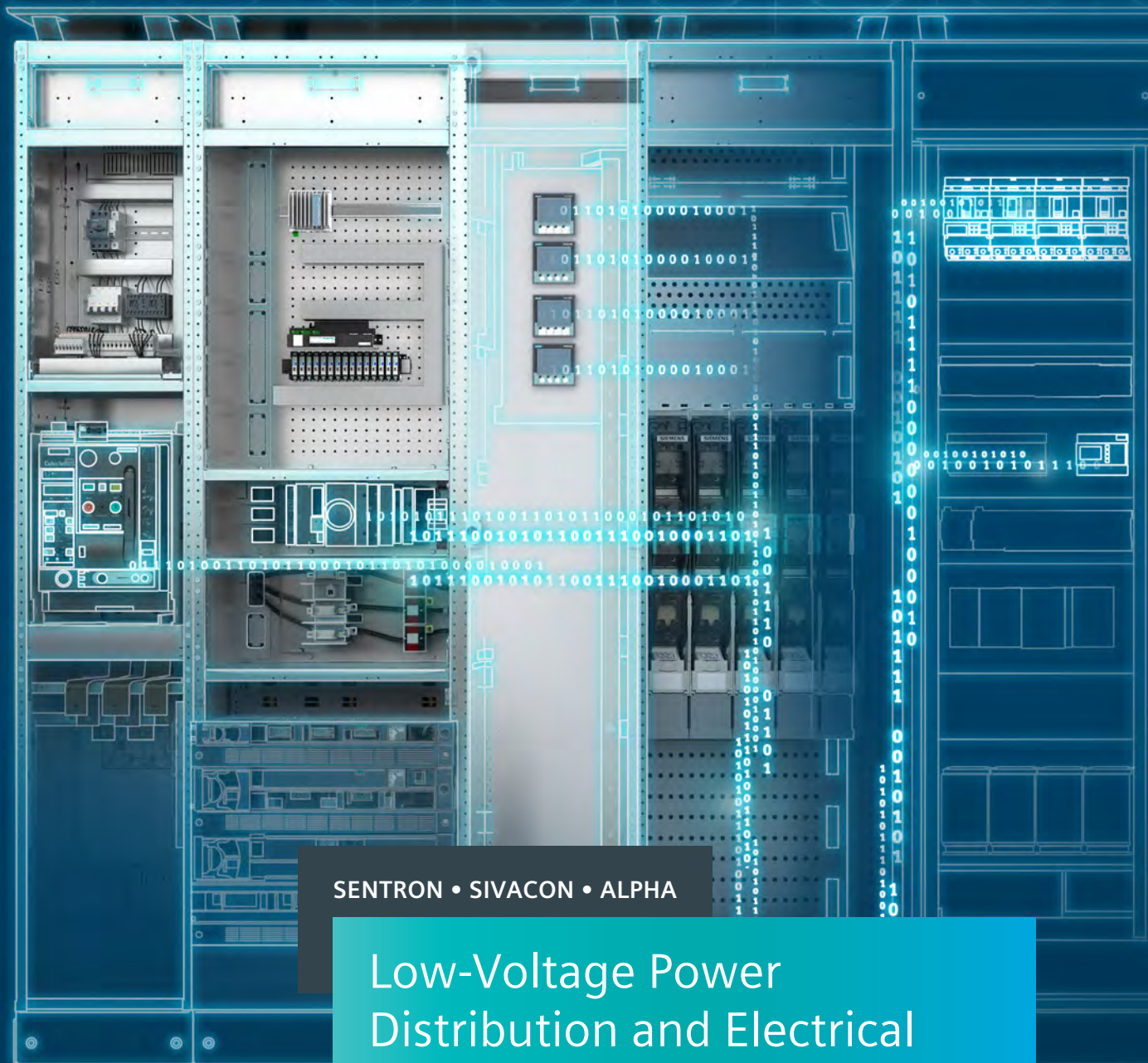


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Low-Voltage Power Distribution and Electrical Installation Technology

Molded Case Circuit Breakers

Catalog
Extract
LV 10

Edition
04/2020

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

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Catalog LV 10 · 04/2020

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

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Low-Voltage Power Distribution and Electrical Installation Technology

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A



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

Contact persons in your region

We are there when you need us

You can find your local contacts at
www.siemens.com/lowvoltage/contact

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information
www.siemens.com/lowvoltage/product-support

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

The relevant tender specifications can be found at
www.siemens.com/lowvoltage/tenderspecifications

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Siemens YouTube channel

Our video range

- 3VA molded case circuit breakers (general)
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

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?ArticleNo.)

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
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

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information

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

Manuals

Manuals are available for downloading in Siemens Industry Online Support at

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)

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You can find further information on services at

www.siemens.com/service-catalog

Training and tutorials

Our training courses can be found at

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 (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



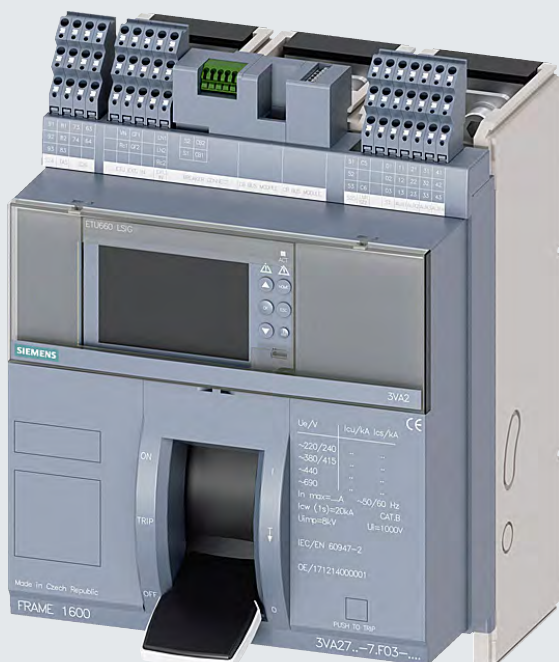
3VA20 ... 3VA26 molded case circuit breakers

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
Switch disconnectors						
No protection	–	■	■	■	■	–
Thermal-magnetic						
Line protection	■	■	■	■	■	■
Starter protection	–	■	■	■	■	■
Electronic						
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
Accessories						
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

Electrical characteristics according to IEC 60947-2

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

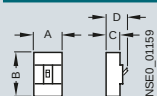
Breaking capacity (line protection)

Rated ultimate short-circuit breaking capacity I _{cu}											
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	–	–	–	–	–	–

Rated operational short-circuit breaking capacity I_{cs}

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	–	–	–	–	–	–

Dimensions



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**

3VA11				3VA12			3VA13				3VA14				3VA15 new		
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		
■				■			■				■				Up to 500 V		
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
Electrical characteristics according to IEC 60947-2						
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
3VA1 molded case circuit breakers for line protection, standard applications (IEC 60947-2)						
Service life (make-break operations)						
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
Trip Units						
TM210	FTFM			■	■	■
TM220	ATFM			–	–	–
TM240	ATAM			–	–	–
3VA1 molded case circuit breakers for starter protection (IEC 60947-4-1 standards and specifications acc. to AC-1)						
Rated operational current I_n at 50 °C ambient temperature A				–	–	–
Service life (switching cycles)						
Mechanical (NO contact – NC contact)				–	–	–
Electrical 380 ... 415 V				–	–	–
Trip Units						
TM120M	AM			–	–	–
Switch disconnectors (IEC 60947-3)						
Electrical characteristics according to IEC 60947-3						
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**

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
20000	20000	20000	20000	10000
9000	8000	6000	4000	4600
15000	14000	12000	8000	7000
6300	5400	4200	3000	3200
■	—	—	—	—
■	—	—	—	—
■	■	■	■	■
32 ... 125	160, 200	250	400 ... 500	630 ... 800
20000	20000	20000	20000	10000
9000	8000	6000	4000	4600
■	■	■	■	■
63 ... 160	250	400	630 (3P), 500 (4P)	—
690	690	690	690	—
500 (3P), 600 (4P)	500 (3P), 600 (4P)	500 (3P), 600 (4P)	500 (3P), 600 (4P)	—
70 at 415 V	70 at 415 V	*	*	—
2	3	6	7.6 (3P), 6 (4P)	—

3VA2 basic units up to 1600 A

Technical data

2



			3VA20				3VA21					3VA22				
Electrical characteristics according to IEC 60947-2																
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				
Breaking capacity			M	H	C	L	M	H	C	L	E	M	H	C	L	E
Rated ultimate short-circuit breaking capacity I _{cu}																
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	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Rated service short-circuit breaking capacity I _{cs}																
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	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Dimensions																
	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
Electrical characteristics according to IEC 60947-2					
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
Service life (make-break operations)					
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
Trip units					
ETU320	LI		■	■	■
ETU330	LIG		■	■	■
ETU340	ELISA LI		–	■	■
ETU350	LSI		■	■	■
ETU550/ETU850	LSI		■	■	■
ETU560/ETU860	LSIG		■	■	■
ETU650	LSI		–	–	–
ETU360	LSIG		–	–	–
ETU660	LSIG		–	–	–
3VA2 molded case circuit breakers for motor/starter protection (IEC 60947-4-1 standards and specifications acc. to AC-1)					
Rated operational current I _n at 50 °C ambient temperature			–	25 ... 100 A	160 ... 200 A
Service life (make-break operations)					
Mechanical (NO contact – NC contact)			–	25000	25000
Electrical	380 ... 415 V		–	14000	12000
Trip units					
ETU310M	I		–	■	■
ETU350M	LSI		–	■	■
ETU550M	LSI		–	■	■
ETU860M	LSIG		–	■	■
ETU320	LI		–	–	–
ETU350	LSI		–	–	–
ETU360	LSIG		–	–	–
ETU650	LSIG		–	–	–
ETU660	LSIG		–	–	–

