM	–	–	–
<b>3VA1 molded case circuit breakers for starter protection (IEC 60947-4-1 standards and specifications acc. to AC-1)</b>				
Rated operational current $I_n$ at 50 °C ambient temperature		A	–	–
<b>Service life (switching cycles)</b>				
Mechanical (NO contact – NC contact)			–	–
Electrical	380 ... 415 V		–	–
<b>Trip Units</b>				
TM120M	AM	–	–	–
<b>Switch disconnectors (IEC 60947-3)</b>				
<b>Electrical characteristics according to IEC 60947-3</b>				
Rated uninterrupted current $I_u$ at 50 °C ambient temperature		A	–	–
Rated operational voltage $U_e$ 50/60 Hz AC		V	–	–
Rated operational voltage $U_e$ DC		V	–	–
Rated conditional short-circuit current $I_q$ with upstream 3VA1 circuit breaker		kA	–	–
Permissible rated short-time current $I_{cw}$ (1 s)		kA	–	–

■ Available    – Not available/not present

\* On request

**3VA11****3VA12****3VA13****3VA14****3VA15 new**

2

3VA11	3VA12	3VA13	3VA14	3VA15 new
3/4-pole 160 A 16 ... 160 A	3/4-pole 250 A 160 ... 250 A	3/4-pole 400 A 320 ... 400 A	3/4-pole 630 A 500 ... 630 A	3/4-pole 1000 A 630 ... 1000 A
20000 9000 15000 6300	20000 8000 14000 5400	20000 6000 12000 4200	20000 4000 8000 3000	10000 4600 7000 3200
■ ■ ■	– – ■	– – ■	– – ■	– – ■
32 ... 125	160, 200	250	400 ... 500	630 ... 800
20000 9000	20000 8000	20000 6000	20000 4000	10000 4600
■	■	■	■	■
63 ... 160 690 500 (3P), 600 (4P) 70 at 415 V 2	250 690 500 (3P), 600 (4P) 70 at 415 V 3	400 690 500 (3P), 600 (4P) * 6	630 (3P), 500 (4P) 690 500 (3P), 600 (4P) * 7.6 (3P), 6 (4P)	– – – – –

# 3VA2 basic units up to 1600 A

## Technical data

2



		3VA20					3VA21					3VA22					
<b>Electrical characteristics according to IEC 60947-2</b>																	
Number of poles		3/4-pole					3/4-pole					3/4-pole					
Size		100 A					160 A					250 A					
Rated operational current $I_n$ at 50 °C ambient temperature		25 ... 100 A					25 ... 160 A					160 ... 250 A					
Rated operational voltage $U_e$ 50/60 Hz AC		690 V					690 V					690 V					
Rated insulation voltage $U_i$		800 V					800 V					800 V					
Rated impulse withstand voltage $U_{pulse}$		8 kV					8 kV					8 kV					
Use in IT networks		■					■					■					
Frequency		50/60 Hz					50/60 Hz					50/60 Hz					
<b>Breaking capacity</b>		M	H	C	L	M	H	C	L	E	M	H	C	L	E		
<b>Rated ultimate short-circuit breaking capacity <math>I_{cu}</math></b>																	
50/60 Hz AC	220 ... 240 V	kA	85	110	150	200	85	110	150	200	–	85	110	150	200	–	
	380 ... 415 V	kA	55	85	110	150	55	85	110	150	200	55	85	110	150	200	
	440 V	kA	55	85	110	150	55	85	110	150	–	55	85	110	150	–	
	500 V	kA	36	55	85	100	36	55	85	100	–	36	55	85	100	–	
	690 V	kA	2	2	2	25	2.5	2.5	2.5	25	85	3	3	3	25	85	
DC	125 V (1 switching pole)	kA	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	250 V (2 switching poles)	kA	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	500 V (3 switching poles)	kA	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	600 V (4 switching poles)	kA	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
<b>Rated service short-circuit breaking capacity <math>I_{cs}</math></b>																	
50/60 Hz AC	220 ... 240 V	kA	85	110	150	200	85	110	150	200	–	85	110	150	200	–	
	380 ... 415 V	kA	55	85	110	150	55	85	110	150	200	55	85	110	150	200	
	440 V	kA	55	85	110	150	55	85	110	150	–	55	85	110	150	–	
	500 V	kA	36	55	85	100	36	55	85	100	–	36	55	85	100	–	
	690 V	kA	2	2	2	18	2.5	2.5	2.5	18	65	3	3	3	18	65	
DC	125 V (1 switching pole)	kA	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	250 V (2 switching poles)	kA	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	500 V (3 switching poles)	kA	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	600 V (4 switching poles)	kA	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
<b>Dimensions</b>																	
	A	mm	105 (3P)   140 (4P)					105 (3P)   140 (4P)					105 (3P)   140 (4P)				
	B	mm	181					181					181				
	C	mm	86					86					86				
	D	mm	107					107					107				

■ Available

– Not available/not present

\* On request



3VA23					3VA24					3VA25			3VA26 new			3VA27		
3/4-pole					3/4-pole					3/4-pole			3/4-pole			3/4-pole		
400 A					630 A					1000 A			1250 A			1600 A		
250 ... 400 A					400 ... 630 A					630 ... 1000 A			1250 A			800 ... 1600 A		
690 V					690 V					690 V			690 V			690 V		
800 V					800 V					800 V			800 V			1000 V		
8 kV					8 kV					8 kV			8 kV			8 kV		
■					■					■			■			■		
50/60 Hz					50/60 Hz					50/60 Hz			50/60 Hz			50/60 Hz		
M	H	C	L	E	M	H	C	L	E	M	H	C	M	H	C	M	H	C
85	110	150	200	–	85	110	150	200	–	85	110	200	85	110	200	100	150	200
55	85	110	150	200	55	85	110	150	200	55	85	110	55	85	110	55	85	110
55	85	110	–	–	55	85	110	–	–	*	*	*	*	*	*	55	85	100
36	55	85	–	–	36	55	85	–	–	36	55	85	*	*	*	36	55	85
5	5	5	25	85	6	6	6	25	85	25	35	35	25	35	35	25	36	50
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
85	110	150	200	–	85	110	150	200	–	85	110	150	85	110	150	100	150	200
55	85	110	150	200	55	85	110	150	200	55	85	85	55	85	85	55	85	110
55	85	110	–	–	55	85	110	–	–	*	*	*	*	*	*	55	85	100
36	55	65	–	–	36	55	85	–	–	36	55	65	*	*	*	36	55	63
5	5	5	18	65	6	6	6	18	65	19	19	19	19	19	19	25	36	36
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
138 (3P)   184 (4P)					138 (3P)   184 (4P)					210 (3P)   280 (4P)			210 (3P)   280 (4P)			210 (3P)   280 (4P)		
248					248					320			320			291		
110					110					120			120			171 (toggle operating mechanism)   183 (stored energy operating mechanism)		
137					137					253			253			225		

# 3VA2 basic units up to 1600 A

## Application

2



		3VA20	3VA21	3VA22
<b>Electrical characteristics according to IEC 60947-2</b>				
Number of poles		3/4-pole	3/4-pole	3/4-pole
Size		100 A	160 A	250 A
Rated operational current $I_n$ at 50 °C ambient temperature		25 ... 100 A	25 ... 160 A	160 ... 250 A
<b>Service life (make-break operations)</b>				
Mechanical (NO contact – NC contact)		25000	25000	25000
Electrical	380 ... 415 V $I_n$	15000	14000	12000
	$I_n/2$	20000	20000	17000
690 V		10500	9800	8400
<b>Trip units</b>				
ETU320	LI	■	■	■
ETU330	LIG	■	■	■
ETU340	ELISA LI	–	■	■
ETU350	LSI	■	■	■
ETU550/ETU850	LSI	■	■	■
ETU560/ETU860	LSIG	■	■	■
ETU650	LSI	–	–	–
ETU360	LSIG	–	–	–
ETU660	LSIG	–	–	–
<b>3VA2 molded case circuit breakers for motor/starter protection (IEC 60947-4-1 standards and specifications acc. to AC-1)</b>				
Rated operational current $I_n$ at 50 °C ambient temperature		–	25 ... 100 A	160 ... 200 A
<b>Service life (make-break operations)</b>				
Mechanical (NO contact – NC contact)		–	25000	25000
Electrical	380 ... 415 V	–	14000	12000
<b>Trip units</b>				
ETU310M	I	–	■	■
ETU350M	LSI	–	■	■
ETU550M	LSI	–	■	■
ETU860M	LSIG	–	■	■
ETU320	LI	–	–	–
ETU350	LSI	–	–	–
ETU360	LSIG	–	–	–
ETU650	LSIG	–	–	–
ETU660	LSIG	–	–	–

■ Available – Not available/not present

\* On request



3VA23	3VA24	3VA25	3VA26 new	3VA27
3/4-pole	3/4-pole	3/4-pole	3/4-pole	3/4-pole
400 A	630 A	1000 A	1250 A	1600 A
250 ... 400 A	400 ... 630 A	630 ... 1000 A	1250 A	800 ... 1600 A
20000	20000	10000	10000	10000
6000	5000	4600	4600	2000
12000	10000	7000	7000	–
4200	3500	3200	3200	–
■	■	■	■	■
■	■	■	■	–
■	■	■	■	–
■	■	■	■	■
■	■	■	■	–
■	■	■	■	–
–	–	–	–	■
–	–	–	–	■
–	–	–	–	■
250 A	400 ... 500 A	630 ... 800 A	–	800 ... 1600 A
20000	20000	10000	–	10000
6000	5000 (400 A) 3000 (500 A)	4600	–	2000
■	■	–	–	–
■	■	■	–	–
■	■	■	–	–
■	■	■	–	–
–	–	–	–	■
–	–	–	–	■
–	–	–	–	■
–	–	–	–	■

# Trip units

Protection system for 3VA molded case circuit breakers up to 1000 A

Trip units	Thermal-magnetic	Electronic	Electronic with display	Electronic with display and metering function
	 TM240 I/A I/A I201_19035	 ETU350 LSI I/A t/s I <sub>∞</sub> I t <sub>∞</sub> /s I <sub>∞</sub> I I201_18828	 ETU550M LSI ACT COM AL1 AL2 ESC OK I201_19701	 ETU860M LSIG ACT COM AL1 AL2 ESC OK I201_18484
	<b>TM 2-series</b>	<b>ETU 3-series</b>	<b>ETU 5-series</b>	<b>ETU 8-series</b>
<b>Protection function</b>				
Line protection	TM210, TM220, TM240	ETU320, ETU330, ETU340, ETU350	ETU550, ETU560	ETU850, ETU860
Starter protection	TM120M	ETU310M	–	–
Motor protection	–	ETU350M	ETU550M	ETU860M
<b>Integrated functions</b>				
Parameterizing	Setting and reading the parameters • Current values	Setting and reading the parameters • Current values • Delay times	Setting and reading the parameters • Via display and communication • Fine setting of the parameters • Reading the measured values	Setting and reading the parameters • Via display and communication • Fine setting of the parameters • Reading the measured values
Status display	–	Indicating the ETU status via LEDs	Indicating the ETU status via LEDs	Indicating the ETU status via LEDs
Interface	–	Interface for test devices	Interface for test devices	Interface for test devices
Metering function	–	–	–	Metering function integrated
<b>Optional expansions</b>				
24 V module	–	–	 24 V module for continuous power supply (also without primary current through the molded case circuit breaker)	 24 V module for continuous power supply (also without primary current through the molded case circuit breaker)
External function box	–	 EFB300 external function box for connection to the ETU	 EFB300 external function box for connection to the ETU	 EFB300 external function box for connection to the ETU
Communication module	–	–	 COM060 communication module	 COM060 communication module
Breaker data server	–	–	 COM800/COM100 breaker data server with interface to • PROFIBUS • PROFINET • Modbus RTU • Ethernet (Modbus TCP)	 COM800/COM100 breaker data server with interface to • PROFIBUS • PROFINET • Modbus RTU • Ethernet (Modbus TCP)
External display	–	–	 DSP800 external display for installing in the cubicle door	 DSP800 external display for installing in the cubicle door
Test device	–	 TD300/TD400/TD500 test device	 TD300/TD400/TD500 test device	 TD300/TD400/TD500 test device

## Protection functions of the 3VA1 with thermal-magnetic trip unit

	TM120M AM	TM210 FTFM	TM220 ATFM	TM240 ATAM
<b>Protections</b>				
Starter protection	■	–	–	–
Line protection	–	■	■	■
<b>Version available with</b>				
1-pole and 2-pole breakers	–	■	–	–
3-pole breaker	■	■	■	■
4-pole breaker	–	■	■	■
<b>Available protection parameters</b>				
$I_r$ adjustable	–	–	■	■
$I_i$ adjustable	■	–	–	■
$I_r$ fixed	–	■	–	–
$I_i$ fixed	–	■	■	–
$I_N$ <sup>1)</sup>	–	■	■	■

<sup>1)</sup> 3VA10 only without N protection  
 3VA11, 3VA12, 3VA13, 3VA14 without, 50% or 100% N protection  
 50% N protection from  $I_N \geq 100$  A

## Protection functions of the 3VA2 with electronic trip unit

	ETU310M I	ETU320 LI	ETU330 LIG	ETU340 ELISA®	ETU350 LSI	ETU350M LSI	ETU550 LSI	ETU550M LSI	ETU560 LSIG	ETU850 LSI	ETU860 LSIG	ETU860M LSIG
<b>Protection</b>												
Starter protection	■	–	–	–	–	–	–	–	–	–	–	–
Motor protection	–	–	–	–	–	■	–	■	–	–	–	■
Line protection	–	■	■	■	■	–	–	–	■	■	■	–
Generator protection	–	■	■	–	■	–	■	–	■	■	■	–
<b>Version available with</b>												
3-pole without external neutral conductor transformer	■	■	■	■	■	■	–	■	–	–	–	■
3-pole with external neutral conductor transformer	–	–	–	–	–	–	■	–	■	■	■	–
4-pole with protected neutral conductor transformer	–	■	■	■	■	–	■	–	■	■	■	–
<b>Available protection parameters</b>												
Characteristic in L range	$I^2t$	$I^2t$	$I^2t$	$I^4t$	$I^2t$	$I^2t$	$I^2t$	$I^2t$	$I^2t$	$I^2t$	$I^2t$	$I^2t$
$I_r$	–	■	■	■	■	■	■	■	■	■	■	■
$t_r$ at $6 \times I_r$	–	■	■	–	■	–	■	–	■	■	■	–
$t_c$	–	–	–	–	–	■	–	■	–	–	–	■
$t_p$	–	–	–	–	–	–	–	■	–	–	–	■
Thermal image	■	■	■	■	■	■	■	■	■	■	■	■
Thermal image can be switched on/off	–	–	–	–	–	–	■	–	■	–	■	–
$I_{sd}$	–	–	–	–	■	■	■	■	■	■	■	■
$t_{sd}$ at $8 \times I_r$	–	–	–	–	■	■	■	■	■	■	■	■
Characteristic in S range: $I^2t_{sd}$	–	–	–	–	–	–	–	–	■	■	■	–
Characteristic in S range: selectable $I^2t_{sd} / t_{sd}$	–	–	–	–	–	–	–	–	■	■	■	–
$I_i$	■	■	■	■	■	■	■	■	■	■	■	■
$I_N$ <sup>1)</sup>	–	■	■	■	■	–	■	–	■	■	■	–
$I_g$	–	–	■	–	–	–	–	–	■	–	■	■
$t_g$ at $2 \times I_g$	–	–	■	–	–	–	–	–	■	–	■	■
Characteristic in G range: $I^2t_g$	–	–	–	–	–	–	–	–	■	–	■	■
Characteristic in G range: selectable $I^2t_g / t_g$	–	–	–	–	–	–	–	–	■	–	■	■
Ground-fault alarm function	–	–	–	–	–	–	–	–	■	–	■	■
Blocking protection	–	–	–	–	–	–	–	–	–	–	–	■
ZSI in combination with an EFB external function box	–	■	■	■	■	■	■	■	■	■	■	■

<sup>1)</sup> Available in a version with external current transformer for N conductor or 4-pole breaker

### Available for:

- Circuit breakers with ETU (4-pole)
- Circuit breakers with ETU5/ETU8 3-pole with external neutral conductor transformer or 4-pole

# Online configurator highlights

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

2

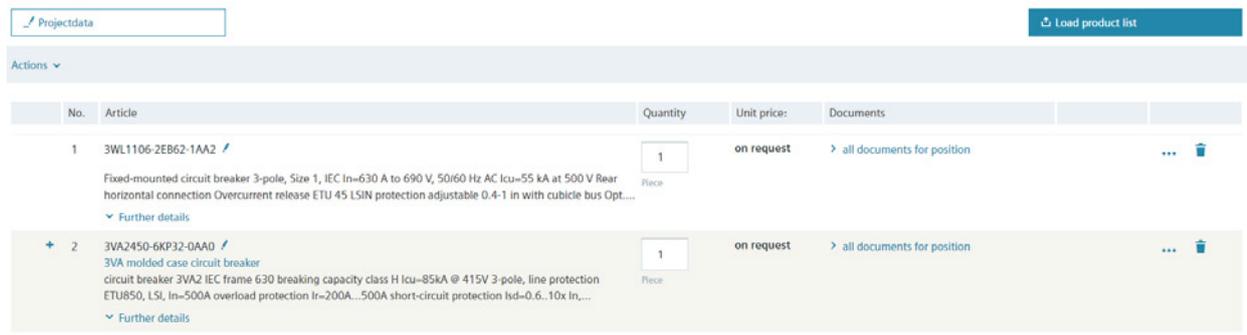
## Search function with global direct input

Searches for specific terms and jumps to MLFB based on input to the correct configurator



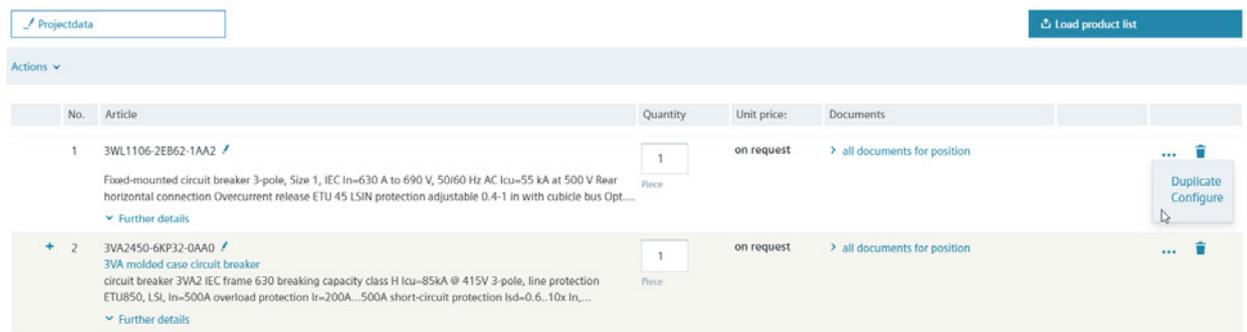
## Product list stores multiple configurations and can transfer them collectively to the shopping cart

List of products

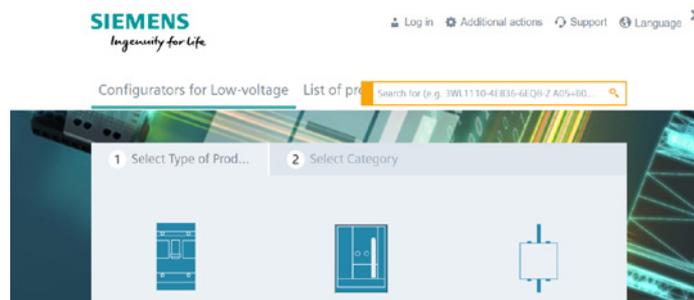


## Recall of completed configurations for modification or additional configuration

List of products



## Responsive Design



[www.siemens.com/lowvoltage/3va-configurator](http://www.siemens.com/lowvoltage/3va-configurator) and  
[www.siemens.com/lowvoltage/3va27-configurator](http://www.siemens.com/lowvoltage/3va27-configurator)

## Visualization of the internally mountable accessories (slot assignment)

The configuration is complete. You can order this product.

