System overview

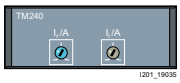
For a complete and verified configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/configurator-3VA

Basic units

3VA1 for standard applications

3VA2 for selective applications

Trip unit



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

Flat terminals

Connection accessories

Insulation accessories

Auxiliary releases/auxiliary switches


Shunt releases


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

Mechanical interlocks


Locking device


Sliding bar interlock


Interlocking with rod


Handle interlock using a Bowden cable


Cylinder lock

Structure of the article numbers

Basic configuration

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		4	5	6	7		8	9	10	11	12	
		3VA	■	■	■	–	■					– 0AA0
Trip units	Thermal-magnetic		1									
	Electronic		2									
Size	100 A		0									
	160 A		1									
	250 A		2									
	400 A		3									
	630 A		4									
	1000 A		5									

		3VA10	3VA11	3VA12	3VA13	3VA14	3VA15	3VA20	3VA21	3VA22	3VA23	3VA24	3VA25			
Current setting of the inverse-time delayed overload protection	8 A	–	■	–	–	–	–	–	–	–	–	–	–		0	8
	12.5 A	–	■	–	–	–	–	–	–	–	–	–	–		9	2
	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

		3VA10	3VA11	3VA12	3VA13	3VA14	3VA15	3VA20	3VA21	3VA22	3VA23	3VA24	3VA25		
Short-circuit breaking capacity $I_{cu} = I_{cs}$ at 380 ... 415 V	Without overload protection, 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

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3VA [4] [5] [6] [7] – [8] [9] [10] [11] [12] – 0AA0

		3VA10	3VA11	3VA12	3VA13	3VA14	3VA15	3VA20	3VA21	3VA22	3VA23	3VA24	3VA25			9	10
Protection function thermal-magnetic	No protection	–	■	■	■	■	–	–	–	–	–	–	–	SD100	–		A
	Line protection	■	■	–	–	–	–	–	–	–	–	–	–	TM210	FTFM		D
		–	■	–	–	–	–	–	–	–	–	–	–	TM220	ATFM		E
		–	■	■	■	■	■	–	–	–	–	–	–	TM240	ATAM		F
	Starter protection	–	■	–	–	–	–	–	–	–	–	–	–	TM110M	FM		G
		–	■	■	■	■	■	–	–	–	–	–	–	TM120M	AM		H

			9
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
	Starter protection	Without neutral conductor protection	M

		3VA10	3VA11	3VA12	3VA13	3VA14	3VA15	3VA20	3VA21	3VA22	3VA23	3VA24	3VA25			9	10
Protection function solid-state	Line protection	–	–	–	–	–	–	■	■	■	■	■	■	ETU340	ELISA LI	H	K
		–	–	–	–	–	–	■	■	■	■	■	■	ETU320	LI	H	L
		–	–	–	–	–	–	■	■	■	■	■	■	ETU330	LIG	H	M
	Line and generator protection	–	–	–	–	–	–	■	■	■	■	■	■	ETU350	LSI	H	N
	Line and generator protection, with display	–	–	–	–	–	–	■	■	■	■	■	■	ETU550	LSI	J	P
		–	–	–	–	–	–	■	■	■	■	■	–	ETU560	LSIG	J	Q
	Line and generator protection, with display, with metering function	–	–	–	–	–	–	■	■	■	■	■	–	ETU850	LSI	K	P
		–	–	–	–	–	–	■	■	■	■	■	■	ETU860	LSIG	K	Q
	Motor protection	–	–	–	–	–	–	–	■	■	■	■	■	ETU350M	LSI	M	N
	Motor protection, with display	–	–	–	–	–	–	–	■	■	■	■	■	ETU550M	LSI	M	P
	Motor protection, with display, with metering function	–	–	–	–	–	–	–	■	■	■	■	■	ETU860M	LSIG	M	Q
	Starter protection	–	–	–	–	–	–	–	■	■	■	■	–	ETU310M	I	M	S

		3VA10	3VA11	3VA12	3VA13	3VA14	3VA15	3VA20	3VA21	3VA22	3VA23	3VA24	3VA25	11
Number of poles	1-pole	–	■	–	–	–	–	–	–	–	–	–	–	1
	2-pole	–	■	–	–	–	–	–	–	–	–	–	–	2
	3-pole	■	■	■	■	■	■	■	■	■	■	■	■	3
	4-pole	■	■	■	■	■	■	■	■	■	■	■	■	4