■ Available

– Not available/not present

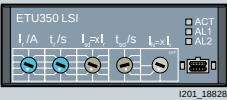
* On request



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 _n /A I _n /A I201_19035	 ETU350 LSI I _n /A t _s /s I _n /A t _s /s I _n /A I201_18828	 ETU550M LSI I _n /A t _s /s I _n /A t _s /s I _n /A I201_19701	 ETU860M LSI I _n /A t _s /s I _n /A t _s /s I _n /A I201_18484
	TM 2-series	ETU 3-series	ETU 5-series	ETU 8-series
Protection function				
Line protection	TM210, TM220, TM240	ETU320, ETU330, ETU340, ETU350	ETU550, ETU560	ETU850, ETU860
Starter protection	TM120M	ETU310M	–	–
Motor protection	–	ETU350M	ETU550M	ETU860M
Integrated functions				
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
Optional expansions				
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
Protections				
Starter protection	■	—	—	—
Line protection	—	■	■	■
Version available with				
1-pole and 2-pole breakers	—	■	—	—
3-pole breaker	■	■	■	■
4-pole breaker	—	■	■	■
Available protection parameters				
I_r adjustable	—	—	■	■
I_i adjustable	■	—	—	■
I_r fixed	—	■	—	—
I_i fixed	—	■	■	—
$I_N^{1)}$	—	■	■	■

¹⁾ 3VA10 only without N protection

3VA11, 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
Protection												
Starter protection	■	—	—	—	—	—	—	—	—	—	—	—
Motor protection	—	—	—	—	—	■	—	■	—	—	—	■
Line protection	—	■	■	■	■	—	—	—	■	■	■	—
Generator protection	—	■	■	—	■	—	■	—	■	■	■	—
Version available with												
3-pole without external neutral conductor transformer	■	■	■	■	■	■	—	■	—	—	—	■
3-pole with external neutral conductor transformer	—	—	—	—	—	—	■	—	■	■	■	—
4-pole with protected neutral conductor transformer	—	■	■	■	■	—	■	—	■	■	■	—
Available protection parameters												
Characteristic in L range	I^2t	I^2t	I^2t	I^4t	I^2t	I^2t	I^2t	I^2t	I^2t	I^2t	I^2t	I^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	■	■	■	■	■	■	■	■	■	■	■	■
$I_N^{1)}$	—	■	■	■	■	—	■	—	■	■	■	—
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	—	■	■	■	■	■	■	■	■	■	■	■

¹⁾ 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

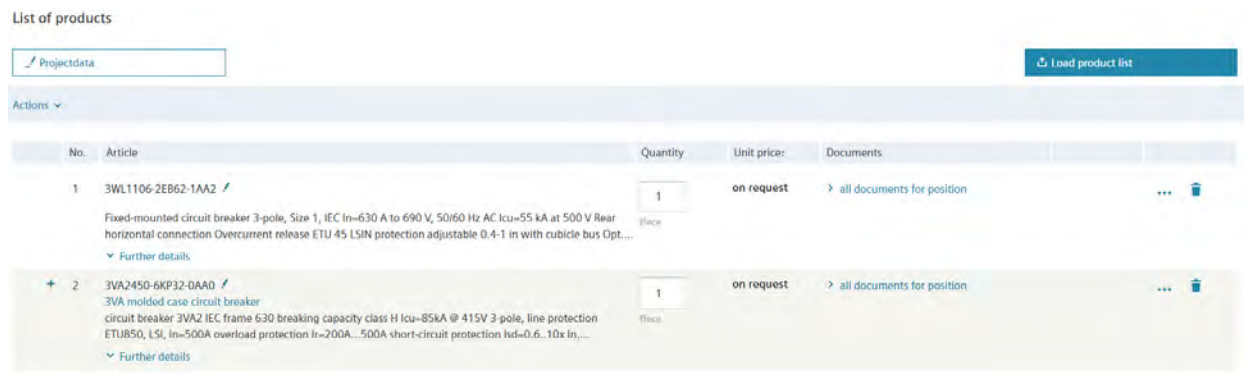
www.siemens.com/lowvoltage/configurators

Search function with global direct input

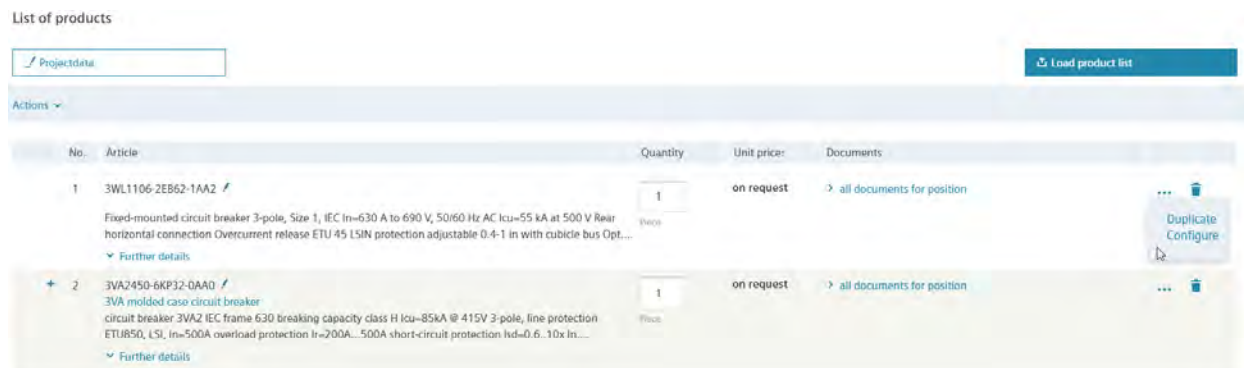
Searches for specific terms and jumps to MLFB based on input to the correct configurator



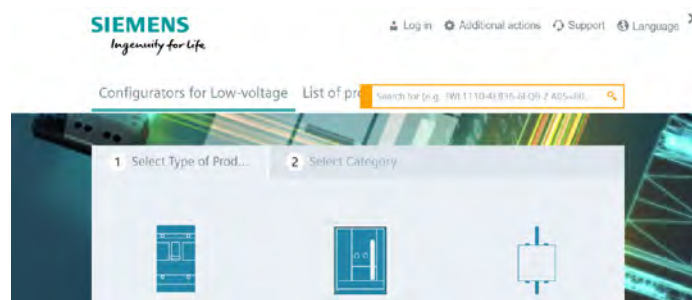
Product list stores multiple configurations and can transfer them collectively to the shopping cart



Recall of completed configurations for modification or additional configuration

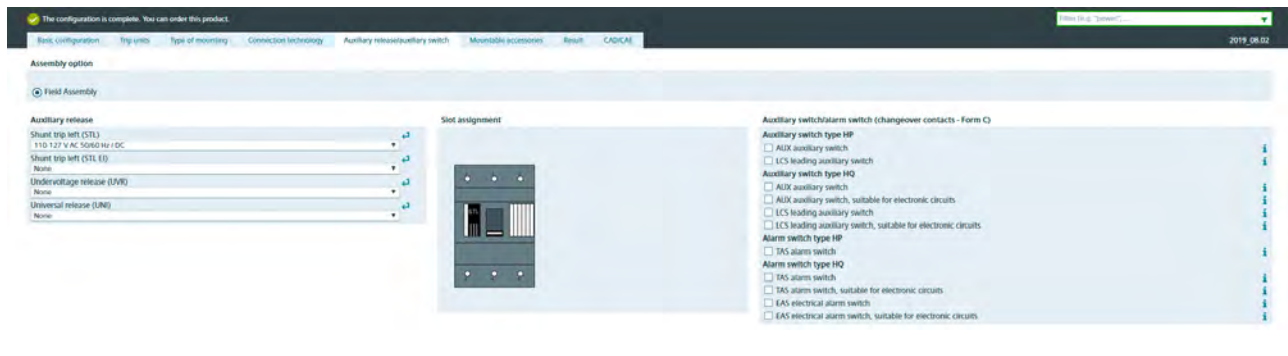


Responsive Design

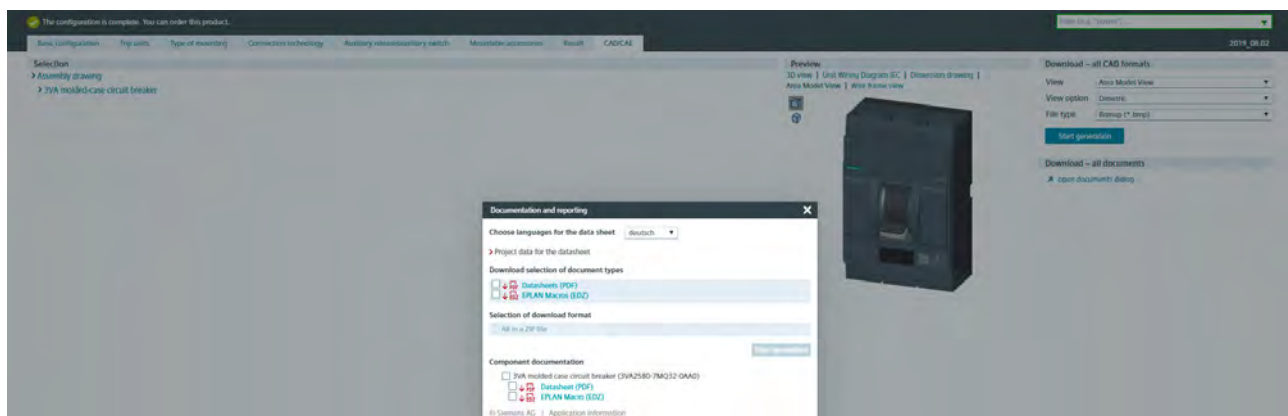


www.siemens.com/lowvoltage/3va-configurator and
www.siemens.com/lowvoltage/3va27-configurator