Basic configuration | Trip units | Type of mounting | Connection technology | Auxiliary release/auxiliary switch | Mountable accessories | Result | CAD/CAM

2019\_08.02

Assembly option

Field Assembly

Auxiliary release

- Shunt trip left (STL)
  - 110-127 V AC 50/60 Hz / DC
- Shunt trip left (STL ED)
  - None
- Undervoltage release (LVR)
  - None
- Universal release (LUN)
  - None

Slot assignment



Auxiliary switch/alarm switch (changeover contacts - Form C)

Auxiliary switch type HP

- AUX auxiliary switch
- LCS leading auxiliary switch

Auxiliary switch type HQ

- AUX auxiliary switch
- AUX auxiliary switch, suitable for electronic circuits
- LCS leading auxiliary switch
- LCS leading auxiliary switch, suitable for electronic circuits

Alarm switch type HP

- EAS alarm switch

Alarm switch type HQ

- EAS alarm switch
- EAS alarm switch, suitable for electronic circuits
- EAS electrical alarm switch
- EAS electrical alarm switch, suitable for electronic circuits

## Download of the individual edz files for 3VA

The configuration is complete. You can order this product.

Basic configuration | Trip units | Type of mounting | Connection technology | Auxiliary release/auxiliary switch | Mountable accessories | Result | CAD/CAM

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Selection

- Assembly drawing
- 3VA molded-case circuit breaker

Preview

3D view | Unit Wiring Diagram IEC | Dimension drawing | Area Model View | Wire frame view



Download - all CAD formats

- View: Area Model View
- View option: Isometric
- File type: Bitmap (\*.bmp)
- Start generation

Download - all documents

- open documents dialog

Documentation and reporting

Choose languages for the data sheet: deutsch

Project data for the datasheet

Download selection of document types

- Datasheets (PDF)
- EPLAN Macro (EDZ)

Selection of download format

- All in a ZIP file

Start generation

Component documentation

- 3VA molded case circuit breaker (3VA2580-7M312-0A00)
- Datasheet (PDF)
- EPLAN Macro (EDZ)

© Siemens AG | Application information

## Automatic generation of the 3D model, 2D dimension drawing and the internal circuit diagram according to IEC

The configuration is complete. You can order this product.

Basic configuration | Trip units | Type of mounting | Connection technology | Auxiliary release/auxiliary switch | Mountable accessories | Result | CAD/CAM

2019\_08.02

Selection

- Assembly drawing
- 3VA molded-case circuit breaker
- Communication
- Main contactor connections
- Form type
- Auxiliary release/auxiliary switch
- STL 110-127 V AC 50/60 Hz / DC
- Mountable accessories

Preview

3D view | Unit Wiring Diagram IEC | Dimension drawing | Area Model View | Wire frame view



Download - all CAD formats

- View: Area Model View
- View option: Isometric
- File type: Bitmap (\*.bmp)
- Start generation

Download - all documents

- open documents dialog

# System overview

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

2

## Basic units



3VA1 for standard applications



3VA2 for selective applications

## Trip units



Thermal-magnetic trip unit (TMTU)



Electronic trip unit (ETU)



Electronic trip unit (ETU) with display, and optionally with metering function

## Trip unit accessories



24 V module



Communication module



Breaker data server



External display



Test device

## Installation type



Fixed-mounted



Draw-out unit, complete kit



Plug-in unit, complete kit

## Supplementary accessories



Auxiliary circuit connector



Door feedthrough



Position signaling switch



Cylinder lock adapter



Crank

## Main conductor connection



Front bus connectors extended



Front bus connectors offset



Circular conductor terminal



Box terminal



Nut keeper units, right-angled

## Connection accessories



Insulation accessories

**Note:**

You will find a detailed range of accessories in the Accessories and spare parts section.

## Auxiliary releases/auxiliary switches



Shunt trip



Universal release



Undervoltage release



Auxiliary switch



Tripped signaling switch



Leading changeover switch LCS



Electrical alarm switches EAS



Short circuit alarm switch SAS

## Mountable accessories



Manual operator



Motorized operating mechanism



Residual current device

## Additional circuit breaker accessories



Cover frame



Adapter for DIN rails

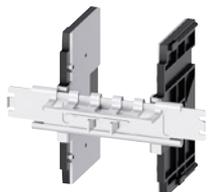


Locking device



Cylinder lock

## Mechanical interlocks



Sliding bar interlock



Interlocking with rod



Handle interlock using a Bowden cable

### Note:

You will find a detailed range of accessories in the Accessories and spare parts section.

# Structure of the article numbers

## Basic configuration for line and generator protection

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

2

		3VA												4	5	6	7	8	9	10	11	12	-	0AA0			
Trip units	Thermal-magnetic													1													
	Electronic													2													
Size		3VA10	3VA11	3VA12	3VA13	3VA14	3VA15	3VA20	3VA21	3VA22	3VA23	3VA24	3VA25	3VA26													
	100 A	■	-	-	-	-	-	■	-	-	-	-	-	-	0												
	160 A	-	■	-	-	-	-	-	■	-	-	-	-	-	1												
	250 A	-	-	■	-	-	-	-	-	■	-	-	-	-	2												
	400 A	-	-	-	■	-	-	-	-	-	■	-	-	-	3												
	630 A	-	-	-	-	■	-	-	-	-	-	■	-	-	4												
	1000 A	-	-	-	-	-	■	-	-	-	-	-	■	-	5												
	1250 A	-	-	-	-	-	-	-	-	-	-	-	-	■	6												
Max. rated current $I_n$	Line protection	16 A	■	■	-	-	-	-	-	-	-	-	-	-			9	6									
		20 A	■	■	-	-	-	-	-	-	-	-	-	-	-			2	0								
		25 A	■	■	-	-	-	-	■	■	-	-	-	-	-			2	5								
		32 A	■	■	-	-	-	-	-	-	-	-	-	-	-			3	2								
		40 A	■	■	-	-	-	-	■	■	-	-	-	-	-			4	0								
		50 A	■	■	-	-	-	-	-	-	-	-	-	-	-			5	0								
		63 A	■	■	-	-	-	-	■	■	-	-	-	-	-			6	3								
		80 A	■	■	-	-	-	-	-	-	-	-	-	-	-			8	0								
		100 A	■	■	-	-	-	-	■	■	-	-	-	-	-			1	0								
		125 A	-	■	■	-	-	-	-	-	-	-	-	-	-			1	2								
		160 A	-	■	■	-	-	-	-	■	■	-	-	-	-			1	6								
		200 A	-	-	■	-	-	-	-	-	-	-	-	-	-			2	0								
		250 A	-	-	■	-	-	-	-	-	■	■	-	-	-			2	5								
		320 A	-	-	-	■	-	-	-	-	-	-	-	-	-			3	2								
		400 A	-	-	-	-	■	-	-	-	-	-	■	■	-			4	0								
		500 A	-	-	-	-	■	-	-	-	-	-	-	■	*			5	0								
	630 A	-	-	-	-	-	■	-	-	-	-	-	■	■			6	3									
	800 A	-	-	-	-	-	-	■	-	-	-	-	-	■			8	0									
	1000 A	-	-	-	-	-	-	■	-	-	-	-	-	■			1	0									
	1250 A	-	-	-	-	-	-	-	-	-	-	-	-	■			1	2									
	Generator protection	25 A	-	-	-	-	-	-	■	■	-	-	-	-	-			2	5								
		40 A	-	-	-	-	-	-	■	■	-	-	-	-	-			4	0								
		63 A	-	-	-	-	-	-	■	■	-	-	-	-	-			6	3								
		100 A	-	-	-	-	-	-	■	■	-	-	-	-	-			1	0								
		160 A	-	-	-	-	-	-	-	■	■	-	-	-	-			1	6								
		250 A	-	-	-	-	-	-	-	-	■	■	-	-	-			2	5								
		400 A	-	-	-	-	-	-	-	-	-	■	■	-	-			4	0								
		500 A	-	-	-	-	-	-	-	-	-	-	■	*	-			5	0								
		630 A	-	-	-	-	-	-	-	-	-	-	-	■	■			6	3								
		800 A	-	-	-	-	-	-	-	-	-	-	-	-	■			8	0								
		1000 A	-	-	-	-	-	-	-	-	-	-	-	-	■			1	0								
		1250 A	-	-	-	-	-	-	-	-	-	-	-	-	■			1	2								
Short-circuit breaking capacity $I_{cu} = I_{cs}$ at 415 V		Without overload protection	-	■	-	■	-	■	-	-	-	-	-	-	-			1									
		Without short-circuit protection	-	■	■	■	■	-	-	-	-	-	-	-	-			1									
		16 kA	■	-	-	-	-	-	-	-	-	-	-	-	-			2									
		25 kA	■	■	-	-	-	-	-	-	-	-	-	-	-			3									
	36 kA	■	■	■	■	■	-	-	-	-	-	-	-	-			4										
	55 kA	-	■	■	■	■	■	■	■	■	■	■	■	■			5										
	70 kA	-	■	■	■	■	■	■	■	■	■	■	■	■			6										
	85 kA	-	-	-	-	-	-	■	■	■	■	■	■	■			6										
	110 kA	-	-	-	■	■	■	■	■	■	■	■	■	■			7										
	150 kA	-	-	-	-	-	-	■	■	■	■	■	■	■			8										
200 kA	-	-	-	-	-	-	-	■	■	■	■	■	■			0											

\* With ETU 5-series and 8-series, utilization category B only

		3VA											4	5	6	7	8	9	10	11	12	-	OAA0			
		3VA10	3VA11	3VA12	3VA13	3VA14	3VA15	3VA20	3VA21	3VA22	3VA23	3VA24	3VA25	3VA26												
<b>Protection function thermal-magnetic</b>	No protection	-	■	■	■	■	-	-	-	-	-	-	-	-	SD100	-							A			
	Line protection	■	■	-	-	-	-	-	-	-	-	-	-	-	TM210	FTFM								D		
		-	■	-	-	-	-	-	-	-	-	-	-	-	TM220	ATFM								E		
		-	■	■	■	■	■	-	-	-	-	-	-	-	TM240	ATAM								F		
<b>Protection function thermal-magnetic, neutral conductor protection</b>	No protection																							A		
	Line protection	Without neutral conductor protection																							E	
		50% neutral conductor protection																								F
		100% neutral conductor protection																								G
<b>Protection function electronic</b>	Line protection	-	-	-	-	-	-	■	■	■	■	■	■	■	ETU320	LI	(N) <sup>1)</sup>	H	L							
		-	-	-	-	-	-	■	■	■	■	■	■	■	ETU330	LIG	(N) <sup>1)</sup>	H	M							
		-	-	-	-	-	-	■	■	■	■	■	■	■	ETU340	ELISA LI	(N) <sup>1)</sup>	H	K							
	Line and generator protection	-	-	-	-	-	-	■	■	■	■	■	■	■	ETU350	LSI	(N) <sup>1)</sup>	H	N							
		-	-	-	-	-	-	■	■	■	■	■	■	■	ETU550	LSI	(N) <sup>2)</sup>	J	P							
	Line and generator protection, with display	-	-	-	-	-	-	■	■	■	■	■	■	■	ETU560	LSIG	(N) <sup>2)</sup>	J	Q							
		-	-	-	-	-	-	■	■	■	■	■	■	■	ETU850	LSI	(N) <sup>2)</sup>	K	P							
	Line and generator protection, with display, with metering function	-	-	-	-	-	-	■	■	■	■	■	■	■	ETU860	LSIG	(N) <sup>2)</sup>	K	Q							
-		-	-	-	-	-	■	■	■	■	■	■	■													
<b>Number of poles</b>	1-pole	Line protection	-	■*	-	-	-	-	-	-	-	-	-	-									1			
		Generator protection	-	-	-	-	-	-	-	-	-	-	-	-												
	2-pole	Line protection	-	■*	-	-	-	-	-	-	-	-	-	-									2			
		Generator protection	-	-	-	-	-	-	-	-	-	-	-	-												
	3-pole	Line protection	■	■	■	■	■	■	■	■	■	■	■	■									3			
		Generator protection	-	-	-	-	-	-	■	■	■	■	■	■									3			
4-pole	Line protection	■	■	■	■	■	■	■	■	■	■	■	■									4				
	Generator protection	-	-	-	-	-	-	■	■	■	■	■	■									4				
* For TM210 only																										
<b>Connection technology</b>	Nut keeper kit	Line protection	■	■	■	■	■	■	■	■	■	■	■	■									2			
		Generator protection	-	-	-	-	-	-	■	■	■	■	■	■									2			
	Box terminal	Line protection	■	■	-	-	-	-	■	■	-	-	-	-									6			
		Generator protection	-	-	-	-	-	-	■	■	-	-	-	-									6			

# Structure of the article numbers

## Basic configuration for starter and motor protection

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

2

		3VA										4	5	6	7	8	9	10	11	12	-	0AA0						
Trip units	Thermal-magnetic											1																
	Electronic											2																
Size	160 A	■	-	-	-	-	-	-	-	-	-	1																
	250 A	-	■	-	-	-	-	-	-	-	-	2																
	400 A	-	-	■	-	-	-	-	-	-	-	3																
	630 A	-	-	-	■	-	-	-	-	-	-	4																
	1000 A	-	-	-	-	■	-	-	-	-	-	5																
Max. rated current $I_n$	Starter protection	1 A	■	-	-	-	-	-	-	-	-	-	8	1														
		2 A	■	-	-	-	-	-	-	-	-	-	-	0	2													
		4 A	■	-	-	-	-	-	-	-	-	-	-	0	4													
		8 A	■	-	-	-	-	-	-	-	-	-	-	0	8													
		12.5 A	■	-	-	-	-	-	-	-	-	-	-	9	2													
		20 A	■	-	-	-	-	-	-	-	-	-	-	2	0													
		25 A	-	-	-	-	-	-	■	-	-	-	-	2	5													
		32 A	■	-	-	-	-	-	-	-	-	-	-	3	2													
		40 A	■	-	-	-	-	-	■	-	-	-	-	4	0													
		50 A	■	-	-	-	-	-	-	-	-	-	-	5	0													
		63 A	■	-	-	-	-	-	-	■	-	-	-	6	3													
		80 A	■	-	-	-	-	-	-	-	-	-	-	8	0													
		100 A	■	-	-	-	-	-	■	-	-	-	-	1	0													
		125 A	■	-	-	-	-	-	-	-	-	-	-	1	2													
	160 A	-	■	-	-	-	-	-	■	-	-	-	1	6														
	200 A	-	■	-	-	-	-	-	-	■	-	-	2	0														
	250 A	-	-	■	-	-	-	-	-	-	■	-	2	5														
	320 A	-	-	-	■	-	-	-	-	-	-	-	3	2														
	400 A	-	-	-	-	■	-	-	-	-	-	■	4	0														
	500 A	-	-	-	-	-	■	-	-	-	-	-	5	0														
	630 A	-	-	-	-	-	-	■	-	-	-	-	6	3														
	800 A	-	-	-	-	-	-	-	■	-	-	-	8	0														
	Motor protection	25 A	-	-	-	-	-	-	-	■	-	-	2	5														
		40 A	-	-	-	-	-	-	-	■	-	-	4	0														
		63 A	-	-	-	-	-	-	-	■	-	-	6	3														
		100 A	-	-	-	-	-	-	-	■	-	-	1	0														
		160 A	-	-	-	-	-	-	-	-	■	-	1	6														
		200 A	-	-	-	-	-	-	-	-	■	-	2	0														
250 A		-	-	-	-	-	-	-	-	-	■	2	5															
400 A		-	-	-	-	-	-	-	-	-	-	■	4	0														
500 A		-	-	-	-	-	-	-	-	-	-	■	5	0														
630 A		-	-	-	-	-	-	-	-	-	-	■	6	3														
800 A	-	-	-	-	-	-	-	-	-	-	■	8	0															
Short-circuit breaking capacity $I_{cu} = I_{cs}$ at 415 V	55 kA	■	■	■	■	■	■	■	■	■	■														5			
	70 kA	■	■	■	■	■	-	-	-	-	-															6		
	85 kA	-	-	-	-	-	-	■	■	■	■															6		
	110 kA	-	-	■	■	■	■	■	■	■	■															7		
	200 kA	-	-	-	-	-	-	■	■	■	■															0		

		3VA										- 0AA0					
		4	5	6	7	8	9	10	11	12							
		3VA11	3VA12	3VA13	3VA14	3VA15	3VA21	3VA22	3VA23	3VA24	3VA25						
Protection function thermal-magnetic	Starter protection	■	-	-	-	-	-	-	-	-	-	TM110M	FM	M	G		
		■	■	■	■	■	-	-	-	-	-	TM120M	AM	M	H		
Protection function electronic	Motor protection	-	-	-	-	-	■	■	■	■	■	ETU350M	LSI	M	N		
	Motor protection, with display	-	-	-	-	-	■	■	■	■	■	ETU550M	LSI	M	P		
	Motor protection, with display, with metering function	-	-	-	-	-	■	■	■	■	■	ETU860M	LSIG	M	Q		
	Starter protection	-	-	-	-	-	■	■	■	■	-	ETU310M	I	M	S		
Number of poles	3-pole																
	Starter protection	■	■	■	■	■	■	■	■	■	-					3	
	Motor protection	-	-	-	-	-	■	■	■	■	■					3	
Connection technology	Nut keeper kit	Starter protection	■	■	■	■	■	■	■	■	-					2	
		Motor protection	-	-	-	-	-	■	■	■	■	■					2
	Box terminal	Starter protection	■	-	-	-	-	■	-	-	-	-					6
		Motor protection	-	-	-	-	-	■	-	-	-	-					6



## Auxiliary releases

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

2

			3VA10	3VA11	3VA12	3VA13	3VA14	3VA15	3VA20	3VA21	3VA22	3VA23	3VA24	3VA25																																																																																																																																																																																																																																								
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# Manual operators