		3VA10	3VA11	3VA12	3VA13	3VA14	3VA15	3VA20	3VA21	3VA22	3VA23	3VA24	3VA25	12
Connection technology	Nut keeper kit	■	■	■	■	■	■	■	■	■	■	■	■	2
	Box terminal	■	■	–	–	–	–	■	■	–	–	–	–	6

System overview, page 2/20

Internal accessories

Auxiliary switches and alarm switches

Configure your molded case circuit breaker easily online at
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Auxiliary switches AUX

- Used to signal the position of the main contacts of the molded case circuit breaker
- The contacts of the auxiliary switch and the molded case circuit breaker close in unison

Type	Width	I_e	U_e AC/DC	Version	3VA10	3VA11	3VA12 3VA13 3VA14	3VA15	3VA20 3VA21 3VA22 3VA23 3VA24 3VA25
HQ	7 mm (1 slot)	6 A	240 V/250 V	Standard			3VA9988-0AA12		
		<1 A	24 V/24 V	Electronic-compatible			3VA9988-0AA13		
HP	14 mm (2 slots)	10 A	600 V/250 V	Standard			3VA9988-0AA11		

Leading changeover switches LCS

- 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

Type	Width	I_e	U_e AC/DC	Version	3VA10	3VA11	3VA12 3VA13 3VA14	3VA15	3VA20 3VA21 3VA22 3VA23 3VA24 3VA25
HQ	7 mm (1 slot)	6 A	240 V/250 V	Standard	–		3VA9988-0AA22		
		<1 A	24 V/24 V	Electronic-compatible	–		3VA9988-0AA23		
HP	14 mm (2 slots)	10 A	600 V/250 V	Standard	–		3VA9988-0AA21		

Trip alarm switches TAS

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

Type	Width	I_e	U_e AC/DC	Version	3VA10	3VA11	3VA12 3VA13 3VA14	3VA15	3VA20 3VA21 3VA22 3VA23 3VA24 3VA25
HQ	7 mm (1 slot)	6 A	240 V/250 V	Standard			3VA9988-0AB12		
		<1 A	24 V/24 V	Electronic-compatible			3VA9988-0AB13		
HP	14 mm (2 slots)	10 A	600 V/250 V	Standard			3VA9988-0AB11		

Short circuit alarm switches SAS

- 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

Type	Width	I_e	U_e AC/DC	Version	3VA10	3VA11	3VA12 3VA13 3VA14	3VA15	3VA20 3VA21 3VA22 3VA23 3VA24 3VA25
HQ	7 mm (1 slot)	6 A	240 V/250 V	Standard	3VA9988-0AB32	3VA9988-0AB32	3VA9988-0AB34	3VA9988-0AB36	–
		<1 A	24 V/24 V	Electronic-compatible	3VA9988-0AB33	3VA9988-0AB33	3VA9988-0AB35	3VA9988-0AB37	–

Electrical alarm switches EAS

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

Type	Width	I_e	U_e AC/DC	Version	3VA10	3VA11	3VA12 3VA13 3VA14	3VA15	3VA20 3VA21 3VA22 3VA23 3VA24 3VA25
HQ	7 mm (1 slot)	6 A	240 V/250 V	Standard	–	–	–	–	3VA9988-0AB22
		<1 A	24 V/24 V	Electronic-compatible	–	–	–	–	3VA9988-0AB23

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Auxiliary releases

Configure your molded case circuit breaker easily online at www.siemens.com/lowvoltage/configurator-3VA

			3VA10 3VA11 3VA12 3VA13 3VA14 3VA15	3VA20 3VA21 3VA22 3VA23 3VA24	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 release 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					
• Trips 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	

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Manual operators

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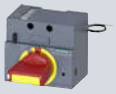
2

Front mounted rotary operators

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



Version	Illumination kit	Door interlock	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
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-STOP (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	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
Standard (gray)	Without	With	3VA9157-0FK21	3VA9257-0FK21	3VA9267-0FK21	3VA9467-0FK21	3VA9687-0FK21
	With	With	3VA9157-0FK23	3VA9257-0FK23	3VA9267-0FK23	3VA9467-0FK23	3VA9467-0FK23
EMERGENCY-STOP (red/yellow)	Without	With	3VA9157-0FK25	3VA9257-0FK25	3VA9267-0FK25	3VA9467-0FK25	3VA9687-0FK25
	With	With	3VA9157-0FK27	3VA9257-0FK27	3VA9267-0FK27	3VA9467-0FK27	3VA9467-0FK27