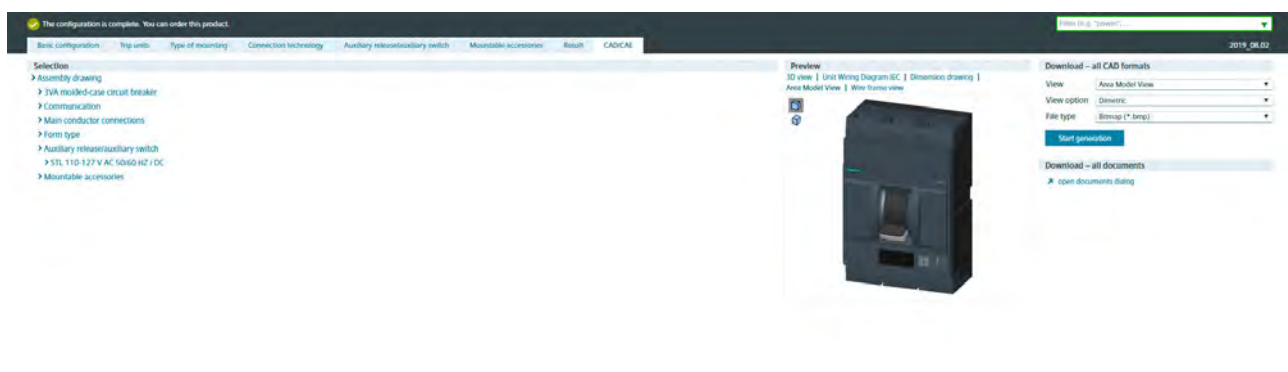
Visualization of the internally mountable accessories (slot assignment)



Download of the individual edz files for 3VA



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



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

Basic units



3VA1 for standard applications

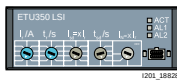


3VA2 for selective applications

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

		3VA												4	5	6	7	8	9	10	11	12	- 0AA0			
Trip units		Thermal-magnetic												1												
		Electronic												2												
		3VA10	3VA11	3VA12	3VA13	3VA14	3VA15	3VA20	3VA21	3VA22	3VA23	3VA24	3VA25	3VA26												
Size	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	– 0AA0	
		3VA10	3VA11	3VA12	3VA13	3VA14	3VA15	3VA20	3VA21	3VA22	3VA23	3VA24	3VA25	3VA26												
Protection function thermal-magnetic	No protection	–	■	■	■	■	–	–	–	–	–	–	–	–	SD100	–		A								
	Line protection	■	■	–	–	–	–	–	–	–	–	–	–	–	TM210	FTFM		D								
		–	■	–	–	–	–	–	–	–	–	–	–	–	TM220	ATFM		E								
		–	■	■	■	■	■	–	–	–	–	–	–	–	TM240	ATAM		F								
Protection function thermal-magnetic, neutral conductor protection	No protection																A									
	Line protection	Without neutral conductor protection															E									
		50% neutral conductor protection															F									
		100% neutral conductor protection															G									
Protection function electronic	Line protection	–	–	–	–	–	–	■	■	■	■	■	■	■	ETU320	LI	(N) ¹⁾	H	L							
		–	–	–	–	–	–	■	■	■	■	■	■	■	ETU330	LIG	(N) ¹⁾	H	M							
		–	–	–	–	–	–	■	■	■	■	■	■	■	ETU340	ELISA LI	(N) ¹⁾	H	K							
	Line and generator protection	–	–	–	–	–	–	■	■	■	■	■	■	■	ETU350	LSI	(N) ¹⁾	H	N							
		–	–	–	–	–	–	■	■	■	■	■	■	■	ETU550	LSI	(N) ²⁾	J	P							
	Line and generator protection, with display	–	–	–	–	–	–	■	■	■	■	■	■	■	ETU560	LSIG	(N) ²⁾	J	Q							
		–	–	–	–	–	–	■	■	■	■	■	■	■	ETU850	LSI	(N) ²⁾	K	P							
	Line and generator protection, with display, with metering function	–	–	–	–	–	–	■	■	■	■	■	■	■	ETU860	LSIG	(N) ²⁾	K	Q							
Number of poles	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																										
Connection technology	Nut keeper kit	Line protection	■	■	■	■	■	■	■	■	■	■	■	■						2						
		Generator protection	–	–	–	–	–	–	■	■	■	■	■	■	■					2						
	Box terminal	Line protection	■	■	–	–	–	–	■	■	–	–	–	–	–					6						
		Generator protection	–	–	–	–	–	–	■	■	–	–	–	–	–					6						

* For TM210 only

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

		3VA 4 5 6 7 8 9 10 11 12 – 0AA0											
Trip units	Thermal-magnetic	1											
	Electronic	2											
		3VA11	3VA12	3VA13	3VA14	3VA15	3VA21	3VA22	3VA23	3VA24	3VA25		
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										4		5		6		7		8		9		10		11		12		– 0AA0	
			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 LSI										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 switches and alarm switches

2

Auxiliary switches AUX

-

- Used for load shedding, for example
- Signal the opening of the main contacts with a lead time of 20 ms in advance of circuit breaker trips

- Signal every circuit breaker tripping operation
- Are actuated whenever the molded case circuit breaker switches to the TRIP position

- Signal tripping operations only if they have been initiated by a short circuit
- The tripping operation must be reset by deliberate acknowledgement of the fault before the molded case circuit breaker can be switched to ON again

- Are actuated as soon as the main contacts of the molded case circuit breaker open in the event that the breaker is tripped by the ETU

Type	Width	I _e	U _e AC/DC	Version					
HQ	7 mm (1 slot)	6 A	240 V/250 V	Standard	–	–	–	–	3VA9988-0AB22
		<1 A	24 V/24 V	Electronic-compatible	–	–	–	–	3VA9988-0AB23

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

2

			3VA10	3VA20	
			3VA11	3VA21	
			3VA12	3VA22	
			3VA13	3VA23	
			3VA14	3VA24	
			3VA15	3VA25	
Shunt trips left STL					
	- Used for remote-controlled tripping of the molded case circuit breaker - Have particularly low power consumption - Especially suitable for electrical interlocking in the EI variant				
	Version	U_e 50/60 Hz AC	U_e DC		
	Standard	–	12 V		3VA9988-0BL10
		24 V	24 ... 30 V		3VA9988-0BL30
		48 ... 60 V	48 ... 60 V		3VA9988-0BL31
		110 ... 127 V	110 ... 127 V		3VA9988-0BL32
		208 ... 277 V	220 ... 250 V		3VA9988-0BL33
		380 ... 600 V	–		3VA9988-0BL20
	Electrical (EI)	–	24 V		3VA9988-0BM10
Shunt trips flexible STF					
	- Used for remote-controlled tripping of the molded case circuit breaker - Flexible installation				
	Version	U_e 50/60 Hz AC	U_e DC		
		24 V	–	–	3VA9988-0BA20
		48 ... 60 V	–	–	3VA9988-0BA21
		110 ... 127 V	–	–	3VA9988-0BA22
		208 ... 277 V	–	–	3VA9988-0BA23
		380 ... 500 V	–	–	3VA9988-0BA24
		600 V	–	–	3VA9988-0BA25
Universal releases UNI					
	Combination of shunt trip and undervoltage release				
	Version	U_e 50/60 Hz AC	U_e DC		
		–	12 V		3VA9908-0BD11
		–	24 V		3VA9908-0BD12
		–	48 V		3VA9908-0BD13
Undervoltage releases UVR					
	Trip the molded case circuit breaker in the event that the rated voltage of a monitored circuit drops below a minimum permissible limit or fails altogether				
	Version	U_e 50/60 Hz AC	U_e DC		
		–	12 V		3VA9908-0BB10
		–	24 V		3VA9908-0BB11
		24 V	–		3VA9908-0BB20
		–	48 V		3VA9908-0BB12
		48 V	–		3VA9908-0BB21
		–	60 V		3VA9908-0BB13
		60 V	–		3VA9908-0BB22
		110 V	–		3VA9908-0BB23
		120 ... 127 V	–		3VA9908-0BB24
		–	125 ... 127 V		3VA9908-0BB14
		208 ... 230 V	–		3VA9908-0BB25
		–	220 ... 230 V		3VA9908-0BB15
		–	250 V		3VA9908-0BB16
		380 ... 400 V	–		3VA9908-0BB26
		440 ... 480 V	–		3VA9908-0BB27
Time-delay devices for undervoltage releases					
	Version	U_e 50/60 Hz AC	U_e DC		
		110 V	110 V		3VA9988-0BF21
		230 V	230 V		3VA9988-0BF22
		–	24 V		3VA9988-0BF23