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			3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25	
<b>Front mounted rotary operators</b>								
<ul style="list-style-type: none"> <li>Handle</li> <li>For IEC</li> <li>Degree of protection IP30</li> <li>For 3-pole and 4-pole breakers</li> </ul>								
	<b>Version</b>	<b>Illumination kit</b>	<b>Door interlock</b>					
	Standard (gray)	Without	Without	3VA9157-0EK11	3VA9257-0EK11	3VA9267-0EK11	3VA9467-0EK11	3VA9687-0EK11
			With	3VA9157-0EK21	3VA9257-0EK21	3VA9267-0EK21	3VA9467-0EK21	3VA9687-0EK21
		With	Without	3VA9157-0EK13	3VA9257-0EK13	3VA9267-0EK13	3VA9467-0EK13	–
			With	3VA9157-0EK23	3VA9257-0EK23	3VA9267-0EK23	3VA9467-0EK23	–
EMERGENCY-OFF (red/yellow)	Without	Without	3VA9157-0EK15	3VA9257-0EK15	3VA9267-0EK15	3VA9467-0EK15	3VA9687-0EK15	
			With	3VA9157-0EK25	3VA9257-0EK25	3VA9267-0EK25	3VA9467-0EK25	3VA9687-0EK25
	With	Without	3VA9157-0EK17	3VA9257-0EK17	3VA9267-0EK17	3VA9467-0EK17	–	
			With	3VA9157-0EK27	3VA9257-0EK27	3VA9267-0EK27	3VA9467-0EK27	–
<b>Door mounted rotary operators with tolerance compensation</b>								
<ul style="list-style-type: none"> <li>Shaft 300 mm (325 mm for 3VA15/3VA25)</li> <li>With mounting tolerance compensation</li> <li>Handle with masking plate 75 × 75 mm (100 × 100 mm for 3VA15/3VA25)</li> <li>Degree of protection IP65</li> <li>For 3-pole and 4-pole breakers</li> </ul>								
	<b>Version</b>	<b>Illumination kit</b>	<b>Door interlock</b>					
	Standard (gray)	Without	With	3VA9157-0FK21	3VA9257-0FK21	3VA9267-0FK21	3VA9467-0FK21	3VA9687-0FK21
			With	3VA9157-0FK23	3VA9257-0FK23	3VA9267-0FK23	3VA9467-0FK23	3VA9687-0FK23 <b>new</b>
	EMERGENCY-OFF (red/yellow)	Without	With	3VA9157-0FK25	3VA9257-0FK25	3VA9267-0FK25	3VA9467-0FK25	3VA9687-0FK25
			With	3VA9157-0FK27	3VA9257-0FK27	3VA9267-0FK27	3VA9467-0FK27	3VA9687-0FK27 <b>new</b>
<b>Door mounted rotary operators without tolerance compensation <b>new</b></b>								
	<ul style="list-style-type: none"> <li>Shaft 300 mm (325 mm for 3VA15/3VA25)</li> <li>Handle with masking plate 75 × 75 mm (100 × 100 mm for 3VA15/3VA25)</li> <li>Degree of protection IP65</li> <li>For 3-pole and 4-pole breakers</li> </ul>							
	<b>Version</b>	<b>Illumination kit</b>	<b>Door interlock</b>					
	Standard (gray)	Without	With	3VA9157-0FK61	3VA9257-0FK61	3VA9267-0FK61	3VA9467-0FK61	3VA9687-0FK61
<b>Door mounted rotary operators without handle</b>								
	<ul style="list-style-type: none"> <li>For IEC</li> <li>Degree of protection IP30</li> <li>For 3-pole and 4-pole breakers</li> </ul>							
	<b>Version</b>	<b>Illumination kit</b>	<b>Door interlock</b>					
	With shaft stub (gray)	–	Without	3VA9157-0GK00	3VA9257-0GK00	3VA9267-0GK00	3VA9467-0GK00	3VA9687-0GK00

			3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25	
<b>Side wall mounted rotary operators</b>								
	<ul style="list-style-type: none"> <li>Rotary operator with shaft 300 mm</li> <li>Handle with masking plate 75 × 75 mm</li> <li>Degree of protection IP65</li> <li>For 3-pole and 4-pole breakers</li> </ul>							
<b>Version</b>	<b>Mounting bracket</b>	<b>Illumination kit</b>						
Standard (gray)	Without	Without	3VA9157-0PK11	3VA9257-0PK11	3VA9267-0PK11	3VA9467-0PK11	–	
		With	3VA9157-0PK13	3VA9257-0PK13	3VA9267-0PK13	3VA9467-0PK13	–	
EMERGENCY-OFF (red/yellow)	Without	Without	3VA9157-0PK15	3VA9257-0PK15	3VA9267-0PK15	3VA9467-0PK15	–	
		With	3VA9157-0PK17	3VA9257-0PK17	3VA9267-0PK17	3VA9467-0PK17	–	
<b>Side wall mounted rotary operators with mounting plates</b>								
	<ul style="list-style-type: none"> <li>Rotary operator with short shaft and mounting plate for mounting directly on the side wall</li> <li>Handle with masking plate 75 × 75 mm</li> <li>Degree of protection IP65</li> <li>For 3-pole and 4-pole breakers</li> </ul>							
<b>Version</b>	<b>Mounting bracket</b>	<b>Illumination kit</b>						
Standard (gray)	With	Without	3VA9157-0PK51	3VA9257-0PK51	3VA9267-0PK51	–	–	
		With	3VA9157-0PK53	3VA9257-0PK53	3VA9267-0PK53	–	–	
EMERGENCY-OFF (red/yellow)	With	Without	3VA9157-0PK55	3VA9257-0PK55	3VA9267-0PK55	–	–	
		With	3VA9157-0PK57	3VA9257-0PK57	3VA9267-0PK57	–	–	
<b>Extended DIN rails for N/PE terminals <span style="color: orange;">new</span></b>								
	<b>Version</b>	<b>Rated current</b>						
	For mounting plate	Up to 250 A	3VA9987-0GL30	3VA9987-0GL30	3VA9987-0GL30	–	–	
<b>Auxiliary switch modules for rotary operating mechanisms <span style="color: orange;">new</span></b>								
	<b>Version</b>							
	2× leading to "ON"		3VA9257-0GX10	3VA9257-0GX10	3VA9467-0GX10	3VA9467-0GX10	–	
	2× leading to "ON" and 1× leading to "OFF"		–	–	3VA9467-0GX20	3VA9467-0GX20	–	
<b>Mounting adapters for side wall mounted rotary operators <span style="color: orange;">new</span></b>								
	<b>Version</b>							
	Necessary accessories for 3VA side wall mounted rotary operators, if 3VA9...-0GX.0 auxiliary switch modules are used		3VA9257-0GX01	3VA9257-0GX01	3VA9467-0GX01	–	–	
<b>Masking plates, standard <span style="color: orange;">new</span></b>								
	<b>Version</b>							
	Necessary accessories for door mounted rotary operators and 3VA side wall mounted rotary operators, if 3VA9...-0GX.0 auxiliary switch modules are used		8UD1900-0BB01	8UD1900-0BB01	8UD1900-0BB01	8UD1900-0BB01	–	
<b>Masking plates, EMERGENCY STOP <span style="color: orange;">new</span></b>								
	<b>Version</b>							
	Necessary accessories for door mounted rotary operators and 3VA side wall mounted rotary operators, if 3VA9...-0GX.0 auxiliary switch modules are used		8UD1900-0BB05	8UD1900-0BB05	8UD1900-0BB05	8UD1900-0BB05	–	

# Manual operators

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	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
<b>Supplementary handles for door mounted rotary operators</b>					
	<ul style="list-style-type: none"> <li>For operation when cabinet door is open</li> </ul>				
<b>Version</b>					
Standard (gray)	3VA9287-0GC01	3VA9287-0GC01	3VA9487-0GC01	3VA9487-0GC11	3VA9687-0GC01
EMERGENCY-OFF (red/yellow)	3VA9287-0GC05	3VA9287-0GC05	3VA9487-0GC05	3VA9487-0GC15	3VA9687-0GC05
<b>Handles</b>					
	<ul style="list-style-type: none"> <li>With masking plate</li> </ul>				
<b>Version</b>					
<b>Tolerance compensation</b>					
Standard (gray)	With		8UD1721-0AB21	8UD1731-0AB21	8UD1741-0AB21
	Without		8UD1721-0AB11	8UD1731-0AB11	8UD1741-0AB11
EMERGENCY-OFF (red/yellow)	With		8UD1721-0AB25	8UD1731-0AB25	8UD1741-0AB25
	Without		8UD1721-0AB15	8UD1731-0AB15	8UD1741-0AB15
<b>Handle extensions</b>					
	<ul style="list-style-type: none"> <li>Note: The handle extension is already included in the scope of supply of the breakers.</li> </ul>				
				3VA9487-0SC10	3VA9987-0SC10
<b>Shafts</b>					
	<b>Variant</b>	<b>Length</b>			
	8 × 8 mm	300 mm	8UD1900-2WA00		–
		600 mm	8UD1900-2WB00		–
	12 × 12 mm	300 mm	–	–	8UD1900-4WA00
		600 mm	–	–	8UD1900-4WB00
<b>Adapters for shafts</b>					
	<b>Variant</b>	<b>Purpose</b>			
	8 × 8 mm	With door mounted rotary operator and side wall mounted rotary operator	8UD1900-2DA00		–
	12 × 12 mm	For door mounted rotary operator	–	–	8UD1900-4DA00
<b>Door couplings</b>					
	<b>Variant</b>				
	8 × 8 mm		8UD1900-2HA00		–
	12 × 12 mm		–	–	8UD1900-4HA00

		3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
<b>Mounting tolerance compensations</b>						
	<b>Variant</b> 8 × 8 mm	8UD1900-2GA00				–
	12 × 12 mm	–	–	–	–	8UD1900-4GA00
<b>Fixing brackets for shafts</b>						
		3VA9287-0GA80		3VA9487-0GA80		3VA9687-0GA80
<b>Variable depth adapters</b>						
	<b>Variant</b> 8 × 8 mm	3VA9487-0GB10				–

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					3VA20	
					3VA21	
					3VA22	
					3VA23	
					3VA24	
				3VA15		3VA25
		3VA10				
		3VA11				
		3VA12	3VA13			
			3VA14			

## Labeling plates for manual operators



3VA9087-05X10

## Illumination kits for manual operators



- 24 V DC voltage

Version	Rated current					
Front rotary operator	100 ... 250 A	8UD1900-0KA10	–	–	–	–
	100 ... 630 A	–	8UD1900-0KA20	–	8UD1900-0KA20	–
	630 ... 1000 A	–	–	8UD1900-0KA30	–	8UD1900-0KA30
Door mounted rotary operator and side wall mounted rotary operator	100 ... 630 A	8UD1900-0KA20	8UD1900-0KA20	8UD1900-0KA20	8UD1900-0KA20	–
	630 ... 1000 A	–	–	–	–	8UD1900-0KA30

## Cylinder locks (type Kaba), standard masking plates



Purpose	Key					
For door mounted rotary operator and side wall mounted rotary operator (in the masking plate)	1	8UD1900-0MB01	8UD1900-0MB01	–	8UD1900-0MB01	–
	2	8UD1900-0NB01	8UD1900-0NB01	–	8UD1900-0NB01	–
	3	8UD1900-0PB01	8UD1900-0PB01	–	8UD1900-0PB01	–
	4	8UD1900-0QB01	8UD1900-0QB01	–	8UD1900-0QB01	–

## Cylinder locks (type Kaba), EMERGENCY-OFF masking plates



Purpose	Key					
For door mounted rotary operator and side wall mounted rotary operator (in the masking plate)	1	8UD1900-0MB05	8UD1900-0MB05	–	8UD1900-0MB05	–
	2	8UD1900-0NB05	8UD1900-0NB05	–	8UD1900-0NB05	–
	3	8UD1900-0PB05	8UD1900-0PB05	–	8UD1900-0PB05	–
	4	8UD1900-0QB05	8UD1900-0QB05	–	8UD1900-0QB05	–

## Cylinder locks (type Ronis)



- Includes a lock with 2 keys
- For locking or interlocking
- For installation in all rotary operators
- For mounting in the adapter kit for the accessories compartment
- Note: The cylinder lock adapter for rotary operators is also needed for locking or interlocking circuit breakers via rotary operators

Key					
1				3VA9980-0VL10	
3				3VA9980-0VL30	
4				3VA9980-0VL40	

## Cylinder lock adapters for rotary operators



- To mount the cylinder lock in the rotary operator (also possible with door mounted rotary operator and side wall mounted rotary operator)

Rated current					
100 ... 630 A	3VA9980-0LF20	3VA9980-0LF20	–	3VA9980-0LF20	–
1000 A	–	–	3VA9680-0LF20	–	3VA9680-0LF20



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## Side mounted motor operators (MO310)



- Cover size 45 mm

Addressable via control signals	Isolating features in accordance with IEC/EN 60947-1	Make time, typically		Break time, typically		Rated operational power
		for 3VA1	for 3VA2	for 3VA1	for 3VA2	
■	■	<300 ms	–	<300 ms	–	250 W, max. 500 W (60 ms)

## Motor operators without stored energy operators (MO320)



Addressable via control signals	Isolating features in accordance with IEC/EN 60947-1	Make time, typically		Break time, typically		Rated operational power
		for 3VA1	for 3VA2	for 3VA1	for 3VA2	
■	■	<800 ms (160 A, 250A)	<1000 ms (250 A), <1700 ms (630 A)	<800 ms (160 A, 250A)	<1000 ms (250 A), <1400 ms (630 A)	250 W, max. 500 W (60 ms)

## Motor operators with stored energy operators (SEO520)



- Synchronizable remote operating mechanism with optional communication link
- Has two spring assemblies that are used to switch the 3VA2 molded case circuit breaker on and off quickly. This new principle in the MCCB area ensures fast, reliable and easily controllable switching sequences, especially in load transfer switching applications.
- The connection with the COM060 communication module, via a plug-in connection, integrates the SEO520 into the communication environment of the 3VA molded case circuit breakers and ensures that the molded case circuit breaker can also be switched via the supported communication networks and the powerconfig and powermanager software packages.
- **Note:** On account of the fast switching times, the SEO520 cannot be used with a leading changeover switch LCS.

Addressable via control signals	Isolating features in accordance with IEC/EN 60947-1	Make time, typically		Break time, typically		Rated operational power
		for 3VA1	for 3VA2	for 3VA1	for 3VA2	
■	■	–	<80 ms	–	<80 ms	300 W, max. 500 W (60 ms)

## Mechanical operating cycles counters (for installation in the SEO520)



### Mounting

For installation in the SEO520

### Article No.

3VA9987-0HX10

## Cylinder lock adapters for SEO520



### Mounting

For installation of cylinder locks in the SEO520

### Article No.

3VA9980-0LF30

## Cylinder locks (type Ronis)



- Includes a lock with 2 keys
- For locking the operating mode (Manual/Auto/Lock) of the SEO520

### Key

	Article No.
1	3VA9980-0VL10
3	3VA9980-0VL30
4	3VA9980-0VL40

		3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24
<b>Rated control supply voltage</b>	<b>With communication</b>				
42 ... 60 V AC, 24 ... 60 V DC	–	3VA9117-0HB10	–	–	–
110 ... 230 V AC, 110 ... 250 V DC	–	3VA9117-0HB20	–	–	–
<b>Rated control supply voltage</b>	<b>With communication</b>				
24 ... 60 V DC	–	3VA9157-0HA10	3VA9257-0HA10	3VA9267-0HA10	3VA9467-0HA10
110 ... 230 V AC, 110 ... 250 V DC	–	3VA9157-0HA20	3VA9257-0HA20	3VA9267-0HA20	3VA9467-0HA20
<b>Rated control supply voltage</b>	<b>With communication</b>				
24 V DC	–	–	–	3VA9267-0HC10	–
42 ... 60 V AC/DC	–	–	–	3VA9267-0HC20	–
110 ... 230 V AC, 110 ... 250 V DC	–	–	–	3VA9267-0HC30	–
24 V DC	Yes	–	–	3VA9267-0HC15	–
110 ... 230 V AC, 110 ... 250 V DC	Yes	–	–	3VA9267-0HC35	–



## Reset mode

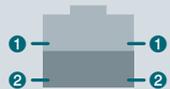
### All motor operators have the following reset modes:

- Reset mode 1: Automatic reset
- Reset mode 2: Reset via OFF-signal

### The motor operator with SEO520 stored energy operator additionally has:

- Reset mode 3: Reset via OFF-signal with additional acknowledge signal

# Connection technology



- ① For mounting onto the circuit breaker  
② For mounting onto draw-out and plug-in units

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

2

3VA10  
3VA11

## Box terminals

	Connection options	Scope of supply	Copper stranded	
	① ②	3 single terminals	1.5 ... 70 mm <sup>2</sup>	3VA9153-0JA11
			6 ... 120 mm <sup>2</sup>	–
			25 ... 185 mm <sup>2</sup>	–
			50 ... 185 mm <sup>2</sup>	–
			35 ... 300 mm <sup>2</sup>	–
	① ②	4 single terminals	1.5 ... 70 mm <sup>2</sup>	3VA9154-0JA11
			6 ... 120 mm <sup>2</sup>	–
			25 ... 185 mm <sup>2</sup>	–
			50 ... 185 mm <sup>2</sup>	–
			35 ... 300 mm <sup>2</sup>	–

## Nut keeper kits

	Connection options	Scope of supply	Max. tap width	Max. tap thickness	
	① ②	3 single terminals	17 mm	6.5 mm	3VA9113-0QA00
			25 mm	8 mm	–
			35 mm	10 mm	–
			50 mm	25 mm	–
		Nut keeper kit for 3-pole breakers, 1 terminal cover			
	① ②	4 single terminals	17 mm	6.5 mm	3VA9114-0QA00
			25 mm	8 mm	–
			35 mm	10 mm	–
			50 mm	28 mm	–
		Nut keeper kit for 4-pole breakers, 1 terminal cover			

## Circular conductor terminals, 1 cable

	Connection options	Scope of supply	Copper/aluminum stranded	
	① ②	3 single terminals	1.5 ... 10 mm <sup>2</sup> <b>new</b>	3VA9113-0JB10
			1.5 ... 50 mm <sup>2</sup>	–
			10 ... 95 mm <sup>2</sup>	3VA9113-0JB11
			16 ... 185 mm <sup>2</sup>	–
			35 ... 185 mm <sup>2</sup>	–
	① ②	4 single terminals	1.5 ... 10 mm <sup>2</sup> <b>new</b>	3VA9114-0JB10
			1.5 ... 50 mm <sup>2</sup>	–
			10 ... 95 mm <sup>2</sup>	3VA9114-0JB11
			16 ... 185 mm <sup>2</sup>	–
			35 ... 185 mm <sup>2</sup>	–
		50 ... 300 mm <sup>2</sup>		–

<sup>1)</sup> Only permitted up to 400 A

<sup>2)</sup> Maximum current-carrying capacity of copper cables 380 A  
Maximum current-carrying capacity of aluminum cables 310 A

			3VA13 3VA14		
			3VA23	3VA15	
3VA12	3VA20 3VA21	3VA22	3VA24	3VA25	
–	–	–	–	–	–
3VA9253-0JA11	3VA9163-0JA12	3VA9163-0JA12	–	–	–
–	3VA9263-0JA12	3VA9263-0JA12	–	–	–
3VA9253-0JA12	–	–	–	–	–
–	–	–	3VA9483-0JA13 <sup>1)</sup>	–	–
–	–	–	–	–	–
3VA9254-0JA11	3VA9164-0JA12	3VA9164-0JA12	–	–	–
–	3VA9264-0JA12	3VA9264-0JA12	–	–	–
3VA9254-0JA12	–	–	–	–	–
–	–	–	3VA9484-0JA13 <sup>1)</sup>	–	–
–	–	–	–	–	–
3VA9213-0QA00	3VA9203-0QA00	3VA9203-0QA00	–	–	–
–	–	–	3VA9403-0QA00	–	–
–	–	–	–	3VA9603-0QA00	–
–	–	–	–	–	–
3VA9214-0QA00	3VA9204-0QA00	3VA9204-0QA00	–	–	–
–	–	–	3VA9404-0QA00	–	–
–	–	–	–	3VA9604-0QA00	–
–	–	–	–	–	–
–	3VA9103-0JB11	–	–	–	–
–	–	–	–	–	–
–	–	3VA9263-0JB12	–	–	–
3VA9253-0JB12	–	–	–	–	–
–	–	–	3VA9383-0JB13 <sup>2)</sup>	–	–
–	–	–	–	–	–
–	3VA9104-0JB11	–	–	–	–
–	–	–	–	–	–
–	–	3VA9264-0JB12	–	–	–
3VA9254-0JB12	–	–	–	–	–
–	–	–	3VA9384-0JB13 <sup>2)</sup>	–	–