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	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
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	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
With shaft stub (gray)	–	Without	3VA9157-0GK00	3VA9257-0GK00	3VA9267-0GK00	3VA9467-0GK00	3VA9687-0GK00

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			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	3VA9157-0PK11	3VA9257-0PK11	3VA9267-0PK11	3VA9467-0PK11	–
		With	3VA9157-0PK13	3VA9257-0PK13	3VA9267-0PK13	3VA9467-0PK13	–
EMERGENCY-STOP (red/yellow)	Without	Without	3VA9157-0PK15	3VA9257-0PK15	3VA9267-0PK15	3VA9467-0PK15	–
		With	3VA9157-0PK17	3VA9257-0PK17	3VA9267-0PK17	3VA9467-0PK17	–
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	3VA9157-0PK51	3VA9257-0PK51	3VA9267-0PK51	–	–
		With	3VA9157-0PK53	3VA9257-0PK53	3VA9267-0PK53	–	–
EMERGENCY-STOP (red/yellow)	With	Without	3VA9157-0PK55	3VA9257-0PK55	3VA9267-0PK55	–	–
		With	3VA9157-0PK57	3VA9257-0PK57	3VA9267-0PK57	–	–
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...-0XG.0 auxiliary switch modules are used			8UD1900-0BB05	8UD1900-0BB05	8UD1900-0BB05	8UD1900-0BB05	–

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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-STOP (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-STOP (red/yellow)	With		8UD1721-0AB25		8UD1731-0AB25	8UD1741-0AB25
	Without		8UD1721-0AB15		8UD1731-0AB15	8UD1741-0AB15
Handle extensions						
 • Note: The handle lever extension is already included in the scope of supply of the breakers.						
		–	–	–	3VA9487-0SC10	3VA9987-0SC10
Shafts						
 **Versions**	**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						
Versions	**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						
Versions						
 8 × 8 mm			8UD1900-2HA00			–
 12 × 12 mm		–	–	–	–	8UD1900-4HA00

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

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Manual operators

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		3VA10 3VA11 3VA12	3VA13 3VA14	3VA15	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 operating mechanism	100 ... 250 A	8UD1900-0KA10	–	–	–	–
	100 ... 630 A	–	8UD1900-0KA20	–	8UD1900-0KA20	–
	630 ... 1000 A	–	–	8UD1900-0KA30	–	8UD1900-0KA30
Door mounted rotary operator and side wall mounted rotary operator	100 ... 630 A	8UD1900-0KA20	8UD1900-0KA20	8UD1900-0KA20	8UD1900-0KA20	–
	630 ... 1000 A	–	–	–	–	8UD1900-0KA30
Cylinder locks (type Kaba), standard masking plates						
 **Purpose**	**Key**					
For door mounted rotary operator and side wall mounted rotary operator (in the masking plate)	1	8UD1900-0MB01	8UD1900-0MB01	–	8UD1900-0MB01	–
	2	8UD1900-0NB01	8UD1900-0NB01	–	8UD1900-0NB01	–
	3	8UD1900-0PB01	8UD1900-0PB01	–	8UD1900-0PB01	–
	4	8UD1900-0QB01	8UD1900-0QB01	–	8UD1900-0QB01	–
Cylinder locks (type Kaba), EMERGENCY OFF masking plates						
 **Purpose**	**Key**					
For door mounted rotary operator and side wall mounted rotary operator (in the masking plate)	1	8UD1900-0MB05	8UD1900-0MB05	–	8UD1900-0MB05	–
	2	8UD1900-0NB05	8UD1900-0NB05	–	8UD1900-0NB05	–
	3	8UD1900-0PB05	8UD1900-0PB05	–	8UD1900-0PB05	–
	4	8UD1900-0QB05	8UD1900-0QB05	–	8UD1900-0QB05	–
Cylinder locks (type Ronis)						
 • Includes a lock with 2 keys • For locking or interlocking • For installation in all rotary operators • For mounting in the adapter kit for the accessories compartment • Note: The cylinder lock adapter for rotary operators is also needed for locking or interlocking circuit breakers via rotary operators						
Key						
1				3VA9980-0VL10		
3				3VA9980-0VL30		
4				3VA9980-0VL40		
Cylinder lock adapters for rotary operators						
 • To mount the cylinder lock in the rotary operator (also possible with door mounted rotary operator and side wall mounted rotary operator)						
Rated current						
100 ... 630 A		3VA9980-0LF20	3VA9980-0LF20	–	3VA9980-0LF20	–
1000 A		–	–	3VA9680-0LF20	–	3VA9680-0LF20