Manual operators

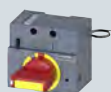
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2

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

Front mounted rotary operators

- Handle
- For IEC
- Degree of protection IP30
- For 3-pole and 4-pole breakers



Version	Illumination kit	Door interlock					
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	–

Door mounted rotary operators with tolerance compensation

- Shaft 300 mm (325 mm for 3VA15/3VA25)
- With mounting tolerance compensation
- Handle with masking plate 75 × 75 mm (100 × 100 mm for 3VA15/3VA25)
- Degree of protection IP65
- For 3-pole and 4-pole breakers



Version	Illumination kit	Door interlock					
Standard (gray)	Without	With	3VA9157-0FK21	3VA9257-0FK21	3VA9267-0FK21	3VA9467-0FK21	3VA9687-0FK21
	With	With	3VA9157-0FK23	3VA9257-0FK23	3VA9267-0FK23	3VA9467-0FK23	3VA9687-0FK23 new
EMERGENCY-OFF (red/yellow)	Without	With	3VA9157-0FK25	3VA9257-0FK25	3VA9267-0FK25	3VA9467-0FK25	3VA9687-0FK25
	With	With	3VA9157-0FK27	3VA9257-0FK27	3VA9267-0FK27	3VA9467-0FK27	3VA9687-0FK27 new

Door mounted rotary operators without tolerance compensation **new**



- Shaft 300 mm (325 mm for 3VA15/3VA25)
- Handle with masking plate 75 × 75 mm (100 × 100 mm for 3VA15/3VA25)
- Degree of protection IP65
- For 3-pole and 4-pole breakers

Version	Illumination kit	Door interlock					
Standard (gray)	Without	With	3VA9157-0FK61	3VA9257-0FK61	3VA9267-0FK61	3VA9467-0FK61	3VA9687-0FK61

Door mounted rotary operators without handle



- For IEC
- Degree of protection IP30
- For 3-pole and 4-pole breakers

Version	Illumination kit	Door interlock					
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
Side wall mounted rotary operators							
	- Rotary operator with shaft 300 mm - Handle with masking plate 75 × 75 mm - Degree of protection IP65 - For 3-pole and 4-pole breakers						
Version	Mounting bracket	Illumination kit					
Standard (gray)	Without	Without	3VA9157-OPK11	3VA9257-OPK11	3VA9267-OPK11	3VA9467-OPK11	–
		With	3VA9157-OPK13	3VA9257-OPK13	3VA9267-OPK13	3VA9467-OPK13	–
EMERGENCY-OFF (red/yellow)	Without	Without	3VA9157-OPK15	3VA9257-OPK15	3VA9267-OPK15	3VA9467-OPK15	–
		With	3VA9157-OPK17	3VA9257-OPK17	3VA9267-OPK17	3VA9467-OPK17	–
Side wall mounted rotary operators with mounting plates							
	- Rotary operator with short shaft and mounting plate for mounting directly on the side wall - Handle with masking plate 75 × 75 mm - Degree of protection IP65 - For 3-pole and 4-pole breakers						
Version	Mounting bracket	Illumination kit					
Standard (gray)	With	Without	3VA9157-OPK51	3VA9257-OPK51	3VA9267-OPK51	–	–
		With	3VA9157-OPK53	3VA9257-OPK53	3VA9267-OPK53	–	–
EMERGENCY-OFF (red/yellow)	With	Without	3VA9157-OPK55	3VA9257-OPK55	3VA9267-OPK55	–	–
		With	3VA9157-OPK57	3VA9257-OPK57	3VA9267-OPK57	–	–
Extended DIN rails for N/PE terminals new							
	Version	Rated current					
	For mounting plate	Up to 250 A	3VA9987-0GL30	3VA9987-0GL30	3VA9987-0GL30	–	–
Auxiliary switch modules for rotary operating mechanisms new							
	Version						
	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	–
Mounting adapters for side wall mounted rotary operators new							
	Version						
	Necessary accessories for 3VA side wall mounted rotary operators, if 3VA9...-0GX.0 auxiliary switch modules are used		3VA9257-0GX01	3VA9257-0GX01	3VA9467-0GX01	–	–
Masking plates, standard new							
	Version						
	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	–
Masking plates, EMERGENCY STOP new							
	Version						
	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
Supplementary handles for door mounted rotary operators								
	• For operation when cabinet door is open							
	Version							
	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		
Handles								
	• With masking plate							
	Version Tolerance compensation							
	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			
Handle extensions								
	• Note: The handle extension is already included in the scope of supply of the breakers.							
		–	–	–	3VA9487-0SC10	3VA9987-0SC10		
Shafts								
	Variant		Length					
	8 × 8 mm	300 mm		8UD1900-2WA00		–		
		600 mm		8UD1900-2WB00		–		
	12 × 12 mm	300 mm	–	–	–	–	8UD1900-4WA00	
		600 mm	–	–	–	–	8UD1900-4WB00	
Adapters for shafts								
	Variant		Purpose					
	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	
Door couplings								
	Variant							
	8 × 8 mm			8UD1900-2HA00		–		
	12 × 12 mm		–	–	–	–	8UD1900-4HA00	

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

Manual operators

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					3VA20	
					3VA21	
					3VA22	
					3VA23	
					3VA24	
						3VA25

Labeling plates for manual operators



3VA9087-0SX10

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

Motor operators

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

2

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 for 3VA1	Make time, typically for 3VA2	Break time, typically for 3VA1	Break time, typically for 3VA2	Rated operational power
■	■	<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 for 3VA1	Make time, typically for 3VA2	Break time, typically for 3VA1	Break time, typically for 3VA2	Rated operational power
■	■	<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 for 3VA1	Make time, typically for 3VA2	Break time, typically for 3VA1	Break time, typically for 3VA2	Rated operational power
■	■	–	<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
Rated control supply voltage		With communication			
42 ... 60 V AC, 24 ... 60 V DC	–	3VA9117-0HB10	–	–	–
110 ... 230 V AC, 110 ... 250 V DC	–	3VA9117-0HB20	–	–	–
Rated control supply voltage		With communication			
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
Rated control supply voltage		With communication			
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

2

3VA10
3VA11

Box terminals

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

Nut keeper kits

	Connection options		Scope of supply	Max. tap width		Max. tap thickness	
	①	②					
	①	②	3 single terminals	17 mm	6.5 mm		3VA9113-0QA00
				25 mm	8 mm		–
				35 mm	10 mm		–
				50 mm	25 mm		–
	①	②	4 single terminals	17 mm	6.5 mm		3VA9114-0QA00
				25 mm	8 mm		–
				35 mm	10 mm		–
				50 mm	28 mm		–

Circular conductor terminals, 1 cable

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

¹⁾ Only permitted up to 400 A

²⁾ Maximum current-carrying capacity of copper cables 380 A
Maximum current-carrying capacity of aluminum cables 310 A

3VA12	3VA20 3VA21	3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
–	–	–	–	–
3VA9253-0JA11	3VA9163-0JA12	3VA9163-0JA12	–	–
–	3VA9263-0JA12	3VA9263-0JA12	–	–
3VA9253-0JA12	–	–	–	–
–	–	–	3VA9483-0JA13 ¹⁾	–
–	–	–	–	–
3VA9254-0JA11	3VA9164-0JA12	3VA9164-0JA12	–	–
–	3VA9264-0JA12	3VA9264-0JA12	–	–
3VA9254-0JA12	–	–	–	–
–	–	–	3VA9484-0JA13 ¹⁾	–
–	–	–	–	–
–	–	–	–	–
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 ²⁾	–
–	–	–	–	–
–	3VA9104-0JB11	–	–	–
–	–	–	–	–
–	–	3VA9264-0JB12	–	–
3VA9254-0JB12	–	–	–	–
–	–	–	3VA9384-0JB13 ²⁾	–

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 cable²⁾

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

Circular conductor terminals, 2 cables

	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 ²	No	–
					Yes ²⁾	–
	①	②	4 single terminals, 1 short terminal cover	120 ... 300 mm ²	No	–
					Yes ²⁾	–

Circular conductor terminals, 3 cables

	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 ²	No	–
					Yes ²⁾	–
	①	②	4 single terminals, 1 short terminal cover	120 ... 185 mm ²	No	–
					Yes ²⁾	–

Auxiliary conductor terminals for box terminals²⁾

	Version	
	Fixed-mounted	3VA9110-0WB00
	Plug-in and draw-out technology	3VA9150-0WB00

Auxiliary conductor terminals for busbars²⁾

	Version	
	Fixed-mounted	3VA9110-0WC00
	Plug-in and draw-out technology	3VA9150-0WC00

¹⁾ Maximum current-carrying capacity of copper cables 380 A
Maximum current-carrying capacity of aluminum cables 310 A