# Connection technology



- ① For mounting onto the circuit breaker  
② For mounting onto draw-out and plug-in units

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2

3VA10  
3VA11

## Circular conductor terminals with auxiliary conductor terminals, 1 cable<sup>2)</sup>

Image	Connection options		Scope of supply	Copper / aluminum stranded	
	①	②			
	①	②	3 single terminals	1.5 ... 10 mm <sup>2</sup> <b>new</b>	3VA9113-OJG10
				1.5 ... 50 mm <sup>2</sup>	–
				10 ... 95 mm <sup>2</sup>	3VA9113-OJG11
				16 ... 185 mm <sup>2</sup>	–
				50 ... 185 mm <sup>2</sup>	–
				50 ... 300 mm <sup>2</sup>	–
	①	②	4 single terminals	1.5 ... 10 mm <sup>2</sup> <b>new</b>	3VA9114-OJG10
				1.5 ... 50 mm <sup>2</sup>	–
				10 ... 95 mm <sup>2</sup>	3VA9114-OJG11
				16 ... 185 mm <sup>2</sup>	–
				50 ... 185 mm <sup>2</sup>	–
				50 ... 300 mm <sup>2</sup>	–

## Circular conductor terminals, 2 cables

Image	Connection options		Scope of supply	Copper / aluminum stranded	Aux. conductor terminal	
	①	②				
	①	②	3 single terminals, 1 short terminal cover	120 ... 300 mm <sup>2</sup>	No	–
					Yes <sup>2)</sup>	–
	①	②	4 single terminals, 1 short terminal cover	120 ... 300 mm <sup>2</sup>	No	–
					Yes <sup>2)</sup>	–

## Circular conductor terminals, 3 cables

Image	Connection options		Scope of supply	Copper / aluminum stranded	Aux. conductor terminal	
	①	②				
	①	②	3 single terminals, 1 short terminal cover	120 ... 185 mm <sup>2</sup>	No	–
					Yes <sup>2)</sup>	–
	①	②	4 single terminals, 1 short terminal cover	120 ... 185 mm <sup>2</sup>	No	–
					Yes <sup>2)</sup>	–

## Auxiliary conductor terminals for box terminals<sup>2)</sup>

Image	Version	
		Fixed-mounted
	Plug-in and draw-out technology	3VA9150-0WB00

## Auxiliary conductor terminals for busbars<sup>2)</sup>

Image	Version	
		Fixed-mounted
	Plug-in and draw-out technology	3VA9150-0WC00

<sup>1)</sup> Maximum current-carrying capacity of copper cables 380 A  
Maximum current-carrying capacity of aluminum cables 310 A

<sup>2)</sup> Maximum current-carrying capacity 15 A  
Maximum cable connection up to 2.5 mm<sup>2</sup>

3VA12	3VA20 3VA21	3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
–	–	–	–	–
–	3VA9103-0JG11	–	–	–
–	–	–	–	–
–	–	3VA9263-0JG12	–	–
3VA9253-0JG12	–	–	–	–
–	–	–	3VA9383-0JG13 <sup>1)</sup>	–
–	3VA9104-0JG11	–	–	–
–	–	–	–	–
–	–	3VA9264-0JG12	–	–
3VA9254-0JG12	–	–	–	–
–	–	–	3VA9384-0JG13 <sup>1)</sup>	–
–	–	–	–	3VA9503-0JB23
–	–	–	–	3VA9503-0JG23
–	–	–	–	3VA9504-0JB23
–	–	–	–	3VA9504-0JG23
–	–	–	–	3VA9503-0JB32
–	–	–	–	3VA9503-0JG32
–	–	–	–	3VA9504-0JB32
–	–	–	–	3VA9504-0JG32
3VA9200-0WB00	3VA9200-0WB00	3VA9200-0WB00	3VA9480-0WB00	–
3VA9280-0WB00	3VA9280-0WB00	3VA9280-0WB00	3VA9480-0WB00	–
3VA9200-0WC00	3VA9200-0WC00	3VA9200-0WC00	3VA9480-0WC00	–
3VA9280-0WC00	3VA9280-0WC00	3VA9280-0WC00	3VA9480-0WC00	–

# Connection technology



- ① For mounting onto the circuit breaker  
② For mounting onto draw-out and plug-in units

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## Note:

All bus connectors extended and rear connections are Cu/Sn 6 r plated according to ISO 2093

2

### Front bus connectors extended



Number of poles	Connection options	Scope of supply	Max. tap width	Max. tap thickness
1P	① –	1 busbar connection piece	22 mm	8 mm
3P	① ②	3 single terminals,	22 mm	8 mm
		2 phase barriers	32 mm	10 mm
			40 mm	12.5 mm
			50 mm	28 mm
4P	① ②	4 single terminals,	22 mm	8 mm
		3 phase barriers	32 mm	10 mm
			40 mm	12.5 mm
			50 mm	28 mm

### Front bus connectors offset

- Distance between pole centers:
  - 100/160 A = 35 mm
  - 250 A = 45 mm
  - 400/630 A = 70 mm



Number of poles	Connection options	Scope of supply	Max. tap width	Max. tap thickness
3P	① ②	3 single terminals,	30 mm	8 mm
		2 phase barriers	35 mm	10 mm
			60 mm	12.5 mm
4P	① ②	4 single terminals,	30 mm	8 mm
		3 phase barriers	35 mm	10 mm
			60 mm	12.5 mm

### Bus connectors edgewise



Number of poles	Connection options	Scope of supply	Max. tap width	Max. tap thickness
3P	① ②	3 single terminals,	20 mm	6 mm
		2 phase barriers	25 mm	7 mm
			40 mm	8 mm
4P	① ②	4 single terminals,	20 mm	6 mm
		3 phase barriers	25 mm	7 mm
			40 mm	8 mm

	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
3VA9151-0QB00		–	–	–	–
3VA9153-0QB00		–	–	–	–
–	3VA9253-0QB00		3VA9263-0QB00	–	–
–	–	–	–	3VA9483-0QB00	–
–	–	–	–	–	3VA9603-0QB00
3VA9154-0QB00		–	–	–	–
–	3VA9254-0QB00		3VA9264-0QB00	–	–
–	–	–	–	3VA9484-0QB00	–
–	–	–	–	–	3VA9604-0QB00
3VA9153-0QC00		–	–	–	–
–	3VA9253-0QC00		3VA9263-0QC00	–	–
–	–	–	–	3VA9483-0QC00	–
3VA9154-0QC00		–	–	–	–
–	3VA9254-0QC00		3VA9264-0QC00	–	–
–	–	–	–	3VA9484-0QC00	–
3VA9153-0QD00		–	–	–	–
–	3VA9253-0QD00		3VA9263-0QD00	–	–
–	–	–	–	3VA9483-0QD00	–
3VA9154-0QD00		–	–	–	–
–	3VA9254-0QD00		3VA9264-0QD00	–	–
–	–	–	–	3VA9484-0QD00	–

# Connection technology



- ① For mounting onto the circuit breaker
- ② For mounting onto draw-out and plug-in units

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## Note:

All bus connectors extended and rear connections are Cu/Sn 6 r plated according to ISO 2093

2

### Nut keeper units, right-angled <sup>1)</sup>

	Number of poles	Connection options		Max. tap width	Max. tap thickness
	3P	① ②	3 single terminals,	22 mm	8 mm
			2 phase barriers	32 mm	10 mm
				40 mm	12.5 mm
	4P	① ②	4 single terminals,	22 mm	8 mm
			3 phase barriers	32 mm	10 mm
				40 mm	12.5 mm

### Rear connection studs flat

	Number of poles	Connection options	Scope of supply
	1P	① ②	1 short connection stud flat
			1 long connection stud flat
	3P	① ②	2 short connection studs flat,
			1 long connection stud flat
	4P	① ②	2 short connection studs flat,
			2 long connection studs flat

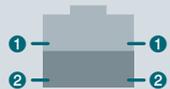
### Rear connection studs round

	Number of poles	Connection options	Scope of supply
	1P	① ②	1 short connection stud round
			1 long connection stud round
	3P	① ②	1 long connection stud round,
			2 short connection studs round
	4P	① ②	2 long connection studs round,
			2 short connection studs round

<sup>1)</sup> Can only be connected to breaker side N, 1, 3, 5

3VA10 3VA11		3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
3VA9113-0QG00	–	–	–	–	–
–	3VA9213-0QG00	3VA9223-0QG00	–	–	–
–	–	–	3VA9403-0QG00	–	–
3VA9114-0QG00	–	–	–	–	–
–	3VA9214-0QG00	3VA9224-0QG00	–	–	–
–	–	–	3VA9404-0QG00	–	–
3VA9111-0QE10	3VA9211-0QE10	3VA9201-0QE10	3VA9401-0QE10	–	–
3VA9111-0QE20	3VA9211-0QE20	3VA9201-0QE20	3VA9401-0QE20	–	–
3VA9113-0QE00	3VA9213-0QE00	3VA9203-0QE00	3VA9403-0QE00	–	–
3VA9114-0QE00	3VA9214-0QE00	3VA9204-0QE00	3VA9404-0QE00	–	–
3VA9111-0QF10	3VA9211-0QF10	3VA9201-0QF10	3VA9401-0QF10	–	–
3VA9111-0QF20	3VA9211-0QF20	3VA9201-0QF20	3VA9401-0QF20	–	–
3VA9113-0QF00	3VA9213-0QF00	3VA9203-0QF00	3VA9403-0QF00	–	–
3VA9114-0QF00	3VA9214-0QF00	3VA9204-0QF00	3VA9404-0QF00	–	–

# Connection technology



- ① For mounting onto the circuit breaker  
② For mounting onto draw-out and plug-in units

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2

## Circular conductor terminals, 2P



Connection options	Scope of supply	Number of cables	Copper/aluminum stranded	Aux. conductor terminal
① –	2 single terminals, 1 extended terminal cover, 1 insulation plate	1	25 ... 150 mm <sup>2</sup>	Yes <sup>1)</sup> No
		6	1.5 ... 35 mm <sup>2</sup>	No

## Circular conductor terminals, 3P



Connection options	Scope of supply	Number of cables	Copper/aluminum stranded	Aux. conductor terminal		
① –	3 single terminals, 1 extended terminal cover, 1 insulation plate	1	25 ... 150 mm <sup>2</sup>	Yes <sup>1)</sup> No		
			50 ... 240 mm <sup>2</sup>	Yes <sup>1)</sup> No		
		2	25 ... 150 mm <sup>2</sup>	Yes <sup>1)</sup> No		
			70 ... 300 mm <sup>2</sup>	Yes <sup>1)</sup> No		
		4	120 ... 240 mm <sup>2</sup>	Yes <sup>1)</sup> No		
			1.5 ... 35 mm <sup>2</sup>	No		
		– ②	3 single terminals, 1 extended terminal cover, 1 insulation plate	1	25 ... 150 mm <sup>2</sup>	Yes <sup>1)</sup> Yes <sup>1)</sup>
				2	25 ... 150 mm <sup>2</sup>	Yes <sup>1)</sup> Yes <sup>1)</sup>
				6	1.5 ... 35 mm <sup>2</sup>	No
				6	1.5 ... 35 mm <sup>2</sup>	No

## Circular conductor terminals, 4P

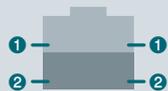


Connection options	Scope of supply	Number of cables	Copper/aluminum stranded	Aux. conductor terminal		
① –	4 single terminals, 1 extended terminal cover, 1 insulation plate	1	25 ... 150 mm <sup>2</sup>	Yes <sup>1)</sup> No		
			50 ... 240 mm <sup>2</sup>	Yes <sup>1)</sup> No		
		2	25 ... 150 mm <sup>2</sup>	Yes <sup>1)</sup> No		
			70 ... 300 mm <sup>2</sup>	Yes <sup>1)</sup> No		
		4	120 ... 240 mm <sup>2</sup>	Yes <sup>1)</sup> No		
			1.5 ... 35 mm <sup>2</sup>	No		
		– ②	4 single terminals, 1 extended terminal cover, 1 insulation plate	1	25 ... 150 mm <sup>2</sup>	Yes <sup>1)</sup> Yes <sup>1)</sup>
				2	25 ... 150 mm <sup>2</sup>	Yes <sup>1)</sup> Yes <sup>1)</sup>
				6	1.5 ... 35 mm <sup>2</sup>	No
				6	1.5 ... 35 mm <sup>2</sup>	No

<sup>1)</sup> Maximum current-carrying capacity 15 A  
Maximum cable connection up to 2.5 mm<sup>2</sup>

3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
3VA9112-0JC12	–	–	–	–
3VA9112-0JJ12	–	–	–	–
3VA9112-0JF60	–	–	–	–
3VA9113-0JC12	–	–	–	–
3VA9113-0JJ12	–	–	–	–
–	3VA9213-0JC13	3VA9223-0JC13	–	–
–	3VA9213-0JJ13	3VA9223-0JJ13	–	–
–	3VA9213-0JC22	3VA9223-0JC22	–	–
–	3VA9213-0JJ22	3VA9223-0JJ22	–	–
–	–	–	3VA9403-0JC23	–
–	–	–	3VA9403-0JJ23	–
–	–	–	–	3VA9603-0JC43
–	–	–	–	3VA9603-0JJ43
3VA9113-0JF60	3VA9213-0JF60	3VA9223-0JF60	3VA9303-0JF60	–
3VA9153-0JC12	–	–	–	–
–	3VA9253-0JC13	3VA9263-0JC13	–	–
–	3VA9253-0JC22	3VA9263-0JC22	–	–
–	–	–	3VA9483-0JC23	–
3VA9153-0JF60	3VA9253-0JF60	3VA9263-0JF60	3VA9383-0JF60	–
3VA9114-0JC12	–	–	–	–
3VA9114-0JJ12	–	–	–	–
–	3VA9214-0JC13	3VA9224-0JC13	–	–
–	3VA9214-0JJ13	3VA9224-0JJ13	–	–
–	3VA9214-0JC22	3VA9224-0JC22	–	–
–	3VA9214-0JJ22	3VA9224-0JJ22	–	–
–	–	–	3VA9404-0JC23	–
–	–	–	3VA9404-0JJ23	–
–	–	–	–	3VA9604-0JC43
–	–	–	–	3VA9604-0JJ43
3VA9114-0JF60	3VA9214-0JF60	3VA9224-0JF60	3VA9304-0JF60	–
3VA9154-0JC12	–	–	–	–
–	3VA9254-0JC13	3VA9264-0JC13	–	–
–	3VA9254-0JC22	3VA9264-0JC22	–	–
–	–	–	3VA9484-0JC23	–
3VA9154-0JF60	3VA9254-0JF60	3VA9264-0JF60	3VA9384-0JF60	–

# Connection technology



- ① For mounting onto the circuit breaker  
② For mounting onto draw-out and plug-in units

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2

3VA10

3VA11

## Terminal covers specially for fixed mounting

Version	Number of poles	Mounting location		3VA10	3VA11
Short	1P	①	–	3VA9111-0WD10	3VA9111-0WD10
	2P	①	–	3VA9111-0WD20	3VA9111-0WD20
	3P	①	–	3VA9111-0WD30	3VA9111-0WD30
	4P	①	–	3VA9111-0WD40	3VA9111-0WD40
Extended <sup>1)</sup>	2P	①	–	3VA9111-0WF20	3VA9111-0WF20
	3P	①	–	3VA9111-0WF30	3VA9111-0WF30
	4P	①	–	3VA9111-0WF40	3VA9111-0WF40
Broadened <sup>1)</sup>	3P	①	–	3VA9111-0WG30	3VA9111-0WG30
	4P	①	–	3VA9111-0WG40	3VA9111-0WG40

## Terminal covers specially for plug-in and draw-out units (spare part)

- To provide circuit breaker touch protection
- For mounting to the molded case circuit breaker
- Included in scope of supply: Cover for the infeed and outgoing terminal

Version	Number of poles	Mounting location		3VA10	3VA11
Short	3P	①	–	3VA9113-OKB01	3VA9113-OKB01
	4P	①	–	3VA9114-OKB01	3VA9114-OKB01

## Terminal covers for plug-in or draw-out sockets

- For touch protection in the termination area of the plug-in or draw-out socket
- For mounting onto the plug-in or draw-out socket

Version	Number of poles	Mounting location		3VA10	3VA11
Short	3P	–	②	–	3VA9153-OKB03
	4P	–	②	–	3VA9154-OKB03
Extended <sup>1)</sup>	3P	–	②	–	3VA9153-OKB04
	4P	–	②	–	3VA9154-OKB04
Broadened <sup>1)</sup>	3P	–	②	–	3VA9153-OKB05
	4P	–	②	–	3VA9154-OKB05

## Insulating plates

Version	Number of poles	Mounting location		3VA10	3VA11
Standard	2P	①	–	3VA9111-0WJ20	3VA9111-0WJ20
	3P	①	–	3VA9111-0WJ30	3VA9111-0WJ30
	4P	①	–	3VA9111-0WJ40	3VA9111-0WJ40
Broadened	3P	①	–	3VA9111-0WK30	3VA9111-0WK30
	4P	①	–	3VA9111-0WK40	3VA9111-0WK40

<sup>1)</sup> Including insulating plate

<sup>2)</sup> Suitable for circular conductor terminals 2/4 cables

	3VA20	3VA13 3VA14	3VA15
3VA12	3VA21 3VA22	3VA23 3VA24	3VA25
–	–	–	–
–	–	–	–
3VA9211-0WD30	3VA9221-0WD30	3VA9481-0WD30	3VA9601-0WD30
3VA9211-0WD40	3VA9221-0WD40	3VA9481-0WD40	3VA9601-0WD40
–	–	–	–
3VA9211-0WF30	3VA9221-0WF30	3VA9481-0WF30	3VA9601-0WE30 <sup>2)</sup> <b>new</b>
3VA9211-0WF40	3VA9221-0WF40	3VA9481-0WF40	3VA9601-0WE40 <sup>2)</sup> <b>new</b>
3VA9211-0WG30	3VA9221-0WG30	3VA9401-0WG30	–
3VA9211-0WG40	3VA9221-0WG40	3VA9401-0WG40	–
–	–	–	–
–	–	–	–
3VA9213-0KB01	3VA9123-0KB01	3VA9353-0KB01	–
3VA9214-0KB01	3VA9124-0KB01	3VA9354-0KB01	–
–	–	–	–
–	–	–	–
3VA9253-0KB03	3VA9163-0KB03	3VA9353-0KB03	–
3VA9254-0KB03	3VA9164-0KB03	3VA9354-0KB03	–
3VA9253-0KB04	3VA9163-0KB04	3VA9353-0KB04	–
3VA9254-0KB04	3VA9164-0KB04	3VA9354-0KB04	–
3VA9253-0KB05	3VA9163-0KB05	3VA9353-0KB05	–
3VA9254-0KB05	3VA9164-0KB05	3VA9354-0KB05	–
–	–	–	–
3VA9211-0WJ30	3VA9221-0WJ30	3VA9481-0WJ30	–
3VA9211-0WJ40	3VA9221-0WJ40	3VA9481-0WJ40	–
3VA9211-0WK30	3VA9221-0WK30	3VA9481-0WK30	–
3VA9211-0WK40	3VA9221-0WK40	3VA9481-0WK40	–