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Motor operators

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Side mounted motor operators (MO310)

- Cover size 45 mm

Addressable via control signals	Isolating features in accordance with IEC/EN 60947-1	Make time, typically 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	Article No.
For installation in the SEO520	3VA9987-0HX10

Cylinder lock adapters for SEO520

Mounting	Article No.
For installation of cylinder locks in the SEO520	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

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		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

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Connection technology

❶ For mounting onto the circuit breaker
❷ For mounting onto withdrawable and plug-in units

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	Connection options		Scope of supply			3VA10 3VA11
Box terminals						
	❶	❷	3 single terminals	Copper stranded 1.5 ... 70 mm²		3VA9153-0JA11
				6 ... 120 mm²		–
				25 ... 185 mm²		–
				50 ... 185 mm²		–
				35 ... 300 mm²		–
	❶	❷	4 single terminals	1.5 ... 70 mm²		3VA9154-0JA11
				6 ... 120 mm²		–
				25 ... 185 mm²		–
				50 ... 185 mm²		–
				35 ... 300 mm²		–
Nut keeper units						
	Connection options		Scope of supply	Max. tap width	Max. tap thickness	
	❶	❷	3 single terminals	17 mm	6.5 mm	3VA9113-0QA00
				25 mm	8 mm	–
				35 mm	10 mm	–
			Nut keeper kit for 3-pole breakers, 1 terminal cover	50 mm	25 mm	–
	❶	❷	4 single terminals	17 mm	6.5 mm	3VA9114-0QA00
				25 mm	8 mm	–
				35 mm	10 mm	–
			Nut keeper kit for 4-pole breakers, 1 terminal cover	50 mm	28 mm	–
Circular conductor terminals, 1 cable						
	Connection options		Scope of supply	Copper/aluminum stranded		
	❶	❷	3 single terminals	1.5 ... 10 mm² new		3VA9113-0JB10
				1.5 ... 50 mm²		–
				10 ... 95 mm²		3VA9113-0JB11
				16 ... 185 mm²		–
				35 ... 185 mm²		–
				50 ... 300 mm²		–
	❶	❷	4 single terminals	1.5 ... 10 mm² new		3VA9114-0JB10
				1.5 ... 50 mm²		–
				10 ... 95 mm²		3VA9114-0JB11
				16 ... 185 mm²		–
				35 ... 185 mm²		–
				50 ... 300 mm²		–

[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

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

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Connection technology

❶ For mounting onto the circuit breaker
❷ For mounting onto withdrawable and plug-in units

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					3VA10 3VA11
Circular conductor terminals with auxiliary conductor terminals, 1 cable [2]					
	Connection options		**Scope of supply**	**Copper/aluminum stranded**	
	❶	❷	3 single terminals	1.5 … 10 mm² **new**	3VA9113-0JG10
				1.5 … 50 mm²	–
				10 … 95 mm²	3VA9113-0JG11
				16 … 185 mm²	–
				35 … 185 mm²	–
				50 … 300 mm²	–
	❶	❷	4 single terminals	1.5 … 10 mm² **new**	3VA9114-0JG10
				1.5 … 50 mm²	–
				10 … 95 mm²	3VA9114-0JG11
				16 … 185 mm²	–
				35 … 185 mm²	–
				50 … 300 mm²	–
Circular conductor terminals, 2 cables					
	Connection options		**Scope of supply**	**Copper/aluminum stranded**	**Aux. conductor terminal**
	❶	❷	3 single terminals, 1 short terminal cover	120 … 300 mm²	No –
					Yes [2] –
	❶	❷	4 single terminals, 1 short terminal cover	120 … 300 mm²	No –
					Yes [2] –
Circular conductor terminals, 3 cables					
	Connection options		**Scope of supply**	**Copper/aluminum stranded**	**Aux. conductor terminal**
	❶	❷	3 single terminals, 1 short terminal cover	120 … 185 mm²	No –
					Yes [2] –
	❶	❷	4 single terminals, 1 short terminal cover	120 … 185 mm²	No –
					Yes [2] –
Auxiliary conductor terminals for box terminals [2]					
	**Version**				
	Fixed-mounted				3VA9110-0WB00
	Plug-in and draw-out technology				3VA9150-0WB00
Auxiliary conductor terminals for busbars [2]					
	**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