²⁾ Maximum current-carrying capacity 15 A
Maximum cable connection up to 2.5 mm²

			3VA13 3VA14	
3VA12	3VA20 3VA21	3VA22	3VA23 3VA24	3VA15 3VA25
–	–	–	–	–
–	3VA9103-0JG11	–	–	–
–	–	–	–	–
–	–	3VA9263-0JG12	–	–
3VA9253-0JG12	–	–	–	–
–	–	–	3VA9383-0JG13 ¹⁾	–
–	3VA9104-0JG11	–	–	–
–	–	–	–	–
–	–	3VA9264-0JG12	–	–
3VA9254-0JG12	–	–	–	–
–	–	–	3VA9384-0JG13 ¹⁾	–
–	–	–	–	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, 2 phase barriers	22 mm	8 mm
				32 mm	10 mm
				40 mm	12.5 mm
	4P	① ②	4 single terminals, 3 phase barriers	22 mm	8 mm
				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, 2 phase barriers	30 mm	8 mm
				35 mm	10 mm
				60 mm	12.5 mm
	4P	① ②	4 single terminals, 3 phase barriers	30 mm	8 mm
				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, 2 phase barriers	20 mm	6 mm
				25 mm	7 mm
				40 mm	8 mm
	4P	① ②	4 single terminals, 3 phase barriers	20 mm	6 mm
				25 mm	7 mm
				40 mm	8 mm

3VA10 3VA11		3VA20 3VA21 3VA22		3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
3VA12					
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 ¹⁾

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

¹⁾ Can only be connected to breaker side N, 1, 3, 5

				3VA13	
				3VA14	
3VA10			3VA20	3VA23	3VA15
3VA11	3VA12		3VA21	3VA24	3VA25
			3VA22		
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 ²	Yes ¹⁾ No
		6	1.5 ... 35 mm ²	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 ²	Yes ¹⁾ No
			50 ... 240 mm ²	Yes ¹⁾ No
		2	25 ... 150 mm ²	Yes ¹⁾ No
			70 ... 300 mm ²	Yes ¹⁾ No
			120 ... 240 mm ²	Yes ¹⁾ No
		4	120 ... 240 mm ²	Yes ¹⁾ No
			1.5 ... 35 mm ²	No
			1.5 ... 35 mm ²	No
– ②		1	25 ... 150 mm ²	Yes ¹⁾ Yes ¹⁾
			50 ... 240 mm ²	Yes ¹⁾ Yes ¹⁾
			70 ... 300 mm ²	Yes ¹⁾ Yes ¹⁾
		6	1.5 ... 35 mm ²	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 ²	Yes ¹⁾ No
			50 ... 240 mm ²	Yes ¹⁾ No
		2	25 ... 150 mm ²	Yes ¹⁾ No
			70 ... 300 mm ²	Yes ¹⁾ No
			120 ... 240 mm ²	Yes ¹⁾ No
		4	120 ... 240 mm ²	Yes ¹⁾ No
			1.5 ... 35 mm ²	No
			1.5 ... 35 mm ²	No
– ②		1	25 ... 150 mm ²	Yes ¹⁾ Yes ¹⁾
			50 ... 240 mm ²	Yes ¹⁾ Yes ¹⁾
			70 ... 300 mm ²	Yes ¹⁾ Yes ¹⁾
		6	1.5 ... 35 mm ²	No

¹⁾ Maximum current-carrying capacity 15 A
Maximum cable connection up to 2.5 mm²

				3VA13 3VA14	
3VA10 3VA11			3VA20 3VA21	3VA23	3VA15
	3VA12		3VA22	3VA24	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			
Short	1P	①	–	3VA9111-OWD10	3VA9111-OWD10
	2P	①	–	3VA9111-OWD20	3VA9111-OWD20
	3P	①	–	3VA9111-OWD30	3VA9111-OWD30
	4P	①	–	3VA9111-OWD40	3VA9111-OWD40
Extended ¹⁾	2P	①	–	3VA9111-OWF20	3VA9111-OWF20
	3P	①	–	3VA9111-OWF30	3VA9111-OWF30
	4P	①	–	3VA9111-OWF40	3VA9111-OWF40
Broadened ¹⁾	3P	①	–	3VA9111-OWG30	3VA9111-OWG30
	4P	①	–	3VA9111-OWG40	3VA9111-OWG40



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			
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			
Short	3P	–	②	–	3VA9153-OKB03
	4P	–	②	–	3VA9154-OKB03
Extended ¹⁾	3P	–	②	–	3VA9153-OKB04
	4P	–	②	–	3VA9154-OKB04
Broadened ¹⁾	3P	–	②	–	3VA9153-OKB05
	4P	–	②	–	3VA9154-OKB05

Insulating plates



Version	Number of poles	Mounting location			
Standard	2P	①	–	3VA9111-OWJ20	3VA9111-OWJ20
	3P	①	–	3VA9111-OWJ30	3VA9111-OWJ30
	4P	①	–	3VA9111-OWJ40	3VA9111-OWJ40
Broadened	3P	①	–	3VA9111-OWK30	3VA9111-OWK30
	4P	①	–	3VA9111-OWK40	3VA9111-OWK40

¹⁾ Including insulating plate

²⁾ Suitable for circular conductor terminals 2/4 cables

		3VA13 3VA14	
	3VA20 3VA21	3VA23 3VA24	3VA15 3VA25
3VA12	3VA22		
–	–	–	–
–	–	–	–
3VA9211-OWD30	3VA9221-OWD30	3VA9481-OWD30	3VA9601-OWD30
3VA9211-OWD40	3VA9221-OWD40	3VA9481-OWD40	3VA9601-OWD40
–	–	–	–
3VA9211-OWF30	3VA9221-OWF30	3VA9481-OWF30	3VA9601-OWE30 ²⁾ new
3VA9211-OWF40	3VA9221-OWF40	3VA9481-OWF40	3VA9601-OWE40 ²⁾ new
3VA9211-OWG30	3VA9221-OWG30	3VA9401-OWG30	–
3VA9211-OWG40	3VA9221-OWG40	3VA9401-OWG40	–
3VA9213-OKB01	3VA9123-OKB01	3VA9353-OKB01	–
3VA9214-OKB01	3VA9124-OKB01	3VA9354-OKB01	–
3VA9253-OKB03	3VA9163-OKB03	3VA9353-OKB03	–
3VA9254-OKB03	3VA9164-OKB03	3VA9354-OKB03	–
3VA9253-OKB04	3VA9163-OKB04	3VA9353-OKB04	–
3VA9254-OKB04	3VA9164-OKB04	3VA9354-OKB04	–
3VA9253-OKB05	3VA9163-OKB05	3VA9353-OKB05	–
3VA9254-OKB05	3VA9164-OKB05	3VA9354-OKB05	–
–	–	–	–
3VA9211-OWJ30	3VA9221-OWJ30	3VA9481-OWJ30	–
3VA9211-OWJ40	3VA9221-OWJ40	3VA9481-OWJ40	–
3VA9211-OWK30	3VA9221-OWK30	3VA9481-OWK30	–
3VA9211-OWK40	3VA9221-OWK40	3VA9481-OWK40	–

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

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

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

Plug-in and draw-out technology

Thanks to plug-in and draw-out technology:

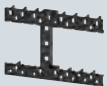
- Molded case circuit breakers can be replaced quickly and easily for overhauls or servicing
- Electrical isolation and clearly visible isolating distance
- The socket can be interlocked to prevent the 3VA molded case circuit breaker from being plugged in or moved in
- Identical connection technology 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

		3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24
Draw-out units, complete kits					
	• Scope of supply: – Draw-out socket – Conversion kit – Mounting screw kit • Note: The crank handle for the draw-out unit must be ordered separately.				
	Number of poles				
	3P	–	3VA9213-OKD00	3VA9123-OKD00	3VA9323-OKD00
	4P	–	3VA9214-OKD00	3VA9124-OKD00	3VA9324-OKD00
Draw-out units, conversion kits					
	• Scope of supply: – Screw-fastened terminal covers for molded case circuit breakers – Side panels – Plug-in contacts – Cable cages – Autotrip plunger • Note: The crank handle for the draw-out unit must be ordered separately.				
	Number of poles				
	3P	–	3VA9213-OKD10	3VA9123-OKD10	3VA9323-OKD10
	4P	–	3VA9214-OKD10	3VA9124-OKD10	3VA9324-OKD10
Plug-in units, complete kits					
	• Scope of supply: – Plug-in base – Conversion kit – Mounting screw kit				
	Number of poles				
	3P	3VA9113-OKP00	3VA9213-OKP00	3VA9123-OKP00	3VA9323-OKP00
	4P	3VA9114-OKP00	3VA9214-OKP00	3VA9124-OKP00	3VA9324-OKP00
Plug-in units, conversion kits					
	• Scope of supply: – Screw-fastened terminal covers for molded case circuit breakers – Plug-in contacts – Cable cages – Autotrip plunger				
	Number of poles				
	3P	3VA9113-OKP10	3VA9213-OKP10	3VA9123-OKP10	3VA9323-OKP10
	4P	3VA9114-OKP10	3VA9214-OKP10	3VA9124-OKP10	3VA9324-OKP10

				3VA20	3VA13
				3VA21	3VA14
				3VA22	3VA23
		3VA11	3VA12		3VA24
Cable cages for plug-in/draw-out units (spare part)					
	For routing of the required cables from the internal accessories on the back of the circuit breaker				
	Number of poles				
	3P/4P	3VA9157-OKB02	3VA9257-OKB02	3VA9167-OKB02	3VA9367-OKB02
Door feedthroughs					
		–	3VA9257-OKT00	3VA9167-OKT00	3VA9367-OKT00
Autotrip plungers (spare part)					
	Version				
	Plug-in unit	3VA9157-OKP81	3VA9257-OKP81	3VA9267-OKP81	3VA9457-OKP81
	Draw-out unit	–	3VA9257-OKD81	3VA9267-OKD81	3VA9457-OKD81