# Connection technology

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

2

3VA10

3VA11

## Phase barriers (fixed mounting, plug-in and draw-out units)



### Scope of supply

2 phase barriers

3VA9152-0WA00

## DC insulation plates for 3VA1 for fixed-mounted molded case circuit breakers



### Number of poles

3P

3VA9113-0SG10

4P

3VA9114-0SG10

## Side plates for 3VA1 for fixed-mounted molded case circuit breakers



### Number of poles

2P

### Mounting

On 2-pole molded case circuit breakers

3VA9112-0SG20

3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
3VA9252-0WA00	3VA9262-0WA00	3VA9482-0WA00	3VA9602-0WA00
-	-	-	-
-	-	-	-
-	-	-	-

# Plug-in and draw-out technology

2

## Thanks to plug-in and draw-out technology:

- Molded case circuit breakers can be replaced quickly and easily for overhauls or servicing
- Electrical isolation and clearly visible isolating distance
- The socket can be interlocked to prevent the 3VA molded case circuit breaker from being plugged in or moved in
- Identical connection technology for all molded case circuit breakers, whether they are plug-in, draw-out or fixed-mounted units

## In addition, draw-out technology offers:

- Transmission of the position of the molded case circuit breaker via communication (CONNECT, TEST, DISCONNECT)
- The ability to test the auxiliary and control circuit connections in the test position of the draw-out unit, without contacted main current paths
- Transmission of the state of the molded case circuit breaker (ON, OFF, TRIP) via the COM060 communication module

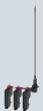
For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3va-configurator](http://www.siemens.com/lowvoltage/3va-configurator)

	3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24
<b>Draw-out units, complete kits</b>				
	<ul style="list-style-type: none"> <li>• Scope of supply:               <ul style="list-style-type: none"> <li>– Draw-out socket</li> <li>– Conversion kit</li> <li>– Mounting screw kit</li> </ul> </li> <li>• <b>Note:</b> The crank handle for the draw-out unit must be ordered separately.</li> </ul>			
<b>Number of poles</b>				
3P	–	3VA9213-OKD00	3VA9123-OKD00	3VA9323-OKD00
4P	–	3VA9214-OKD00	3VA9124-OKD00	3VA9324-OKD00
<b>Draw-out units, conversion kits</b>				
	<ul style="list-style-type: none"> <li>• Scope of supply:               <ul style="list-style-type: none"> <li>– Screw-fastened terminal covers for molded case circuit breakers</li> <li>– Side panels</li> <li>– Plug-in contacts</li> <li>– Cable cages</li> <li>– Autotrip plunger</li> </ul> </li> <li>• <b>Note:</b> The crank handle for the draw-out unit must be ordered separately.</li> </ul>			
<b>Number of poles</b>				
3P	–	3VA9213-OKD10	3VA9123-OKD10	3VA9323-OKD10
4P	–	3VA9214-OKD10	3VA9124-OKD10	3VA9324-OKD10
<b>Plug-in units, complete kits</b>				
	<ul style="list-style-type: none"> <li>• Scope of supply:               <ul style="list-style-type: none"> <li>– Plug-in base</li> <li>– Conversion kit</li> <li>– Mounting screw kit</li> </ul> </li> </ul>			
<b>Number of poles</b>				
3P	3VA9113-OKP00	3VA9213-OKP00	3VA9123-OKP00	3VA9323-OKP00
4P	3VA9114-OKP00	3VA9214-OKP00	3VA9124-OKP00	3VA9324-OKP00
<b>Plug-in units, conversion kits</b>				
	<ul style="list-style-type: none"> <li>• Scope of supply:               <ul style="list-style-type: none"> <li>– Screw-fastened terminal covers for molded case circuit breakers</li> <li>– Plug-in contacts</li> <li>– Cable cages</li> <li>– Autotrip plunger</li> </ul> </li> </ul>			
<b>Number of poles</b>				
3P	3VA9113-OKP10	3VA9213-OKP10	3VA9123-OKP10	3VA9323-OKP10
4P	3VA9114-OKP10	3VA9214-OKP10	3VA9124-OKP10	3VA9324-OKP10

	3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	
<b>Cable cages for plug-in/draw-out units (spare part)</b>					
	<ul style="list-style-type: none"> <li>For routing of the required cables from the internal accessories on the back of the circuit breaker</li> </ul>				
<b>Number of poles</b>					
3P/4P	3VA9157-OKB02	3VA9257-OKB02	3VA9167-OKB02	3VA9367-OKB02	
<b>Door feedthroughs</b>					
	–	3VA9257-OKT00	3VA9167-OKT00	3VA9367-OKT00	
<b>Autotrip plungers (spare part)</b>					
	<b>Version</b>				
	Plug-in unit	3VA9157-OKP81	3VA9257-OKP81	3VA9267-OKP81	3VA9457-OKP81
	Draw-out unit	–	3VA9257-OKD81	3VA9267-OKD81	3VA9457-OKD81

2

## Accessories

<b>Communication links for draw-out unit</b>				
	<b>Scope of supply</b>			<b>Article No.</b>
	Set of cables with three special position signaling switches, 3VA9987-OKC10 connecting cables			3VA9987-OKC00
<b>Position signaling switches for draw-out unit and plug-in unit</b>				
				<b>Article No.</b>
				3VA9987-OKB00
<b>Connecting cables</b>				
	<b>Purpose</b>			<b>Article No.</b>
	Connection of position signaling switches for communication with COM060			3VA9987-OKC10
<b>Crank handles for draw-out units</b>				
	<b>Version</b>	<b>Scope of supply</b>		<b>Article No.</b>
	Insulated	Including crank handle holder		3VA9987-OKD81
<b>Auxiliary circuit connectors</b>				
	<ul style="list-style-type: none"> <li>Each auxiliary circuit connector is designed for 4 cables.</li> </ul>			
	<b>Version</b>			<b>Article No.</b>
	For all draw-out units			3VA9987-OKD80
	For all plug-in units			3VA9987-OKP80
<b>Cylinder locks</b>				
	<ul style="list-style-type: none"> <li>Scope of supply:               <ul style="list-style-type: none"> <li>– 1 lock with 2 keys</li> </ul> </li> <li>For locking or interlocking</li> <li><b>Note:</b> Not for 3VA15/3VA25!</li> </ul>			
	<b>Key</b>	<b>Lock number</b>	<b>Article No.</b>	
	1	1	3VA9980-0VL10	
	3	3	3VA9980-0VL30	
	4	4	3VA9980-0VL40	
<b>Cylinder lock adapters for draw-out units</b>				
	<ul style="list-style-type: none"> <li>To prevent unauthorized withdrawal or insertion of the circuit breaker into the draw-out unit</li> <li>Circuit breaker can be locked in the CONNECT, TEST and DISCONNECT positions</li> </ul>			
	<b>Purpose</b>			<b>Article No.</b>
	For fitting a cylinder lock in the right-hand side wall of the draw-out unit			3VA9980-0LF40

# Residual current devices RCD

According to IEC 60947-2 Annex B (Type A, Type B) and according to DIN VDE 0664-400 (Type B+)

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

2

## Mounted onto the side (left)

- Can be mounted onto switch disconnectors and molded case circuit breakers



Number of poles	Type	Sensitivity <sup>3)</sup>	Rated residual response current $I_{\Delta n}$	Limit value of non-tripping time $\Delta t$	Rated voltage $U_e$	Fault current frequency	Pre-alarm			Tripped signal		
							Pre-alarm indicator	Pre-alarm NO	Pre-alarm COM	Tripped signal TRIP	Tripped signal NO	Tripped signal COM
3-pole	RCD510	Type A	0.03 ... 5 A.	0 ... 3 s	127 ... 480 V AC	50/60 Hz	1	–	–	–	–	–
4-pole	RCD310	Type A	0.03 ... 5 A.	Instantaneous	127 ... 480 V AC	50/60 Hz	1	–	–	–	–	–
	RCD510	Type A	0.03 ... 5 A.	0 ... 3 s	127 ... 480 V AC	50/60 Hz	1	–	–	–	–	–

## Mounted below (under trip unit)

- Can be mounted onto molded case circuit breakers



Number of poles	Type	Sensitivity <sup>3)</sup>	Rated residual response current $I_{\Delta n}$	Limit value of non-tripping time $\Delta t$	Rated voltage $U_e$	Fault current frequency	Pre-alarm			Tripped signal		
							Pre-alarm indicator	Pre-alarm NO	Pre-alarm COM	Tripped signal TRIP	Tripped signal NO	Tripped signal COM
3-pole	RCD520	Type A	0.03 ... 5 A.	0 ... 3 s	127 ... 480 V AC	50/60 Hz	1	–	–	–	–	–
	RCD520B <sup>1)4)</sup>	Type B	0.03 ... 5 A.	0 ... 10 s	127 ... 690 V AC	0 ... 100 kHz	1	■	–	–	–	–
	<b>new</b>	Type B+	0.03 ... 0.3 A.									
4-pole	RCD820 <sup>2)</sup>	Type A	0.03 ... 30 A <sup>5)</sup>	0 ... 10 s	127 ... 690 V AC	50/60 Hz	2	■	■	■	■	■
	RCD320	Type A	0.03 ... 5 A.	Instantaneous	127 ... 480 V AC	50/60 Hz	1	–	–	–	–	–
	RCD520	Type A	0.03 ... 5 A.	0 ... 3 s	127 ... 480 V AC	50/60 Hz	1	–	–	–	–	–
	RCD520B <sup>4)</sup>	Type B	0.03 ... 5 A.	0 ... 10 s	127 ... 690 V AC	0 ... 100 kHz	1	■	–	–	–	–
<b>new</b>	Type B+	0.03 ... 0.3 A.										
RCD820 <sup>2)</sup>	Type A	0.03 ... 30 A <sup>5)</sup>	0 ... 10 s	127 ... 690 V AC	50/60 Hz	2	■	■	■	■	■	

## Residual current releases (spare part) **new**



Version	Scope of supply
For RCD310 or RCD510	RCR, RCR-RCD cables

<sup>1)</sup> 3-pole version in 4-pole enclosure

<sup>2)</sup> With energy infeed from below, the required auxiliary switch (AUX) must be ordered separately

<sup>3)</sup> Type A: pulse current sensitive, type B/B+: universal current sensitive

<sup>4)</sup> Sensitivity selectable for type B/B+

<sup>5)</sup>  $I_{\Delta n} = 30A$ : type AC

<sup>6)</sup> If the molded case circuit breaker has no box terminals as connections, a set of box terminals must be ordered additionally for the taps below the thermal-magnetic trip units.

<sup>7)</sup> 1 set of box terminals is included in scope of supply of the RCD510 (3VA921..-ORS20).

**Modular residual current devices type A/B (according to IEC 60947-2 Annex M)**  
See monitorin devices, page 11/1

			3VA11	3VA12	3VA20 3VA21	3VA22	3VA23	3VA24
Monitoring mode (tripping can be disabled as an option)	Remote test/ remote reset	Communica- tion-capable						
■	–	–	3VA9113-ORS20 <sup>6)</sup>	3VA9213-ORS20 <sup>7)</sup>	–	–	–	–
■	–	–	3VA9114-ORS10 <sup>6)</sup>	–	–	–	–	–
■	–	–	3VA9114-ORS20 <sup>6)</sup>	3VA9214-ORS20 <sup>7)</sup>	–	–	–	–
Monitoring mode (tripping can be disabled as an option)	Remote test/ remote reset	Communica- tion-capable						
–	–	–	3VA9113-ORL20	3VA9213-ORL20	–	–	–	–
■	–	–	3VA9113-ORL21	–	–	–	–	–
■	■	■	–	–	3VA9123-ORL30	3VA9223-ORL30	3VA9323-ORL30	3VA9423-ORL30
–	–	–	3VA9114-ORL10	–	–	–	–	–
–	–	–	3VA9114-ORL20	3VA9214-ORL20	–	–	–	–
■	–	–	3VA9114-ORL21	–	–	–	–	–
■	■	■	–	–	3VA9124-ORL30	3VA9224-ORL30	3VA9324-ORL30	3VA9424-ORL30
			3VA9988-OBR10	3VA9988-OBR10	–	–	–	–

# Communication

2

Metering function <sup>1)</sup>			ETU 5-series	ETU 8-series	Display in ETU	Display DSP800	Communication COM800/COM100
<b>Current</b>							
Phase and neutral conductor currents	$I_1, I_2, I_3, I_N$	A	■	■	□	□	■
Residual current to ground	$I_g$	A	■	■	□	□	■
Phase with highest load		A	■	■	□	□	■
Mean value over the three phase currents	$I_{\text{leading axis}} = (I_1 + I_2 + I_3)/3$	A	–	■	–	□	■
Asymmetry of the phase currents	$I_{\text{nba}}$	%	–	■	–	□	■
THD of the 3 phases	$\text{THDI}_1, \text{THDI}_2, \text{THDI}_3$	%	–	■	–	□	■
<b>Voltage</b>							
Phase voltages incl. mean value	$U_{12}, U_{23}, U_{31}, U_{\text{phavg}}$	V	–	■	□	□	■
Voltages to N conductor incl. mean value	$U_{1N}, U_{2N}, U_{3N}, U_{\text{Navg}}$	V	–	■	–	□	■
Voltage unbalance		%	–	■	–	□	■
THD phase/phase and phase/N	$\text{THDI}_1, \text{THDI}_2, \text{THDI}_3$	%	–	■	–	□	■
<b>Power</b>							
Active power, total and per phase	$P_1, P_2, P_3, P_{\text{tot}}$	kW	–	■	□ ( $P_{\text{tot}}$ )	□	■
Apparent power, total and per phase	$S_1, S_2, S_3, S_{\text{tot}}$	kVA	–	■	–	□	■
Reactive power, total and per phase	$Q_1, Q_2, Q_3, Q_{\text{tot}}$	kVAr	–	■	□	□	■
Power factor of the fundamental	$P_{F1}, P_{F2}, P_{F3}, P_{\text{Favg}}$		–	■	□ ( $\text{PF}_{\text{avg}}$ )	□	■
<b>Energy</b>							
Active energy, infeed and feedback	$E_p$	kWh	–	■	□	□	■
Reactive energy, infeed and feedback	$E_q$	kVArh	–	■	–	□	■
Apparent energy	$E_s$	kVAh	–	■	–	□	■
<b>Frequency</b>							
Present frequency	$f$	Hz	–	■	□	□	■
<b>Maximum pointer function</b>							
Min./max. current, voltage, power	With time stamp	–	–	–	–	–	■

<sup>1)</sup> Depending on ETU version

■ Available

□ Displayable

– Not available

3VA20

3VA21

3VA22

3VA23

3VA24

3VA25

## COM060 communication modules

- For mounting in the right-hand accessories compartment of the 3VA2 molded case circuit breaker (including ETU power supply)
- Including a T-Connector



### Purpose

Communication to the COM800/COM100 breaker data server via 3VA line

3VA9187-0TB10

3VA9387-0TB10

## 24 V modules

- 24 V DC
- For mounting in the right-hand accessories compartment of the 3VA2

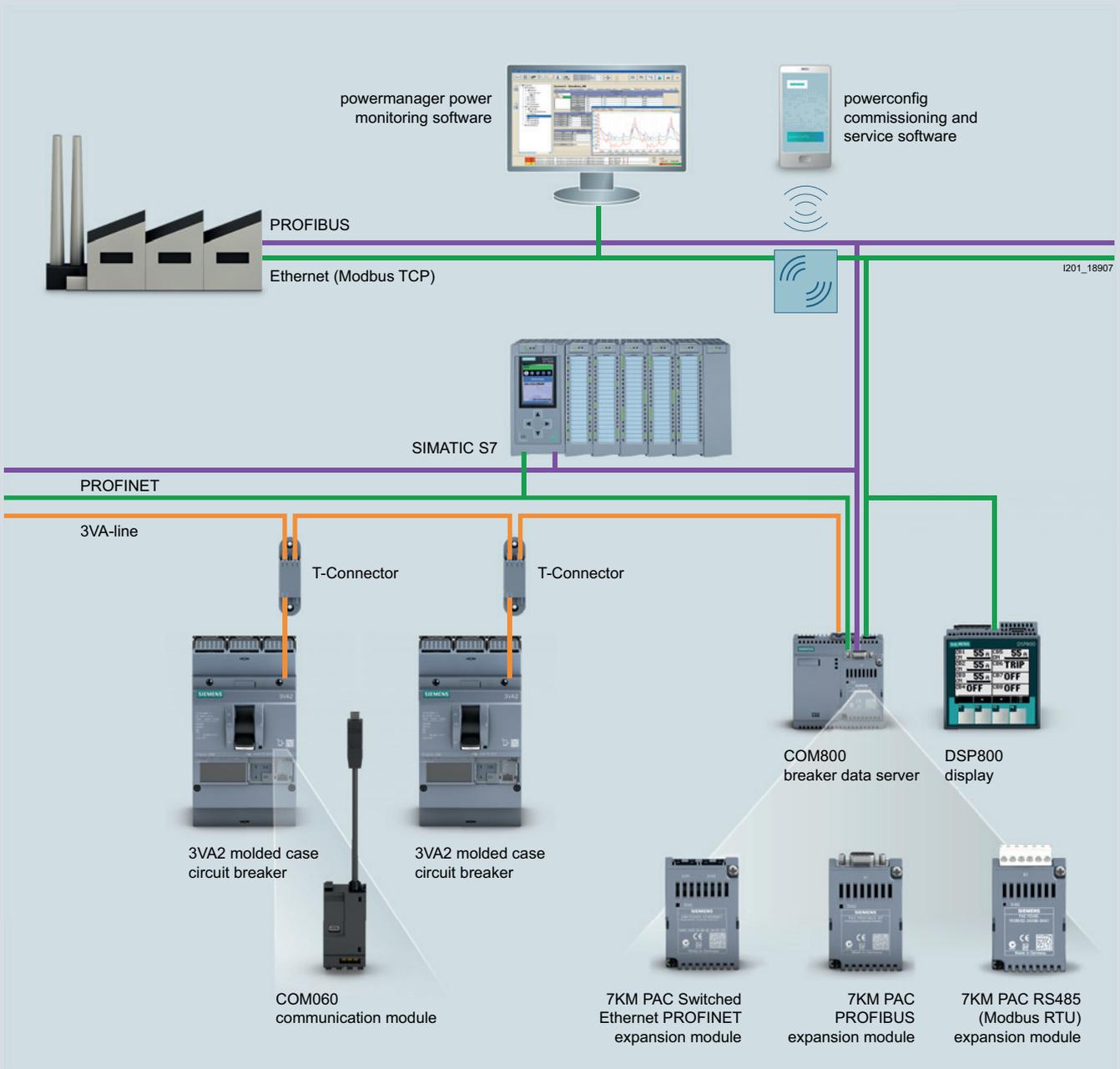


### Purpose

Optional energy supply for the ETU, also includes continuous operation of the ETU display and the metering function of the ETU 8-series

3VA9187-0TB50

3VA9387-0TB50



# Communication

## Breaker data server

### COM800 breaker data servers



#### Version

Central communication module for connection of up to eight 3VA2 molded case circuit breakers via the 3VA line, Ethernet 10/100 Mbps interface module socket for inserting an optional PROFIBUS DP or PROFINET module, 2 terminating resistors

#### Article No.

3VA9987-0TA10

### COM100 breaker data servers



#### Version

Central communication module for connection of a 3VA2 molded case circuit breaker via the 3VA line, Ethernet 10/100 Mbps interface module socket for inserting an optional PROFIBUS DP or PROFINET module, 2 terminating resistors

#### Article No.

3VA9987-0TA20

### 7KM PAC PROFIBUS DP expansion modules



#### Purpose

Used for connecting the COM800/COM100 breaker data server, and the 3VA molded case circuit breakers connected to it, to PROFIBUS DPV1. Supplies the state and measured variables of the 3VA molded case circuit breaker for the PROFIBUS DP master. Receives information (e.g. commands) from the PROFIBUS DP master and transmits them to the 3VA molded case circuit breaker.