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3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 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	3VA9480-0WB00	–
3VA9280-0WB00	3VA9280-0WB00	3VA9480-0WB00	–
3VA9200-0WC00	3VA9200-0WC00	3VA9480-0WC00	–
3VA9280-0WC00	3VA9280-0WC00	3VA9480-0WC00	–

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Connection technology

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Front bus connectors extended

	Number of poles	Connection options		Scope of supply	Max. tap width	Max. tap thickness
	1P	❶	–	1 busbar connection piece	22 mm	8 mm
	3P	❶	❷	3 single terminals, 2 phase barriers	22 mm	8 mm
					32 mm	10 mm
					40 mm	12.5 mm
					50 mm	28 mm
	4P	❶	❷	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	❶	❷	3 single terminals, 2 phase barriers	30 mm	8 mm
					35 mm	10 mm
					60 mm	12.5 mm
	4P	❶	❷	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	❶	❷	3 single terminals, 2 phase barriers	20 mm	6 mm
					25 mm	7 mm
					40 mm	8 mm
	4P	❶	❷	4 single terminals, 3 phase barriers	20 mm	6 mm
					25 mm	7 mm
					40 mm	8 mm

Nut keeper units, right-angled [1)]

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

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

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3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
3VA9151-0QB00	–	–	–	–
3VA9153-0QB00	–	–	–	–
–	3VA9253-0QB00	3VA9263-0QB00	–	–
–	–	–	3VA9483-0QB00	–
–	–	–	–	3VA9603-0QB00
3VA9154-0QB00	–	–	–	–
–	3VA9254-0QB00	3VA9264-0QB00	–	–
–	–	–	3VA9484-0QB00	–
–	–	–	–	3VA9604-0QB00
3VA9153-0QC00	–	–	–	–
–	3VA9253-0QC00	3VA9263-0QC00	–	–
–	–	–	3VA9483-0QC00	–
3VA9154-0QC00	–	–	–	–
–	3VA9254-0QC00	3VA9264-0QC00	–	–
–	–	–	3VA9484-0QC00	–
3VA9153-0QD00	–	–	–	–
–	3VA9253-0QD00	3VA9263-0QD00	–	–
–	–	–	3VA9483-0QD00	–
3VA9154-0QD00	–	–	–	–
–	3VA9254-0QD00	3VA9264-0QD00	–	–
–	–	–	3VA9484-0QD00	–
3VA9113-0QG00	–	–	–	–
–	3VA9213-0QG00	3VA9223-0QG00	–	–
–	–	–	3VA9403-0QG00	–
3VA9114-0QG00	–	–	–	–
–	3VA9214-0QG00	3VA9224-0QG00	–	–
–	–	–	3VA9404-0QG00	–

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Rear connection studs flat

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

Rear connection studs round

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

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

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Connection technology

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Circular conductor terminals, 2P

Connection options		Scope of supply	Number of cables	Copper/aluminum stranded	Aux. conductor terminal
❶	–	2 single terminals, 1 extended terminal cover, 1 insulation plate	1	25 ... 150 mm²	Yes [1]
					No
			6	1.5 ... 35 mm²	No

Circular conductor terminals, 3P

Connection options		Scope of supply	Number of cables	Copper/aluminum stranded	Aux. conductor terminal
❶	–	3 single terminals, 1 extended terminal cover, 1 insulation plate	1	25 ... 150 mm²	Yes [1]
					No
				50 ... 240 mm²	Yes [1]
					No
			2	25 ... 150 mm²	Yes [1]
					No
				70 ... 300 mm²	Yes [1]
					No
			4	120 ... 240 mm²	Yes [1]
					No
			6	1.5 ... 35 mm²	No
–	❷	3 single terminals, 1 extended terminal cover, 1 insulation plate	1	25 ... 150 mm²	Yes [1]
				50 ... 240 mm²	Yes [1]
			2	25 ... 150 mm²	Yes [1]
				70 ... 300 mm²	Yes [1]
			6	1.5 ... 35 mm²	No