2

Accessories

Communication links for draw-out unit			
	Scope of supply		Article No.
	Set of cables with three special position signaling switches, 3VA9987-OKC10 connecting cables		3VA9987-OKC00
Position signaling switches for draw-out unit and plug-in unit			
			Article No.
			3VA9987-OKB00
Connecting cables			
	Purpose		Article No.
	Connection of position signaling switches for communication with COM060		3VA9987-OKC10
Crank handles for draw-out units			
	Version	Scope of supply	Article No.
	Insulated	Including crank handle holder	3VA9987-OKD81
Auxiliary circuit connectors			
	Each auxiliary circuit connector is designed for 4 cables.		
	Version		Article No.
	For all draw-out units		3VA9987-OKD80
	For all plug-in units		3VA9987-OKP80
Cylinder locks			
	- Scope of supply: 1 lock with 2 keys - For locking or interlocking Note: Not for 3VA15/3VA25!		
	Key	Lock number	Article No.
	1	1	3VA9980-OVL10
	3	3	3VA9980-OVL30
	4	4	3VA9980-OVL40
Cylinder lock adapters for draw-out units			
	- To prevent unauthorized withdrawal or insertion of the circuit breaker into the draw-out unit - Circuit breaker can be locked in the CONNECT, TEST and DISCONNECT positions		
	Purpose		Article No.
	For fitting a cylinder lock in the right-hand side wall of the draw-out unit		3VA9980-OLF40

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

2

Mounted onto the side (left)

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



Number of poles	Type	Sensitivity ³⁾	Rated residual response current $I_{\Delta n}$	Limit value of non-tripping time Δt	Rated voltage U_e	Fault current frequency	Pre-alarm	Tripped signal		
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 ³⁾	Rated residual response current $I_{\Delta n}$	Limit value of non-tripping time Δt	Rated voltage U_e	Fault current frequency	Pre-alarm	Tripped signal		
3-pole	RCD520	Type A	0.03 ... 5 A	0 ... 3 s	127 ... 480 V AC	50/60 Hz	1	–	–	–
	RCD520B ¹⁾⁴⁾	Type B	0.03 ... 5 A	0 ... 10 s	127 ... 690 V AC	0 ... 100 kHz	1	■	–	–
	new Type B+		0.03 ... 0.3 A							
4-pole	RCD820 ²⁾	Type A	0.03 ... 30 A ⁵⁾	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 ⁴⁾	Type B	0.03 ... 5 A	0 ... 10 s	127 ... 690 V AC	0 ... 100 kHz	1	■	–	–
	new Type B+		0.03 ... 0.3 A							
	RCD820 ²⁾	Type A	0.03 ... 30 A ⁵⁾	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

¹⁾ 3-pole version in 4-pole enclosure

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

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

⁴⁾ Sensitivity selectable for type B/B+

⁵⁾ $I_{\Delta n} = 30A$: type AC

⁶⁾ 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.

⁷⁾ 1 set of box terminals is included in scope of supply of the RCD510 (3VA921.-0RS20).

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 ⁶⁾	3VA9213-ORS20 ⁷⁾	–	–	–	–
■	–	–	3VA9114-ORS10 ⁶⁾	–	–	–	–	–
■	–	–	3VA9114-ORS20 ⁶⁾	3VA9214-ORS20 ⁷⁾	–	–	–	–
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
			3VA9988-0BR10	3VA9988-0BR10	–	–	–	–

Communication

Metering function ¹⁾			ETU 5-series	ETU 8-series	Display in ETU	Display DSP800	Communication COM800/COM100
Current							
Phase and neutral conductor currents	I_1, I_2, I_3, I_N	A	■	■	□	□	■
Residual current to ground	I_g	A	■	■	□	□	■
Phase with highest load		A	■	■	□	□	■
Mean value over the three phase currents	$I_{\text{leading axis}} = (I_1 + I_2 + I_3)/3$	A	–	■	–	□	■
Asymmetry of the phase currents	I_{nba}	%	–	■	–	□	■
THD of the 3 phases	$\text{THDI}_1, \text{THDI}_2, \text{THDI}_3$	%	–	■	–	□	■
Voltage							
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	$\text{THDI}_1, \text{THDI}_2, \text{THDI}_3$	%	–	■	–	□	■
Power							
Active power, total and per phase	$P_1, P_2, P_3, P_{\text{tot}}$	kW	–	■	□ (P_{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	$P_{F1}, P_{F2}, P_{F3}, P_{\text{Favg}}$		–	■	□ (PF_{avg})	□	■
Energy							
Active energy, infeed and feedback	E_p	kWh	–	■	□	□	■
Reactive energy, infeed and feedback	E_q	kVArh	–	■	–	□	■
Apparent energy	E_s	kVAh	–	■	–	□	■
Frequency							
Present frequency	f	Hz	–	■	□	□	■
Maximum pointer function							
Min./max. current, voltage, power	With time stamp	–	–	–	–	–	■

¹⁾ Depending on ETU version

■ Available

□ 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

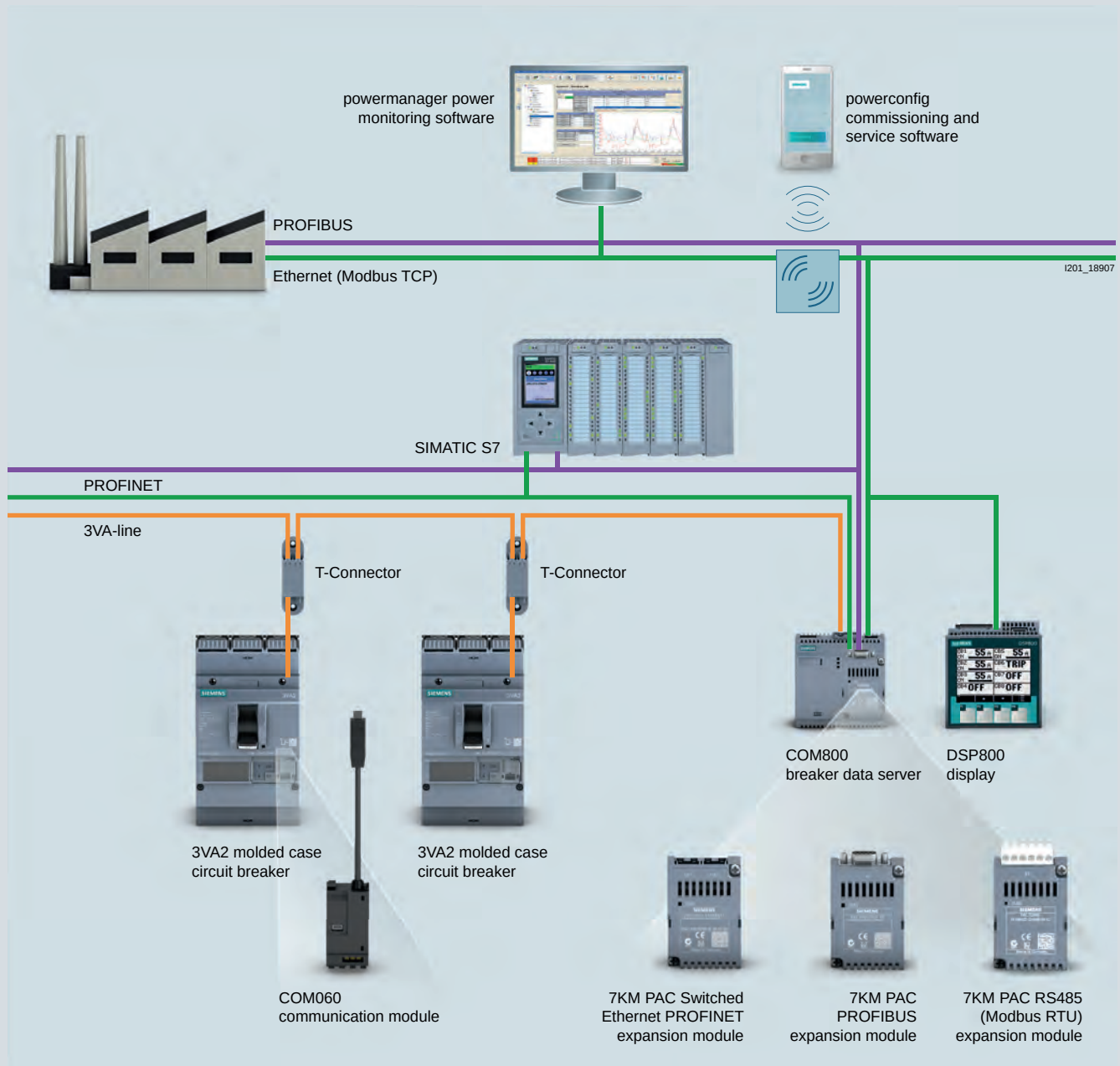


Purpose

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 ¹⁾

4 interfaces

6MF28021AA00

SICAM PS-8620

–

24 ... 60 V DC (12 W)