#### Article No.

7KM9300-0AB01-0AA0

### 7KM PAC Switched Ethernet PROFINET expansion modules



#### Purpose

Used for connecting the COM800/COM100 breaker data server, and the connected 3VA molded case circuit breakers, to PROFINET via two Ethernet interfaces. Supplies the state and measured variables of the 3VA molded case circuit breakers to PROFINET via the PROFINET IO, PROFinergy and Modbus TCP protocols.

#### Article No.

7KM9300-0AE01-0AA0

### 7KM PAC RS485 Modbus RTU expansion modules



#### Purpose

Used for connecting the COM800/COM100 breaker data server, and the 3VA molded case circuit breakers connected to it, to Modbus RTU. Supplies the state and measured variables of the 3VA molded case circuit breaker for the Modbus RTU master. Receives information (e.g. commands) from the Modbus RTU master and transmits them to the 3VA molded case circuit breaker.

#### Article No.

7KM9300-0AM00-0AA0

### Interfaces to IEC 61850 **new**

Purpose: The SICAM A8000 smart breaker data server 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

#### Processor assembly

#### Operating voltage

#### Article No.

SICAM CP-8021 <sup>1)</sup>

4 interfaces

6MF28021AA00

SICAM PS-8620

–

24 ... 60 V DC (12 W)

6MF28620AA00

SICAM PS-8622

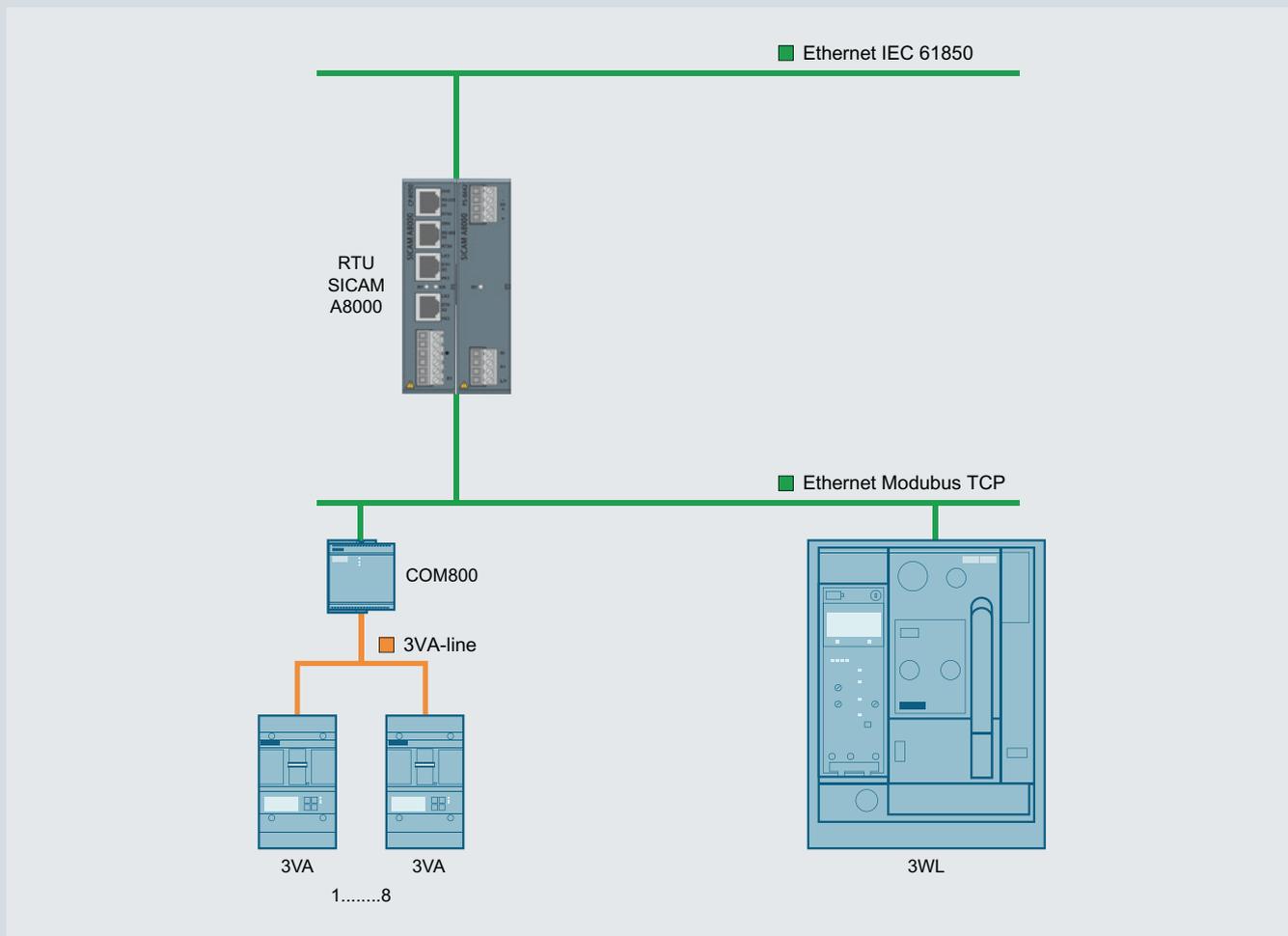
–

110 ... 220 V DC (12 W)

6MF28622AA00

<sup>1)</sup> Dimensioned for device quantities of 8× 3VA and 1× 3W

You will find further information at:  
[www.siemens.com/sicam-a8000](http://www.siemens.com/sicam-a8000)



# Communication

## Accessories for communication

T-connectors (spare part)			
	<b>Purpose</b>		<b>Article No.</b>
	Provides a stub connection to the COM060 and loops through to the next circuit breaker.		3VA9987-0TG10
DIN rail adapters			
	<b>Purpose</b>		<b>Article No.</b>
	For snapping the T-Connector onto a DIN rail.		3VA9987-0TG11
Prefabricated connecting cables, T-connector – T-connector or T-connector – COM800/COM100			
	<b>Length</b>		<b>Article No.</b>
	0.4 m		3VA9987-0TC10
	1 m		3VA9987-0TC20
	2 m		3VA9987-0TC30
	4 m		3VA9987-0TC40
Prefabricated connecting cables for extending the COM060 – T-connector stub connection			
	<b>Length</b>		<b>Article No.</b>
	0.4 m		3VA9987-0TF20
	0.8 m		3VA9987-0TF10
Additional bus terminating resistors (spare part)			
	<b>Purpose</b>		<b>Article No.</b>
	For COM800 and COM060		3VA9987-0TE10
Voltage tap to external N conductors (spare part)			
	<b>Purpose</b>		<b>Article No.</b>
	Cable for connection of the star point for the metering function of the 8-series ETU, length 1.5 m		3VA9987-0UC10
External current transformer for N conductors			
	<b>Purpose</b>	<b>Rated current I<sub>n</sub></b>	<b>Article No.</b>
	For 3VA2 3-pole molded case circuit breakers, for 5 and 8-series ETUs, including connecting cables	25 ... 150 A	3VA9007-0NA10
		160 ... 350 A	3VA9107-0NA10
		400 ... 630 A	3VA9307-0NA10
External current transformers as straight-through transformers			
	<b>Rated current I<sub>n</sub></b>		<b>Article No.</b>
	25 ... 150 A		3VA9077-0NA10
	160 ... 350 A		3VA9177-0NA10
	400 ... 630 A		3VA9377-0NA10
	600 ... 1250 A		3VA9677-0NA10
Connecting cables for external current transformers for N conductors (spare part)			
			<b>Article No.</b>
			3VA9907-0NB10

## Display

DSP800 displays		
	<b>Purpose</b>	<b>Article No.</b>
	For displaying the status and measured values of up to eight devices <ul style="list-style-type: none"> <li>• 3VA2 via COM800/100</li> <li>• 3VA27</li> <li>• 3WL10</li> <li>• 3WL11-13</li> <li>• PAC3200T</li> </ul>	3VA9987-0TD10

## External function box

### EFB300 external function boxes



- 4 digital outputs for information output
- 1 digital input
- ZSI functionality
- S0-Interface
- Including cable 1.5 m in length

#### Purpose

For connection to the ETU of 3VA2 molded case circuit breakers

#### Article No.

3VA9987-0UA10

### Connecting cables for EFB300



#### Length

1.5 m

3.0 m

#### Purpose

For 3VA2 with EFB

For 3VA2 with EFB

For 3VA2 with EFB and RCD820

#### Article No.

3VA9987-0UB10

3VA9987-0UB20

3VA9987-0UB30

## Test devices

### TD300 test devices



#### Purpose

For activation of the ETU and initiation of a test tripping operation

#### Connection

On the front interface of the ETU

#### Article No.

3VA9987-0MA10

### TD400 test devices



- Energy supply via batteries or the USB-C interface
- USB-C interface for connecting a PC with powerconfig
- Bluetooth interface for connection to a PC, smartphone or tablet
- ETU parameterization
- Including adapter and connecting cable to 3VA2 molded case circuit breaker and IEC 3WL (ETU release 2)
- Including case

#### Purpose

Initiation of a test tripping operation

#### Connection

On the front interface of the ETU (3VA and IEC 3WL ETU release 2)

#### Article No.

3VW9011-0AT40

### TD500 test devices



- USB interface for connecting a PC with powerconfig
- Including external power supply
- Including connecting cable to 3VA2 molded case circuit breaker

#### Purpose

Initiation of various test tripping operations (LSING), ETU parameterization

#### Connection

On the front interface of the ETU

#### Article No.

3VA9987-0MB10

### External power supplies for TD500 (spare part)



#### Voltage

110 ... 240 V

#### Article No.

3VA9987-0MX10

### Connecting cables for connecting TD500 to 3VA2 molded case circuit breakers (spare part)



#### Article No.

3VA9987-0MY10

# Locking, blocking and interlocking

2

		3VA11	3VA12	3VA20 3VA21 3VA22
<b>Locking</b>				
<ul style="list-style-type: none"> <li>The locking devices make it possible to lock the 3VA molded case circuit breakers in either the OFF or the ON operating position.</li> </ul>				
<b>Version</b>				
	Cylinder lock	Key 1 (lock number 1)		3VA9980-OVL10
		Key 3 (lock number 3)		3VA9980-OVL30
		Key 4 (lock number 4)		3VA9980-OVL40
	Adapter kit for mounting the cylinder lock (type Ronis) in the accessories compartment of the molded case circuit breaker	3VA9157-OLF10	3VA9257-OLF10	3VA9167-OLF10
	Locking device for toggle operating mechanism		3VA9088-OLB10	3VA9388-OLB10
<b>Interlocking</b>				
<ul style="list-style-type: none"> <li>Using interlocking technology, it is possible to mutually interlock two or more molded case circuit breakers.</li> <li>The interlock system is designed to ensure that no more than one molded case circuit breaker can be operated at a time.</li> <li>The following methods of interlocking can be used on 3VA molded case circuit breakers:               <ul style="list-style-type: none"> <li>Front interlock</li> <li>Rear interlock</li> </ul> </li> </ul>				
<b>Version</b>				
	Cylinder lock	Key 1 (lock number 1)		3VA9980-OVL10
		Key 3 (lock number 3)		3VA9980-OVL30
		Key 4 (lock number 4)		3VA9980-OVL40
	Sliding bar interlock	3VA9158-0VF30	3VA9258-0VF30	3VA9168-0VF30
	Module for handle interlock using a Bowden cable	3VA9157-0VF10	3VA9257-0VF10	3VA9167-0VF10
	Bowden cable	Length 0.6 m		3VA9980-0VC10
		Length 1.0 m		3VA9980-0VC20
		Length 1.5 m		3VA9980-0VC30
	Rear interlock with rod	Circuit breaker, fixed-mounted		3VA9088-0VM10
		Plug-in/draw-out technology		
	Mounting frame for rear interlock with rod	Profile rails		3VA9088-0VK10
		Mounting plate	3VA9158-0VK20	3VA9258-0VK20

<sup>1)</sup> Available from Q1/2020

<sup>2)</sup> With mounting frame for rear interlock.

Can be used with breaker 3VA15 from "E02" and 3VA25 from "E05" (Line protection CB with TMTU, 3-Series ETU and 5-Series ETU)

3VA13 3VA14	
3VA23 3VA24	3VA15 3VA25
3VA9980-0VL10	–
3VA9980-0VL30	–
3VA9980-0VL40	–
3VA9367-0LF10	3VA9587-0LF10
3VA9388-0LB10	3VA9588-0LB10
3VA9980-0VL10	–
3VA9980-0VL30	–
3VA9980-0VL40	–
3VA9368-0VF30	–
3VA9367-0VF10	3VA9587-0VF10
3VA9980-0VC10	
3VA9980-0VC20	
3VA9980-0VC30	
3VA9088-0VM10	3VA9588-0VM10 <sup>1) 2)</sup>
3VA9088-0VM30	–
3VA9088-0VK10	–
3VA9468-0VK20	–

### Locking

Use in	Locking in OFF position	Locking in ON position	Front mounting	Rear mounting	Interlocked breakers
Breakers, motor-drive mechanisms, manual operators, draw-out technology	■	■	■	–	–
Circuit breaker	■	■	■	–	–
Circuit breaker	■	■	■	–	–

### Interlocking

Use in	Locking in OFF position	Locking in ON position	Front mounting	Rear mounting	Interlocked breakers
Breakers, manual operators	■	■	■	–	Unlimited
Circuit breaker	–	–	■	–	3
Circuit breaker	–	–	■	–	3
Circuit breaker, fixed-mounted	–	–	–	■	2
Plug-in/draw-out technology	–	–	–	■	

# Cover frame and mounting

2

3VA10

3VA11

3VA12

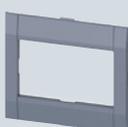
## Cover frames for door cutouts for molded case circuit breakers

	Number of poles	Door cut-out with trip unit	3VA10	3VA12
	3P	No		3VA9053-OSB10
Yes			3VA9053-OSB20	3VA9253-OSB20
4P	No		3VA9054-OSB10	3VA9254-OSB10
	Yes		3VA9054-OSB20	3VA9254-OSB20

## Cover frames for MO320 motor operators

	Purpose	3VA10	3VA12
	MO320 motor operator		3VA9053-OSB20
Motor operator with SEO520 stored energy operator		–	–

## Cover frames for RCD320, RCD520 and RCD820 residual current devices

	Number of poles	3VA10	3VA12
	3P		3VA9053-OSB10
4P		3VA9054-OSB10	3VA9254-OSB10

## Cover frames for front mounted rotary operators

	3VA10	3VA12
	3VA9053-OSB10	3VA9253-OSB10

## Cover frames for door feedthroughs

	3VA10	3VA12
	–	3VA9253-OSB20

## Labeling plates for cover frame

	3VA10	3VA12
	3VA9087-OSX10	

## Adapters for DIN rails for 3VA1 molded case circuit breakers

	Number of poles	3VA10	3VA12
	1P		3VA9181-OSH10
2P		3VA9182-OSH10	–
3P and 4P		3VA9187-OSH10	–
3P and 4P in connection with RCD310 or RCD510		3VA9187-OSH20	–

## Mounting screw kits

	Purpose	Number of poles	3VA10	3VA12
	For fixed-mounted breakers	1P		3VA9111-OSS10
2P and 3P (apart from 125 A/160 A with 55 kA and 70 kA)			3VA9116-OSS10	
3P (125 A/160 A with 55 kA and 70 kA) and 4P			3VA9114-OSS10	
3P			–	–
		4P	–	–
		3P and 4P	–	–
For plug-in technology	–	3VA9114-OSS10		
For plug-in and draw-out technology	–	–	3VA9114-OSS10	

Adapter for 60 mm busbar system (8US), [see page 13/26](#)

	3VA13	
	3VA14	
3VA20	3VA23	3VA15
3VA21	3VA24	3VA25
3VA22		
3VA9163-0SB10	3VA9383-0SB10	3VA9503-0SB10
3VA9163-0SB20	3VA9363-0SB20	3VA9503-0SB20
3VA9164-0SB10	3VA9384-0SB10	3VA9504-0SB10
3VA9164-0SB20	3VA9364-0SB20	3VA9504-0SB20
3VA9257-0SB30	3VA9387-0SB30	–
3VA9167-0SB30	–	–
3VA9253-0SB10	3VA9303-0SB40	–
3VA9254-0SB10	3VA9304-0SB40	–
3VA9163-0SB10	3VA9383-0SB10	3VA9503-0SB50
3VA9253-0SB20	3VA9353-0SB20	–
3VA9087-0SX10		
–	–	–
–	–	–
–	–	–
–	–	–
–	–	–
–	–	–
–	–	–
3VA9126-0SS10	–	–
3VA9124-0SS10	–	–
–	3VA9328-0SS10	3VA9517-0SS10
–	–	–
3VA9124-0SS10	3VA9328-0SS10	–

# System overview

For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3va27-configurator](http://www.siemens.com/lowvoltage/3va27-configurator)

## Basic units



Handle



Stored energy operator

## Trip units



Electronic trip unit (ETU)

## Accessories



Communication module



Rating plugs



Breaker Connect module



Test devices and breaker data adapters

## Main conductor connections

Rear vertical/  
horizontalRear  
broadenedFront  
extendedFront  
broadened

Cable lug



Phase barriers



Terminal cover

## Accessories

## Motors

Spring charging  
motor

## Accessories



Mechanical operating cycles counter (MOC)

## Auxiliary releases / closing coils

Undervoltage release (UVR) /  
Shunt trip (ST)Closing coil (CC) /  
Remote reset magnet (RR)

### Note:

You will find a detailed range of accessories in the Accessories and spare parts section.

## Auxiliary switches



Tripped signaling switch



Ready-to-close signaling switch (RTC)



Auxiliary switch ON/OFF (AUX)



Tripped signaling switch (S24)



Trip alarm switch (TAS)

## Further accessories



Padlockable protective cover



Locking device



Locking mechanism



Door sealing frame



Protective cover



Mutual mechanical interlocking



Manual operator

### Note:

You will find a detailed range of accessories in the Accessories and spare parts section.

# Structure of the article numbers

## Basic configuration with toggle operating mechanism

The structure shown below is intended as an overview of each position and its meaning. For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3va27-configurator](http://www.siemens.com/lowvoltage/3va27-configurator)

3VA27 6 7 8 9 10 11 12 13 14 15 16

### Basic units and ETUs

Max. rated current $I_n$	800 A	8	0																
	1000 A	1	0																
	1250 A	1	2																
	1600 A	1	6																
Short-circuit breaking capacity $I_{cu} = I_{cs}$ at 415 V	Toggle operating mechanism	55 kA																	
		85 kA																	
		110 kA																	
Non-automatic air circuit breakers	Without metering function, without a communication link	Without trip unit																	
Circuit breakers, ETU 3-series	Without metering function, without a communication link	With trip unit	ETU320 LI	(N) <sup>1)</sup>															
			ETU350 LSI	(N) <sup>1)</sup>															
			ETU360 LSI	(N) <sup>1)</sup>															
Circuit breakers, ETU 6-series	Without communications interface	With trip unit	ETU650 LSI	(N) <sup>1)</sup>															
			ETU660 LSI	(N) <sup>1)</sup>															

<sup>1)</sup> Neutral conductor protection for 3-pole breakers with an external neutral conductor transformer or 4-pole breakers

Number of poles	Fixed-mounted versions	3-pole																	
		4-pole	Neutral left																
			Neutral right																
	Withdrawable	3-pole																	
		4-pole	Neutral left																
			Neutral right																

### Connection

Installation type	Withdrawable	Withdrawable circuit breaker without guide frame (guide frame must be ordered separately)																	
	Fixed-mounted breaker / withdrawable breaker	Rear vertical connection																	
		Rear horizontal connection																	
		Front terminal for main circuit connection																	
		Front-accessible, extended terminal for main circuit connection																	
		Front-accessible, broadened terminal for main circuit connection																	
		Rear broadened bus connectors																	

3VA27 6 7 8 9 10 11 12 13 14 15 16

## Alarm switch combinations

Alarm switches	Without	0
	With tripped signaling switch TAS and tripped signaling switch S25	1
	With two leading changeover switches S26	2
	With tripped signaling switch TAS and tripped signaling switch S25 and two leading changeover switches S26	3

## Auxiliary releases, closing coils

Closing coil (CC), remote reset magnet (RR)	Without	A
---	---------	---

2nd auxiliary release	Without 2nd auxiliary release		A
	With undervoltage release (UVR)	24 V AC/DC	B
		30 V AC/DC	C
		48 V AC/DC	D
		60 V AC/DC	E
		110 ... 120 V AC/DC	F
		120 ... 127 V AC/DC	G
		220 ... 240 V AC/DC	H
		240 ... 250 V AC/DC	J
		380 ... 400 V AC/DC	K
		415 ... 440 V AC/DC	L
	With undervoltage release (UVR), delayable with external time-delay device Scope of supply: UVR + time-delay device	24 ... 30 V AC/DC	M
		110 ... 127 V AC/DC	N
		220 ... 250 V AC/DC	P
			Q
	With 2nd shunt trip (ST2)	24 V AC/DC	R
		30 V AC/DC	S
		48 V AC/DC	T
		60 V AC/DC	U
		110 ... 120 V AC/DC	V
120 ... 127 V AC/DC		W	
220 ... 240 V AC/DC		X	
240 ... 250 V AC/DC			

1st auxiliary release	Without 1st auxiliary release		0
	Shunt trip (ST)	24 V AC/DC	1
		30 V AC/DC	2
		48 V AC/DC	3
		60 V AC/DC	4
		110 ... 120 V AC/DC	5
		120 ... 127 V AC/DC	6
		220 ... 240 V AC/DC	7
		240 ... 250 V AC/DC	8



3VA27 6 7 8 9 10 11 12 13 14 15 16

## Auxiliary releases, closing coils, remote reset magnets

Closing coil (CC), remote reset magnet (RR)	Without		A
	Closing coil (CC)	24 V AC/DC	B
		30 V AC/DC	C
		48 V AC/DC	D
		60 V AC/DC	E
		110 ... 120 V AC/DC	F
		120 ... 127 V AC/DC	G
		220 ... 240 V AC/DC	H
	Closing coil (CC) and additional remote reset magnet (RR)	240 ... 250 V AC/DC	J
		24 V AC/DC	K
110 V AC/DC		L	
	220 V AC/DC	M	
2nd auxiliary release	Without 2nd auxiliary release		A
	With undervoltage release (UVR)	24 V AC/DC	B
		30 V AC/DC	C
		48 V AC/DC	D
		60 V AC/DC	E
		110 ... 120 V AC/DC	F
		120 ... 127 V AC/DC	G
		220 ... 240 V AC/DC	H
		240 ... 250 V AC/DC	J
		380 ... 400 V AC/DC	K
		415 ... 440 V AC/DC	L
	With undervoltage release (UVR), delayable with external time-delay device Scope of supply: UVR + time-delay device	24 ... 30 V AC/DC	M
		110 ... 127 V AC/DC	N
		220 ... 250 V AC/DC	P
	With 2nd shunt trip (ST2)	24 V AC/DC	Q
		30 V AC/DC	R
		48 V AC/DC	S
		60 V AC/DC	T
110 ... 120 V AC/DC		U	
120 ... 127 V AC/DC		V	
220 ... 240 V AC/DC		W	
240 ... 250 V AC/DC		X	
1st auxiliary release	Without 1st auxiliary release		0
	Shunt trip (ST)	24 V AC/DC	1
		30 V AC/DC	2
		48 V AC/DC	3
		60 V AC/DC	4
		110 ... 120 V AC/DC	5
		120 ... 127 V AC/DC	6
		220 ... 240 V AC/DC	7
240 ... 250 V AC/DC	8		

# Accessory options

For a complete and valid configuration of your molded case circuit breaker, please use our online configurator at [www.siemens.com/lowvoltage/3va27-configurator](http://www.siemens.com/lowvoltage/3va27-configurator)

To specify the options, add „Z“ to the complete Article No. and indicate the appropriate order code(s).

3VA27..-.....-.... -Z

Order code

## Accessories for basic configuration

### Mounting options for fixed mounting

- In the basic configuration, the fixed-mounted circuit breaker is mounted onto the rear panel. Floor mounting is possible as an option. The device must additionally be modified if it is to be extended to include functionalities such as external auxiliary switches or mechanical interlocks.<sup>1)</sup>

Mounting options for fixed mounting <sup>1)</sup>								
Floor mounting	Mounting support standard							A 0 7
	Mounting support extended <sup>2)</sup>							S 5 6
Rear panel mounting onto mounting plate	Side wall extended <sup>2)</sup>							S 5 7

## Accessories for electronic trip units ETU

### Rating plugs

- The electronic trip units are equipped as standard with a rating plug for setting the rated current  $I_n$ , which is equal to the maximum rated circuit breaker current ( $< I_{n\max}$ ). The rated current of the selected rating plug must be less than or equal to  $I_{n\max}$ .
- To downrate the circuit breaker, a rated current smaller than  $I_{n\max}$  is selected for the rating plug via a Z option.
- Other functions can also be activated using rating plugs (L = OFF or Rc protection).

Rating plug									
For setting the rated current $I_n$	For all ETU	400 A						B 0 4	
		630 A						B 0 6	
		800 A						B 0 8	
		1000 A						B 1 0	
		1200 A						B 1 2	
		For setting the rated current $I_n$ , with overload protection L = OFF	For ETU 6-series	400 A					
	630 A								L 0 6
	800 A								L 0 8
	1000 A								L 1 0
	1250 A								L 1 2
	1600 A								L 1 6
	For setting the rated current $I_n$ , For enabling the residual current protection function. The residual current function is only possible with the MF Advanced metering function.	For ETU660 only	400 A						G 0 4
630 A								G 0 6	
800 A								G 0 8	
1250 A								G 1 2	

### Communication modules

- Up to 2 different communication modules can be used at the same time.
- When using an IOM040 digital I/O module (Z option K56), only 1 communication module can be used.

Communication modules								
COM043	Modbus TCP							F 1 1
COM042	Modbus RTU							F 1 2

### Breaker Connect modules

- When a circuit breaker with a communications interface is ordered, a Breaker Connect module for external 24 V DC power supply of the electronic components is also supplied ready installed as standard.
- By means of this Z option, the Breaker Connect module for 24 V DC is replaced by a Breaker Connect module for 110–240 V AC/DC.

Breaker Connect module								
110 ... 240 V AC/DC								F 2 6

### I/O modules internal

I/O modules internal								
IOM040 digital I/O module	2 inputs, 2 outputs							K 5 6

 For molded case circuit breakers with stored energy operating mechanism

 For molded case circuit breakers with toggle operating mechanism

<sup>1)</sup> These functionalities can be applied directly to the frame of the withdrawable circuit breaker, without any modification of the side wall.

<sup>2)</sup> Not possible in connection with or as an alternative to the mounting support, standard (A07).



# Guide frames

3VA27

## Guide frames for ordering separately without circuit breakers



- Guide frames without breakers up to 1250 A
- **Note:** All CB bus modules for communication COM04x / IOM300 / Breaker Connect module, as well as COMPSS signaling switches are configured without frames in the withdrawable circuit breaker and defined there by means of Z options, and are included with the switching device. PSS Standard is always included in the frame and can be changed to an electronics-capable signal by means of a Z option.

Number of poles	Connection type	Article No.
3-pole	Rear vertical	3VW8116-7AA01
	Rear horizontal	3VW8116-7AB01
	Front straight bus connectors extended	3VW8116-7AE01
	Broadened bus connectors	3VW8116-7AF01
	Rear broadened bus connectors	3VW8116-7AG01
4-pole	Rear vertical	3VW8116-7BA01
	Rear horizontal	3VW8116-7BB01
	Front straight bus connectors extended	3VW8116-7BE01
	Broadened bus connectors	3VW8116-7BF01
	Rear broadened bus connectors	3VW8116-7BG01

To specify the options, add „Z“ to the complete Article No. and indicate the appropriate order code(s).

3VW8....-.....-Z

Order code

## Locking, blocking and interlocking

Locking device	To prevent movement of withdrawable circuit breaker	Cylinder lock, made by Ronis	☒	☒	R	7	8
		For no more than 3 8-mm padlocks	☒	☒	R	6	5
Locking mechanism	To prevent movement to disconnected position (only in combination with R78 or R65)		☒	☒	R	7	9

## Auxiliary/signaling switches

Position signaling switch PSS for guide frame	For 24 V DC digital signals, for minimum currents	2 CO   2 CO   2 CO (connected   test   disconnected position)	☒	☒	K	5	5
---	---	---	---	---	---	---	---

Auxiliary and signaling switches for currents >100 mA and up to 400 V AC are installed as standard.

For currents <100 mA for PLC connections, these auxiliary and signaling switches can be modified.

The auxiliary/signaling switches for 24 V DC digital signals are designed for

- A minimum load above 1 mA at 5 V DC, and
- A maximum breaking capacity of 100 mA at 24 V DC.

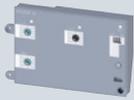
☒ For molded case circuit breakers with stored energy operating mechanism

☒ For molded case circuit breakers with toggle operating mechanism

# Electronic trip unit ETU and accessories

3VA27

## Electronic trip units (ETU)

Version	With communications / metering function, enhanced protection functions	Type	Protective function	Article No.
	With rotary coding switches No	ETU320	LIN  	3VW9011-5AA00
		ETU350	LSIN  	3VW9012-5AA00
		ETU360	LSING  	3VW9012-7AA00
	With display Yes	ETU650	LSIN  	3VW9017-5AA00
		ETU660	LSING  	3VW9017-7AA00

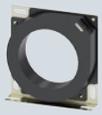
## Metering functions for ETU650 or ETU660

Description	Protective function / version	Arrangement	Article No.
	MF Basic	–  	3VW9011-0AT01
	MF Advanced	–  	3VW9011-0AT04
Set of cables for voltage tap for MF	For 4-pole circuit breakers with N conductor right	Top or bottom  	3VW9011-0AT08
	For 4-pole circuit breakers with N conductor left	Top  	3VW9011-0AT75
		Bottom  	3VW9011-0AT76
	For 3-pole circuit breakers	Top  	3VW9011-0AT72
		Bottom  	3VW9011-0AT73

## External current transformers for N conductors

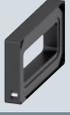
Accessory for	Purpose	Article No.
 ETU320, ETU350, ETU360, ETU650, ETU660	Only for 3-pole circuit breakers	  3VW9011-0AA30

## External current transformers for grounded transformer star points

Accessory for	G <sub>ret</sub> (Ground return)	Article No.
 ETU660	100 A	  3VW9011-0GF30
	250 A	  3VW9011-0GF31

## Summation current transformers external Rc-CT for residual current measurement

- Only with MF Advanced metering function and Rc rating plug

Accessory for	Purpose	Article No.
 ETU660	For external residual current measurement	  3VW9011-ORC30

## Remote reset magnets RR for the circuit breakers including tripped signal

- Remote reset magnet (RR) for resetting the circuit breaker after tripping as a result of overcurrent conditions

Accessory for	Voltage	Article No.
 ETU320, ETU350, ETU360, ETU650, ETU660	24 V DC	 – 3VW9011-0AK03
	110 V AC/DC	 – 3VW9011-0AK05
	250 V AC/DC	 – 3VW9011-0AK06

## Replacement batteries for electronic trip unit ETU

Accessory for	Article No.
 ETU320, ETU350, ETU360, ETU650, ETU660	  3VW9011-0AT38

 For molded case circuit breakers with stored energy operating mechanism

 For molded case circuit breakers with toggle operating mechanism

# Electronic trip unit ETU and accessories

3VA27

## Rated current modules / rating plugs



- Only one module is possible per circuit breaker.

Accessory for	Version	Rated current $I_n$	Article No.
ETU320, ETU350, ETU360, ETU650, ETU660	Rating plugs for setting ( $< I_{n\max}$ ) the rated current $I_n$	400 A	3VW9011-0AA53
		630 A	3VW9011-0AA55
		800 A	3VW9011-0AA56
		1000 A	3VW9011-0AA57
		1250 A	3VW9011-0AA58
		1600 A	3VW9011-0AA61
ETU 6-series	Rating plug without overload protection (L = OFF) and for setting ( $< I_{n\max}$ ) the rated current $I_n$	400 A	3VW9011-0LF53
		630 A	3VW9011-0LF55
		800 A	3VW9011-0LF56
		1000 A	3VW9011-0LF57
		1250 A	3VW9011-0LF58
		1600 A	3VW9011-0LF61
ETU660	Rating plug Rc for ETU660 for enabling the residual current protection function and setting ( $< I_{n\max}$ ) the rated current $I_n$ . The residual current function is only possible with the MF Advanced metering function.	400 A	3VW9011-0RC53
		630 A	3VW9011-0RC55
		800 A	3VW9011-0RC56
		1250 A	3VW9011-0RC58

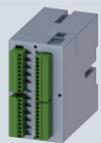
## CB bus modules - communication modules



- Contains the communication module
- Up to 2 different communication modules can be used at the same time.
- When using a digital I/O module IOM040 (Z option K56), only 1 communication module can be used.
- Can only be used with ETU of the 6-series and require a Breaker Connect module for connection to the circuit breaker. This can also be configured directly on the device by means of a Z option if the communications interface to the ETU 6-series is selected.

Communication module	Protocol	Article No.
COM043	Modbus TCP	3VW9011-0AT16
COM042	Modbus RTU	3VW9011-0AT17

## CB bus modules - I/O modules external IOM300



- For snapping onto standard mounting rail

Accessory for	Maximum switching current per contact	Inputs	Outputs	Article No.
ETU 6-series	<ul style="list-style-type: none"> <li>2 A at <math>\leq 30</math> V DC</li> <li>0.8 A at 50 V DC</li> <li>0.2 A at 150 V DC</li> <li>4 A at 250 V AC</li> </ul>	11	10	3VW9011-0AT20

## CB bus modules - I/O modules internal IOM040



- When using a digital I/O module IOM040, only 1 communication module can be used.

Accessory for	Maximum switching current per contact	Inputs	Outputs	Article No.
ETU 6-series	<ul style="list-style-type: none"> <li>2 A at <math>\leq 30</math> V DC</li> <li>0.8 A at 50 V DC</li> <li>0.2 A at 150 V DC</li> <li>4 A at 250 V AC</li> </ul>	2	2	3VW9011-0AT30

For molded case circuit breakers with stored energy operating mechanism

For molded case circuit breakers with toggle operating mechanism

3VA27

## Actuator modules COM ACT



- For switching the circuit breaker on/off remotely via communication.
- Actuation of the closing coil (CC) and the 1st shunt trip (ST).
- Can only be used in combination with a communication module, spring charging motor, closing coil and 1st shunt trip.
- Automatically included if the communications interface of the ETU 6-series is selected in the basic circuit breaker configuration.

## Accessory for

ETU 6-series



-

## Article No.

3VW9011-0AT10

## Breaker Connect modules



- For external power supply for the electronics components

## Voltage

110 ... 240 V AC/DC



## Article No.

3VW9011-0AT06

24 ... 48 V DC



3VW9011-0AT07

## Auxiliary contact signals for communications interfaces



- Auxiliary contacts for signaling the readiness to close or for position signaling switches of the withdrawable positions.
- Can only be used in combination with communication module.
- Can be combined with standard position signaling switches or ready-to-close signaling contacts.
- Note: Both signaling switches are automatically included in the basic circuit breaker (COM PSS only with withdrawable versions) if the communications interface of the ETU 6-series is selected.

## Function

Ready-to-close signaling switch for communication (COM RTC)



-

## Article No.

3VW9011-0AT11

Position signaling switch COM PSS (for withdrawable breaker only)



3VW9011-0AT12

## Test devices and breaker data adapters



- Usable for all ETU 3-series and 6-series

## Description

Test device

## Type

TD310



## Article No.

3VW9011-0AT32

- For the trip test via ETU and tripping solenoid including release
- Activation of the ETU and the tripping solenoid by means of a battery built into the test device
- On activation in the ETU 6-series, the parameters can be configured on the display

Breaker data adapter

TD410



3VW9011-0AT34

- As gateway for parameterization of the ETU with powerconfig
- For generation of a report of the set parameters with powerservice

Test device and breaker data adapter

TD420



3VW9011-0AT33

- As gateway for parameterization of the ETU with powerconfig
  - Testing a tripping operation using powerconfig
- For use with the powerservice software
  - Testing of the basic protection functions LSING
  - Testing of the enhanced protection functions
  - Test data storage
  - Readout of ETU buffer
  - Generation of a report of the set parameters

For molded case circuit breakers with stored energy operating mechanism

For molded case circuit breakers with toggle operating mechanism

# Accessories for connection and insulation

3VA27

## Front terminals for main circuit connections acc. to IEC 60947-2

- Acc. to IEC 60947-2 for 3VA27 up to 1600 A (depending on application conditions)
- To be ordered separately for top and bottom

Version	Description	Mounting onto	Number of poles / quantity		Article No.
Fixed-mounted	Front terminals for main circuit connection	–	3-pole / 3 units		3VW9011-0AL01
			4-pole / 4 units		3VW9011-0AL02
	Extended main terminals, including insulation plate and phase barriers, standard	Front terminals for main circuit connection	3-pole / 3 units		3VW9011-0AL77
			4-pole / 4 units		3VW9011-0AL78
	Broadened main terminals, including insulation plate and extended phase barriers	Front terminals for main circuit connection, top	3-pole / 3 units		3VW9011-0AL73
			Front terminals for main circuit connection, bottom		3VW9011-0AL75
Front terminals for main circuit connection, top/bottom				3VW9011-0AL74	
Withdrawable	Front-accessible terminals for main circuit connection	Guide frame flange	3-pole / 3 units		3VW9011-0AN01
			4-pole / 4 units		3VW9011-0AN02
	Broadened main circuit connections	Front-accessible terminals for	3-pole / 3 units		3VW9011-0AN73
		4-pole / 4 units		3VW9011-0AN74	

## Rear terminals for main circuit connections acc. to IEC 60947-2

- Acc. to IEC 60947-2 for 3VA27 up to 1600 A (depending on application conditions)
- To be ordered separately for top and bottom

Fixing	Version	Mounting onto	Number of poles / quantity		Article No.
Fixed-mounted	Rear terminals for main circuit connection, rotatable for horizontal / vertical connection Including terminal cover	–	3-pole / 3 units		3VW9011-0AL32
			4-pole / 4 units		3VW9011-0AL33
Withdrawable	Rear terminals for main circuit connection, rotatable for horizontal / vertical connection Including terminal cover	–	3-pole / 3 units		3VW9011-0AN32
			4-pole / 4 units		3VW9011-0AN33
	Broadened main terminals	Rear horizontal main connec-	3-pole / 3 units		3VW9011-0AN75
		4-pole / 4 units		3VW9011-0AN76	

## Cu-/Al cable connections acc. to IEC 60947-2

- Acc. to IEC 60947-2 for 3VA27 up to 1600 A (depending on application conditions)
- To be ordered separately for top and bottom

Fixing	Version	Mounting onto	Number of poles / quantity		Article No.
Fixed-mounted	Circular conductor terminals 4 x 240 mm <sup>2</sup> for front cable connection, including insulation plate and high, extended terminal cover	Front terminals for main circuit connection	3-pole / 3 units		3VW9011-0AL71
			4-pole / 4 units		3VW9011-0AL72
Withdrawable	Set of circular conductor connection pieces 4 x 240 mm <sup>2</sup> for cable lugs for rear cable connection	Rear vertical main connections	3-pole / 3 units		3VW9011-0AN71
			4-pole / 4 units		3VW9011-0AN72

## Auxiliary supply connectors in push-in version

For molded case circuit breakers with stored energy operating mechanism

For molded case circuit breakers with toggle operating mechanism



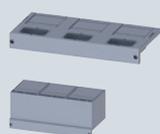
- Auxiliary conductor terminal in push-in version for upgrading fixed-mounted breakers and guide frames.
- The device is always fitted at the factory with the exact number of auxiliary conductor terminals required.