6MF28620AA00

SICAM PS-8622

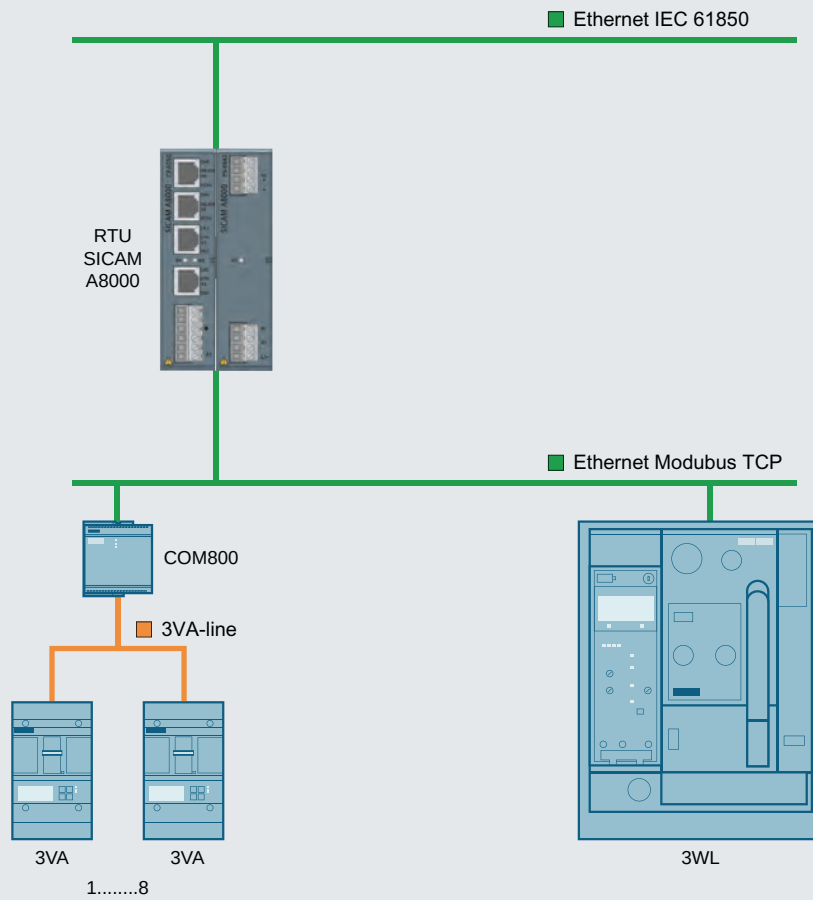
–

110 ... 220 V DC (12 W)

6MF28622AA00

¹⁾ Dimensioned for device quantities of 8 × 3VA and 1 × 3W

You will find further information at:
www.siemens.com/sicam-a8000



Communication

Accessories for communication

T-connectors (spare part)


Purpose

Provides a stub connection to the COM060 and loops through to the next circuit breaker.

Article No.

3VA9987-OTG10

DIN rail adapters


Purpose

For snapping the T-Connector onto a DIN rail.

Article No.

3VA9987-OTG11

Prefabricated connecting cables, T-connector – T-connector or T-connector – COM800/COM100


Length

0.4 m

1 m

2 m

4 m

Article No.

3VA9987-OTC10

3VA9987-OTC20

3VA9987-OTC30

3VA9987-OTC40

Prefabricated connecting cables for extending the COM060 – T-connector stub connection


Length

0.4 m

0.8 m

Article No.

3VA9987-OTF20

3VA9987-OTF10

Additional bus terminating resistors (spare part)


Purpose

For COM800 and COM060

Article No.

3VA9987-OTE10

Voltage tap to external N conductors (spare part)


Purpose

Cable for connection of the star point for the metering function of the 8-series ETU, length 1.5 m

Article No.

3VA9987-0UC10

External current transformer for N conductors


Purpose

For 3VA2 3-pole molded case circuit breakers,
for 5 and 8-series ETUs,
including connecting cables

Rated current I_n

25 ... 150 A

160 ... 350 A

400 ... 630 A

Article No.

3VA9007-ONA10

3VA9107-ONA10

3VA9307-ONA10

External current transformers as straight-through transformers


Rated current I_n

25 ... 150 A

160 ... 350 A

400 ... 630 A

600 ... 1250 A

Article No.

3VA9077-ONA10

3VA9177-ONA10

3VA9377-ONA10

3VA9677-ONA10

Connecting cables for external current transformers for N conductors (spare part)


Article No.

3VA9907-0NB10

Display

DSP800 displays


Purpose

For displaying the status and measured values of up to eight devices

- 3VA2 via COM800/100
- 3VA27
- 3WL10
- 3WL11-13
- PAC3200T

Article No.

3VA9987-OTD10

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

Purpose

For 3VA2 with EFB

Article No.

3VA9987-0UB10

3.0 m

For 3VA2 with EFB

3VA9987-0UB20

For 3VA2 with EFB and RCD820

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)

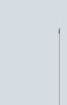


Article No.

3VA9987-0MY10

Locking, blocking and interlocking

2

			3VA11	3VA12	3VA20 3VA21 3VA22
Locking					
The locking devices make it possible to lock the 3VA molded case circuit breakers in either the OFF or the ON operating position.					
Version					
  	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	
Interlocking					
- Using interlocking technology, it is possible to mutually interlock two or more molded case circuit breakers. - The interlock system is designed to ensure that no more than one molded case circuit breaker can be operated at a time. - The following methods of interlocking can be used on 3VA molded case circuit breakers: - Front interlock - Rear interlock					
Version					
      	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-OVC10		
		Length 1.0 m	3VA9980-OVC20		
		Length 1.5 m	3VA9980-OVC30		
Rear interlock with rod		Circuit breaker, fixed-mounted	3VA9088-OVM10		
		Plug-in/draw-out technology	3VA9088-OVM30		
Mounting frame for rear interlock with rod		Profile rails	3VA9088-OVK10		
		Mounting plate	3VA9158-OVK20	3VA9258-OVK20	3VA9268-OVK20

¹⁾ Available from Q1/2020

²⁾ 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	3VA15
3VA24	3VA25

3VA9980-OVL10	–
3VA9980-OVL30	–
3VA9980-OVL40	–
3VA9367-OLF10	3VA9587-OLF10
3VA9388-OLB10	3VA9588-OLB10

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

3VA9980-OVL10	–
3VA9980-OVL30	–
3VA9980-OVL40	–
3VA9368-OVF30	–
3VA9367-OVF10	3VA9587-OVF10
3VA9980-OVC10	
3VA9980-OVC20	
3VA9980-OVC30	
3VA9088-OVM10	3VA9588-OVM10 ^{1) 2)}
3VA9088-OVM30	–
3VA9088-OVK10	–
3VA9468-OVK20	–

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		
	3P	No	3VA9053-OSB10	3VA9253-OSB10
		Yes	3VA9053-OSB20	3VA9253-OSB20
	4P	No	3VA9054-OSB10	3VA9254-OSB10
		Yes	3VA9054-OSB20	3VA9254-OSB20
Cover frames for MO320 motor operators				
	Purpose			
	MO320 motor operator	3VA9053-OSB20	3VA9257-OSB30	
	Motor operator with SEO520 stored energy operator	–	–	
Cover frames for RCD320, RCD520 and RCD820 residual current devices				
	Number of poles			
	3P	3VA9053-OSB10	3VA9253-OSB10	
	4P	3VA9054-OSB10	3VA9254-OSB10	
Cover frames for front mounted rotary operators				
		3VA9053-OSB10	3VA9253-OSB10	
Cover frames for door feedthroughs				
		–	3VA9253-OSB20	
Labeling plates for cover frame				
		3VA9087-OSX10		
Adapters for DIN rails for 3VA1 molded case circuit breakers				
	Number of poles			
	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		
	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	
3VA20	3VA14	
3VA21	3VA23	3VA15
3VA22	3VA24	3VA25
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

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

Accessories



Phase barriers



Terminal cover

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.

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	3
	and two leading changeover switches S26	

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
	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

Structure of the article numbers

Basic configuration with stored energy 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

2

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	Stored energy operating mechanism	55 kA	1													
		85 kA	2													
		110 kA	3													
Non-automatic air circuit breakers	Without metering function, without a communication link	Without trip unit					A	A								
Circuit breakers, ETU 3-series	Without metering function, without a communication link	With trip unit	ETU320 LI	(N) ¹⁾			A	B								
			ETU350 LSI	(N) ¹⁾			A	C								
			ETU360 LSIG	(N) ¹⁾			A	D								
Circuit breakers, ETU 6-series		With trip unit	ETU650 LSI	(N) ¹⁾				E								
			ETU660 LSIG	(N) ¹⁾				F								
	Without communications interface	Without metering function					A									
	With communications interface	Without metering function					B									
		Metering function Basic	Voltage tap on bottom				C									
			Voltage tap on top				D									
		Metering function Advanced	Voltage tap on bottom				E									
			Voltage tap on top				F									

¹⁾ 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	0
		4-pole	1
		Neutral left	2
	Withdrawable	Neutral right	3
		3-pole	4
		4-pole	5

Connections

Installation type	Withdrawable	Withdrawable circuit breaker without guide frame (guide frame must be ordered separately)	0
	Fixed-mounted breaker / withdrawable breaker	Rear vertical connection	1
		Rear horizontal connection	2
		Front terminal for main circuit connection	3
		Front-accessible, extended terminal for main circuit connection	5
		Front-accessible, broadened terminal for main circuit connection	6
		Rear broadened bus connectors	7

Motor

Operating mechanisms	Manual operator		0
	Spring charging motor	24 ... 30 V AC/DC	1
		48 ... 60 V AC/DC	2
		110 V AC/DC	3
		230 V AC/DC	4

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
		240 ... 250 V AC/DC	J
	Closing coil (CC) and additional remote reset magnet (RR)	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	24 ... 30 V AC/DC	M
	Scope of supply: UVR + time-delay device	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

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.¹⁾

Mounting options for fixed mounting ¹⁾	Floor mounting	Mounting support standard				A	0	7
		Mounting support extended ²⁾				S	5	6
	Rear panel mounting onto mounting plate	Side wall extended ²⁾				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					B	0	4
		400 A				B	0	6	
		630 A				B	0	8	
		800 A				B	1	0	
		1000 A				B	1	2	
		1200 A				B	1	2	
	For setting the rated current I_n with overload protection L = OFF	For ETU 6-series	400 A				L	0	4
			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

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

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

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

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

Order code

Accessories for motors

5-digit mechanical operating cycles counter

WM - C 0 1

Auxiliary switches and signaling switches

- 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 replaced.
- 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.