3VA27

Version	Article No.
Push-in	3VW9011-0AB11

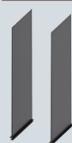
### Terminal covers for fixed circuit breakers

- Finger-proof for front terminals for main circuit connection for fixed-mounting
- Necessary isolation measures are always supplied with the corresponding connection technology and do not need to be ordered separately.



Version	Number of poles / quantity	Article No.
Standard	3-pole / 2 units	3VW9723-0WD30
	4-pole / 2 units	3VW9724-0WD40
Extended	3-pole / 2 units	3VW9723-0WF30
	4-pole / 2 units	3VW9724-0WF40

### Phase barriers for fixed breakers



- Necessary isolation measures are always supplied with the corresponding connection technology and do not need to be ordered separately.
- For operating voltages >440 V AC the use of phase barriers is mandatory; up to 440 V AC their use is optional.

Height	Number of poles / quantity	Article No.
100 mm (standard)	3-pole / 4 units	3VW9723-0WA00
	4-pole / 6 units	3VW9724-0WA10
200 mm (extended)	3-pole / 4 units	3VW9723-0WA01
	4-pole / 6 units	3VW9724-0WA11

### Supports for mounting the fixed-mounted breakers on the floor

- For fixed-mounted versions only



Version	Purpose	Article No.
Mounting support standard (circuit breaker feet) (= Z option A07)		3VW9011-0BB51
Mounting support extended (circuit breaker feet) including mechanical transmission of switch position on circuit breaker side panel (= Z option S56)	<ul style="list-style-type: none"> <li>• Fixation for external auxiliary switches AUX 15 CO (3VW9011-0AG15)</li> <li>• Locking mechanism for control cabinet door, direct (for 3VW9011-0BB10)</li> <li>• Locking mechanism for control cabinet door, Bowden cable (for 3VW9011-0BB16),</li> <li>• Mutual mechanical interlocking to 3WL/3VA (for 3VW9011-0BB21)</li> </ul>	3VW9011-0BB52

### Extension kits for modification of the side wall of the fixed-mounted breakers

- For fixed-mounted breakers only
- Rear fixation on mounting plate
- For modification for mechanical transmission of switch position on circuit breaker side panel (= Z option S57)



Version	Purpose	Article No.
Extension kit for side wall	<ul style="list-style-type: none"> <li>• Fixation for external auxiliary switches AUX 15 CO (3VW9011-0AG15)</li> <li>• Locking mechanism for control cabinet door, direct (for 3VW9011-0BB10)</li> <li>• Locking mechanism for control cabinet door, Bowden cable (for 3VW9011-0BB16),</li> <li>• Mutual mechanical interlocking to 3WL/3VA (for 3VW9011-0BB21)</li> </ul>	3VW9011-0BB53

### Spring charging motor (MO)

☒ For molded case circuit breakers with stored energy operating mechanism

☒ For molded case circuit breakers with toggle operating mechanism

# Motor operators and manual operators



				3VA27
Description	Voltage			Article No.
For automatic charging of the stored energy operating mechanism	24 ... 30 V AC/DC	WE	–	3VW9011-0AF01
	48 ... 60 V AC/DC	WE	–	3VW9011-0AF02
	100 ... 130 V AC/DC	WE	–	3VW9011-0AF03
	220 ... 250 V AC/DC	WE	–	3VW9011-0AF04

## Mechanical operating cycles counter MOC



Description	Version			Article No.
Only possible in combination with a spring charging motor.	5 digits	WE	–	3VW9011-0AH07

## Manual operators for circuit breakers with toggle operating mechanism



Description	Version	Color	Degree of protection		Article No.	
Front rotary operating mechanism incl. door sealing frame	Standard	Gray	IP30	–	↙	3VW9727-0EK11
	EMERGENCY-OFF	Yellow-red	IP30	–	↙	3VW9727-0EK15



Door mounted rotary operator	Standard	Gray	IP30	–	↙	3VW9727-0FK21
	EMERGENCY-OFF	Yellow-red	IP30	–	↙	3VW9727-0FK25



Basic without handle			IP30	–	↙	3VW9727-0GK00
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Shaft stub			IP30	–	↙	8UD1900-3WD00
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Handle	Gray	IP30	–	↙	8UD1861-0AB11
	Yellow-red	IP30	–	↙	8UD1861-0AB15

## Closing coils CC / shunt trips ST

WE For molded case circuit breakers with stored energy operating mechanism

↙ For molded case circuit breakers with toggle operating mechanism

# Auxiliary release, closing coil

3VA27

- **Note:**

- For molded case circuit breakers with stored energy operators, the products can only be used as closing coils CC
- For molded case circuit breakers with handle mechanisms, the products can be used as closing coils CC and shunt trips ST.



Voltage	Article No.
24 V AC/DC	3VW9011-0AD01
30 V AC/DC	3VW9011-0AD02
48 V AC/DC	3VW9011-0AD03
60 V AC/DC	3VW9011-0AD04
110 ... 120 V AC/DC	3VW9011-0AD05
120 ... 127 V AC/DC	3VW9011-0AD06
220 ... 240 V AC/DC	3VW9011-0AD07
240 ... 250 V AC/DC	3VW9011-0AD08
380 ... 400 V AC	3VW9011-0AD17
415 ... 440 V AC	3VW9011-0AD18

## TD320 function test units for closing coils / shunt trips



- The TD320 test unit allows the operational availability and functions of the closing coils and shunt trips with a rated operational voltage between 24 V and 250 V (AC and DC) to be tested.
- The operational availability test is performed cyclically at intervals of 30 seconds.
- The unit has visual indicators in the form of LEDs on the front in order to display the following states:
  - LED POWER ON LIT: Correct function of the YO/YC test unit
  - LED DEACTIVATION LIT: Power supply failure, wire break
  - LED SHORT-CIRCUIT LIT: Winding short-circuit
  - LED DEACTIVATION and SHORT-CIRCUIT FLASHING: Incorrect power supply
  - LED DEACTIVATION and SHORT-CIRCUIT OFF: Closing coil / shunt trips OK

Description	Article No.
For all closing coils / shunt trips	3VW9011-0AT31

## Auxiliary / signaling switches



- The auxiliary/signaling switches for 24 V DC digital signals are designed for a
  - minimum load above 1 mA at 5 V DC, and a
  - maximum breaking capacity of 100 mA at 24 V DC.
- For external auxiliary switches ON/OFF AUX 15 CO, a 3VW9011-0AG1x fixation must be ordered in addition, and for fixed-mounted breakers a 3VW9011-0BB5x side wall modification.

Description	Contacts	Article No.
Ready-to-close signal RTC	1 CO standard	3VW9011-0AH01
	1 CO digital	3VW9011-0AH02
Auxiliary switch ON/OFF AUX	4 CO standard	3VW9011-0AG01
	4 CO digital	3VW9011-0AG02
	2 CO standard + 2 CO digital	3VW9011-0AG03
External auxiliary switch ON/OFF AUX	15 CO standard	3VW9011-0AG05
	15 CO digital	3VW9011-0AG06
Tripped signaling switch S24	1 CO standard	3VW9011-0AH14
	1 CO digital	3VW9011-0AH15
Spring charged signaling switch S21	1 CO standard	3VW9011-0AH10
	1 CO digital	3VW9011-0AH08
Position signaling switches PSS (only with draw-out versions)	2 CO   2 CO   2 CO (connected   test   disconnected position) standard	3VW9011-0AH11
	2 CO   2 CO   2 CO (connected   test   disconnected position) digital	3VW9011-0AH12

## Auxiliary / signaling switches for toggle operating mechanisms

☒ For molded case circuit breakers with stored energy operating mechanism

☒ For molded case circuit breakers with toggle operating mechanism

# Auxiliary release, closing coil

3VA27

2



- Auxiliary and signaling switches are each offered in two versions:
  - Standard version for currents >100 mA and up to 400/250 V AC,
  - Minimum load above 100 mA at 24 V DC
  - Maximum breaking capacity 5 A at 250 V AC
  - Digital version for currents <100 mA for PLC connections, minimum load above 1 mA at 5 V DC, and maximum breaking capacity of 100 mA at 24 V DC
- For external auxiliary switches ON/OFF AUX 15 CO, a 3VW9011-0AG1x fixation must be ordered in addition, and for fixed-mounted breakers a 3VW9011-0BB5x side wall modification.

Description	Contacts		Article No.
Trip alarm switch TAS signals the trip position irrespective of the tripping reason	1 CO standard	–	3VW9727-0AB11
	1 CO digital	–	3VW9727-0AB13
Tripped signaling switch via auxiliary release S25 signals tripping operations via auxiliary releases (UVR, ST) in UVR/ST2 pocket	1 CO standard	–	3VW9727-0AB41
	1 CO digital	–	3VW9727-0AB43
Leading auxiliary switch S26 (2 units)	1 NO standard, 250 V AC	–	3VW9727-0AA21

## Fixation for external auxiliary switches AUX 15 CO



- External auxiliary switches ON/OFF AUX 15 CO must be ordered separately.

Version		Article No.
For fixed-mounted breakers with rear panel or floor mounting (in combination with Z option S56 or S57)	WE	3VW9011-0AG15
For guide frames	WE	3VW9011-0AG17

## Undervoltage releases UVR



Voltage		Article No.
24 V AC/DC	WE	3VW9011-0AE01
30 V AC/DC	WE	3VW9011-0AE02
48 V AC/DC	WE	3VW9011-0AE03
60 V AC/DC	WE	3VW9011-0AE04
110 ... 120 V AC/DC	WE	3VW9011-0AE05
120 ... 127 V AC/DC	WE	3VW9011-0AE06
220 ... 240 V AC/DC	WE	3VW9011-0AE07
240 ... 250 V AC/DC	WE	3VW9011-0AE08
380 ... 400 V AC	WE	3VW9011-0AE17
415 ... 440 V AC	WE	3VW9011-0AE18

## External time-delay devices for undervoltage releases



- With adjustable delay time from 0.5 to 3 s.
- Suitable for mounting onto DIN rail.

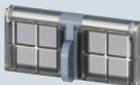
Voltage		Article No.
24 ... 30 V AC/DC	WE	3VW9011-0AE10
48 V AC/DC	WE	3VW9011-0AE11
60 V AC/DC	WE	3VW9011-0AE15
110 ... 127 V AC/DC	WE	3VW9011-0AE12
220 ... 250 V AC/DC	WE	3VW9011-0AE13

## Locking devices to prevent movement of the withdrawable circuit breakers

WE For molded case circuit breakers with stored energy operating mechanism

WE For molded case circuit breakers with toggle operating mechanism

# Locking devices and interlocks

		3VA27		
Version		Article No.		
	Ronis cylinder lock (replacement for R78)	☒ ↙	3VW9011-0BA80	
	Padlock 8 mm (replacement for R65), for no more than 3 padlocks	☒ ↙	3VW9011-0BA87	
<b>Locking mechanisms to prevent movement of the withdrawable circuit breakers in disconnected position</b>				
	<ul style="list-style-type: none"> <li>Only possible as a supplement in conjunction with R78 (3VW9011-0BA80) and/or R65 (3VW9011-0BA87).</li> </ul>			
	Description	Article No.		
	Locking mechanism (replacement for R79)	☒ ↙	3VW9011-0BA84	
<b>Locking devices in OFF position</b>				
	<ul style="list-style-type: none"> <li>For fixed-mounted versions and withdrawable versions</li> <li>To prevent unauthorized activation in the operator panel (safe OFF)</li> <li>The disconnecter unit fulfills the conditions for a supply disconnecting (isolating) device acc. to EN 60204-1.</li> </ul>			
	Description	Article No.		
	Cylinder lock, made by Ronis (replacement for S08)	☒ –	3VW9011-0BA33	
<b>Locking devices in OFF position</b>				
	<ul style="list-style-type: none"> <li>For fixed-mounted versions and withdrawable versions</li> <li>To prevent unauthorized activation in the operator panel (safe OFF)</li> <li>The disconnecter unit fulfills the conditions for a supply disconnecting (isolating) device acc. to EN 60204-1.</li> </ul>			
	Description	Version	Article No.	
	Padlock 4 mm (replacement for S22)	Plastic for no more than 3 locks	☒ –	3VW9011-0BA41
	Padlock 7 mm (replacement for S23)	Metal for no more than 1 lock	☒ –	3VW9011-0BA42
Padlock 8 mm (replacement for S07)	Metal for no more than 2 locks	☒ –	3VW9011-0BA44	
<b>Locking devices in OFF position for toggle operating mechanisms with rotary operators</b>				
	<ul style="list-style-type: none"> <li>To prevent unauthorized activation in the case of molded case circuit breakers with rotary operator</li> </ul>			
	Description	Article No.		
	For Ronis	– ↙	3VW9727-0VL10	
<b>Locking devices in OFF position for toggle operating mechanisms without rotary operators</b>				
	<ul style="list-style-type: none"> <li>To prevent unauthorized activation in the operator panel in the case of molded case circuit breakers without rotary operator</li> </ul>			
	Description	Article No.		
	For padlocks	– ↙	3VW9727-0LB10	
	For Ronis	– ↙	3VW9727-0LF10	
<b>Padlockable protective covers ON/OFF on the operator panels</b>				
	Description	Version	Article No.	
	Padlock 4 mm (replacement for S42)	Plastic for no more than 3 locks	☒ –	3VW9011-0BA22
	Padlock 7 mm (replacement for S43)	Metal for no more than 1 lock	☒ –	3VW9011-0BA23
	Padlock 8 mm (replacement for S44)	Metal for no more than 2 locks	☒ –	3VW9011-0BA24
<b>Protective covers for mechanical ON/OFF</b>				

☒ For molded case circuit breakers with stored energy operating mechanism

↙ For molded case circuit breakers with toggle operating mechanism

# Locking devices and interlocks

3VA27



- Mechanical ON/OFF to protect against unintentional actuation on the operator panel.
- Not lockable.

Description	Article No.
Not lockable (replacement for S41)	3VW9011-0BA21

## Mutual mechanical interlocking



- Mutual mechanical interlocking with Bowden cable 2 m

Fixing	Mounting	Article No.
Fixed-mounted	Rear panel or floor mounting	3VW9011-0BB21
Withdrawable	Mounting onto guide frame	3VW9011-0BB22

## Bowden cables, separate

- One required for each circuit breaker

Variant	Article No.
1000 mm	3VW9011-0BB23
2000 mm	3WL9111-0BB45-0AA0
3000 mm	3WL9111-0BB46-0AA0

## Locking mechanisms to prevent opening of the control cabinet doors in ON position



- To prevent opening of the control cabinet door in ON position
- It additionally prevents the circuit breaker from being closed when the control cabinet door is open.

Fixing	Version	Article No.
Fixed mounting on side panel or floor	Direct fixed interlocking	3VW9011-0BB10
	Locking with Bowden cable	3VW9011-0BB16
Withdrawable	Direct fixed interlocking	3VW9011-0BB14
	Locking with Bowden cable	3VW9011-0BB18

## Door sealing frames IP30



- For IP4x and higher, you must order the protective cover IP54 3VW9011-0AP03 or 3VW9011-0AP13.

Description	Fixing	Version	Article No.
Replacement part for Z option T30.	Fixed-mounted	IP3x	3VW9011-0AP01
	Withdrawable	IP3x	3VW9011-0AP02

## Protective covers IP54



- Protective cover / hood IP54 lockable for fixed-mounted breakers and withdrawable breakers
- For implementing degrees of protection IP4x and IP54 when installing in switchboard door.
- Cannot be combined with IP30 door sealing frame and door mounted rotary operator.

Description	Version	Article No.
Lock with unique key	IP54	3VW9011-0AP03
Lock with standard key	IP54	3VW9011-0AP13

☒ For molded case circuit breakers with stored energy operating mechanism

☒ For molded case circuit breakers with toggle operating mechanism

# 3VL up to 1600 A, IEC



3VL molded case circuit breaker



## Product Discontinuation

The 3VL molded case circuit breaker up to 1600 A IEC will only be able to be ordered as a spare part from 10/2020, and will be removed from the order portfolio from 10/2025.

### Documents available for downloading:

You can find comprehensive information on the 3VL molded case circuit breaker in the catalog extract.

3VL molded case circuit breaker ([109769073](#))

# Conditions of sale and delivery

## 1. General Provisions

By using this catalog you can purchase products (hardware, software and services) described therein from Siemens Aktiengesellschaft subject to the following Terms and Conditions of Sale and Delivery (hereinafter referred to as „T&C“). Please note that the scope, the quality and the conditions for supplies and services, including software products, by any Siemens entity having a registered office outside Germany, shall be subject exclusively to the General Terms and Conditions of the respective Siemens entity. The following T&C apply exclusively for orders placed with Siemens Aktiengesellschaft, Germany.

### 1.1 For customers with a seat or registered office in Germany

For customers with a seat or registered office in Germany, 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 installation work the „General Conditions for Erection Works – Germany“<sup>1)</sup> („Allgemeine Montagebedingungen – Deutschland“ (currently only available in German)) and/or
- for stand-alone software products and software products forming a part of a product or project, the „General License Conditions for Software Products for Automation and Drives for Customers with a Seat or registered Office in Germany“<sup>1)</sup> and/or
- for other supplies and/or services the „General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry“<sup>1)</sup>. In case such supplies and/or services 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>, a notice will be contained in the scope of delivery in which the applicable conditions for Open Source Software are specified. This shall apply mutatis mutandis for notices referring to other third party software components.

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For customers with a seat or registered office outside Germany, 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 services the „International Terms & Conditions for Services“<sup>1)</sup> supplemented by „Software Licensing Conditions“<sup>1)</sup> and/or
- for other supplies of hard- and software 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 our supplies and/or services offered are covered by an existing master or framework agreement, the terms and conditions of that agreement shall apply instead of T&C.

## 2. 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.

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## LV 10 Low-Voltage Power Distribution and Electrical Installation Technology SENTRON • SIVACON • ALPHA

Protection, Switching, Measuring and  
Monitoring Devices, Switchboards and  
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PDF (E86060-K8280-A101-B1-7600)  
Print (E86060-K8280-A101-A6-7600)



## LV 14 Power Monitoring Made Simple SENTRON

PDF/Print (E86060-K1814-A101-A6-7600)



## LV 18 Air Circuit Breakers and Molded Case Circuit Breakers with UL Certification SENTRON

PDF (E86060-K8280-E347-A4-7600)



## ET D1 Switches and Socket Outlets DELTA

PDF



## IC 10 Industrial Controls SIRIUS

PDF/Print (E86060-K1010-A101-B1-7600)



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

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