Position signaling switches for guide frames		2 CO 2 CO 2 CO (connected test disconnected position)	WM		K	5	5
Signaling switch	Ready-to-close signaling	1 CO contact digital 24 V DC	WM	-	K	5	0
	Tripped signaling switch (S24)	1 CO contact digital 24 V DC	WM		K	5	3
	Spring charged signaling switch (S21)	1 CO contact digital 24 V DC	WM	-	K	5	4
Auxiliary switch	On / Off AUX	4 CO contacts digital 24 V DC	WM		K	5	1
		2 CO contacts 400 V AC, and 2 CO contacts digital 24 V DC	WM		K	5	2

Locking, blocking and interlocking

Locking devices	To prevent movement of withdrawable circuit breaker	Cylinder lock	Made by Ronis	WM		R	7	8
		For no more than three 8-mm padlocks		WM		R	6	5
Locking mechanism	To prevent movement to disconnected position			WM		R	7	9
Locking device	To prevent unauthorized activation in the operator panel (safe OFF)	Cylinder lock, made by Ronis		WM	-	S	0	8
		For no more than 3 padlocks, plastic 4 mm		WM	-	S	2	2
		For no more than 1 padlock, metal 7 mm		WM	-	S	2	3
		For no more than 2 padlocks, metal 8 mm		WM	-	S	0	7
Padlockable protective cover	For mechanical ON and/or OFF on the operator panel	For no more than 3 padlocks, plastic 4 mm		WM	-	S	4	2
		For no more than 1 padlock, metal 7 mm		WM	-	S	4	3
		For no more than 2 padlocks, metal 8 mm		WM	-	S	4	4
Protective cover	For mechanical ON/OFF, not lockable			WM	-	S	4	1
Door sealing frame IP30	IP3x			WM		T	3	0

☰ For molded case circuit breakers with stored energy operating mechanism

⚡ For molded case circuit breakers with toggle operating mechanism

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	WM			R	7	8		
		For no more than 3 8-mm padlocks	WM			R	6	5		
Locking mechanism	To prevent movement to disconnected position (only in combination with R78 or R65)				WM			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)	WM	⚡		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.

WM 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



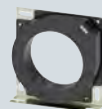
Description	Protective function / version	Arrangement	Article No.
Metering function	MF Basic	–	3VW9011-0AT01
	MF Advanced	–	3VW9011-0AT04
Set of cables for voltage tap for MF	For 4-pole circuit breakers with N conductor right	Top or bottom	3VW9011-0AT08
	For 4-pole circuit breakers with N conductor left	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 _{ret} (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	3VW9011-0RC30

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	2 A at ≤ 30 V DC 0.8 A at 50 V DC 0.2 A at 150 V DC 4 A at 250 V AC	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	2 A at ≤ 30 V DC 0.8 A at 50 V DC 0.2 A at 150 V DC 4 A at 250 V AC	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	–	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	3-pole / 3 units 	3VW9011-0AL75
		Front terminals for main circuit connection, top/bottom	4-pole / 4 units 	3VW9011-0AL74
	Withdrawable	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	–	3-pole / 3 units 	3VW9011-0AL32
			4-pole / 4 units 	3VW9011-0AL33
	Withdrawable	–	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	Front terminals for main circuit connection	3-pole / 3 units 	3VW9011-0AL71
			4-pole / 4 units 	3VW9011-0AL72
	Withdrawable	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

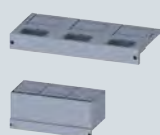
 For molded case circuit breakers with toggle operating mechanism



- 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.

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)	• Fixation for external auxiliary switches AUX 15 CO (3VW9011-0AG15) • Locking mechanism for control cabinet door, direct (for 3VW9011-0BB10) • Locking mechanism for control cabinet door, Bowden cable (for 3VW9011-0BB16), • Mutual mechanical interlocking to 3WL/3VA (for 3VW9011-0BB21)	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	• Fixation for external auxiliary switches AUX 15 CO (3VW9011-0AG15) • Locking mechanism for control cabinet door, direct (for 3VW9011-0BB10) • Locking mechanism for control cabinet door, Bowden cable (for 3VW9011-0BB16), • Mutual mechanical interlocking to 3WL/3VA (for 3VW9011-0BB21)	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

2



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

Mechanical operating cycles counter MOC



Description	Version			Article No.
Only possible in combination with a spring charging motor.	5 digits	W	–	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

W For molded case circuit breakers with stored energy operating mechanism

⚡ For molded case circuit breakers with toggle operating mechanism

Auxiliary release, closing coil


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.

3VA27

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



- 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)		3VW9011-0AG15
For guide frames		3VW9011-0AG17

Undervoltage releases UVR



Voltage		Article No.
24 V AC/DC		3VW9011-0AE01
30 V AC/DC		3VW9011-0AE02
48 V AC/DC		3VW9011-0AE03
60 V AC/DC		3VW9011-0AE04
110 ... 120 V AC/DC		3VW9011-0AE05
120 ... 127 V AC/DC		3VW9011-0AE06
220 ... 240 V AC/DC		3VW9011-0AE07
240 ... 250 V AC/DC		3VW9011-0AE08
380 ... 400 V AC		3VW9011-0AE17
415 ... 440 V AC		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		3VW9011-0AE10
48 V AC/DC		3VW9011-0AE11
60 V AC/DC		3VW9011-0AE15
110 ... 127 V AC/DC		3VW9011-0AE12
220 ... 250 V AC/DC		3VW9011-0AE13

Locking devices to prevent movement of the withdrawable circuit breakers

For molded case circuit breakers with stored energy operating mechanism

For molded case circuit breakers with toggle operating mechanism

Locking devices and interlocks



3VA27			Article No.
Version			
Ronis cylinder lock (replacement for R78)	WM	↙	3VW9011-0BA80
Padlock 8 mm (replacement for R65), for no more than 3 padlocks	WM	↙	3VW9011-0BA87

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



- Only possible as a supplement in conjunction with R78 (3VW9011-0BA80) and/or R65 (3VW9011-0BA87).

Description			Article No.
Locking mechanism (replacement for R79)	WM	↙	3VW9011-0BA84

Locking devices in OFF position



- For fixed-mounted versions and withdrawable versions
- To prevent unauthorized activation in the operator panel (safe OFF)
- The disconnecter unit fulfills the conditions for a supply disconnecting (isolating) device acc. to EN 60204-1.

Description			Article No.
Cylinder lock, made by Ronis (replacement for S08)	WM	—	3VW9011-0BA33

Locking devices in OFF position



- For fixed-mounted versions and withdrawable versions
- To prevent unauthorized activation in the operator panel (safe OFF)
- The disconnecter unit fulfills the conditions for a supply disconnecting (isolating) device acc. to EN 60204-1.

Description	Version			Article No.
Padlock 4 mm (replacement for S22)	Plastic for no more than 3 locks	WM	—	3VW9011-0BA41
Padlock 7 mm (replacement for S23)	Metal for no more than 1 lock	WM	—	3VW9011-0BA42
Padlock 8 mm (replacement for S07)	Metal for no more than 2 locks	WM	—	3VW9011-0BA44

Locking devices in OFF position for toggle operating mechanisms with rotary operators



- To prevent unauthorized activation in the case of molded case circuit breakers with rotary operator

Description			Article No.
For Ronis	—	↙	3VW9727-0VL10

Locking devices in OFF position for toggle operating mechanisms without rotary operators



- To prevent unauthorized activation in the operator panel in the case of molded case circuit breakers without rotary operator

Description			Article No.
For padlocks	—	↙	3VW9727-0LB10

For Ronis	—	↙	3VW9727-0LF10
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Padlockable protective covers ON/OFF on the operator panels



Description	Version			Article No.
Padlock 4 mm (replacement for S42)	Plastic for no more than 3 locks	WM	—	3VW9011-0BA22
Padlock 7 mm (replacement for S43)	Metal for no more than 1 lock	WM	—	3VW9011-0BA23
Padlock 8 mm (replacement for S44)	Metal for no more than 2 locks	WM	—	3VW9011-0BA24

Protective covers for mechanical ON/OFF

WM 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

Not lockable (replacement for S41)

Article No.

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



3VW9011-0AP04

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](#))

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LV 14 Power Monitoring Made Simple SENTRON

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