Circular conductor terminals, 4P

Connection options		Scope of supply	Number of cables	Copper/aluminum stranded	Aux. conductor terminal
❶	–	4 single terminals, 1 extended terminal cover, 1 insulation plate	1	25 ... 150 mm²	Yes [1]
					No
				50 ... 240 mm²	Yes [1]
					No
			2	25 ... 150 mm²	Yes [1]
					No
				70 ... 300 mm²	Yes [1]
					No
			4	120 ... 240 mm²	Yes [1]
					No
			6	1.5 ... 35 mm²	No
–	❷	4 single terminals, 1 extended terminal cover, 1 insulation plate	1	25 ... 150 mm²	Yes [1]
				50 ... 240 mm²	Yes [1]
			2	25 ... 150 mm²	Yes [1]
				70 ... 300 mm²	Yes [1]
			6	1.5 ... 35 mm²	No

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

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

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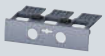
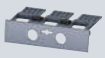
Connection technology

❶ For mounting onto the circuit breaker
❷ For mounting onto withdrawable and plug-in units

Configure your molded case circuit breaker easily online at
www.siemens.com/lowvoltage/configurator-3VA

	Version	Number of poles	Mounting location		3VA10	3VA11
Terminal covers specially for fixed mounting						
	Short	1P	❶	–	3VA9111-0WD10	3VA9111-0WD10
		2P	❶	–	3VA9111-0WD20	3VA9111-0WD20
		3P	❶	–	3VA9111-0WD30	3VA9111-0WD30
		4P	❶	–	3VA9111-0WD40	3VA9111-0WD40
	Extended [1]	2P	❶	–	3VA9111-0WF20	3VA9111-0WF20
		3P	❶	–	3VA9111-0WF30	3VA9111-0WF30
		4P	❶	–	3VA9111-0WF40	3VA9111-0WF40
	Broadened [1]	3P	❶	–	3VA9111-0WG30	3VA9111-0WG30
		4P	❶	–	3VA9111-0WG40	3VA9111-0WG40
Terminal covers specially for plug-in and draw-out units (spare part)						
	• To provide circuit breaker touch protection • For mounting to the molded case circuit breaker • Included in scope of supply: Cover for the infeed and outgoing terminal					
	Version	Number of poles	Mounting location			
	Short	3P	❶	–	3VA9113-0KB01	3VA9113-0KB01
		4P	❶	–	3VA9114-0KB01	3VA9114-0KB01
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	–	❷	–	3VA9153-0KB03
		4P	–	❷	–	3VA9154-0KB03
						
	Extended [1]	3P	–	❷	–	3VA9153-0KB04
			–	❷	–	3VA9154-0KB04
	Broadened [1]	3P	–	❷	–	3VA9153-0KB05
		4P	–	❷	–	3VA9154-0KB05
Insulating plates						
	Version	Number of poles	Mounting location			
	Standard	2P	❶	–	3VA9111-0WJ20	3VA9111-0WJ20
		3P	❶	–	3VA9111-0WJ30	3VA9111-0WJ30
		4P	❶	–	3VA9111-0WJ40	3VA9111-0WJ40
	Broadened	3P	❶	–	3VA9111-0WK30	3VA9111-0WK30
		4P	❶	–	3VA9111-0WK40	3VA9111-0WK40

[1] Including insulating plate

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

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Connection technology

Configure your molded case circuit breaker easily online at
www.siemens.com/lowvoltage/configurator-3VA

		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** / **Mounting**		
	2P / On 2-pole molded case circuit breakers	3VA9112-0SG20	

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

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Plug-in and draw-out technology

The main differences between plug-in units and draw-out units are convenience of operation and the potential for functional expansion.

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

Configure your molded case circuit breaker easily online at
www.siemens.com/lowvoltage/configurator-3VA

		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	–	3VA9213-0KD00	3VA9123-0KD00	3VA9323-0KD00
	4P	–	3VA9214-0KD00	3VA9124-0KD00	3VA9324-0KD00
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	–	3VA9213-0KD10	3VA9123-0KD10	3VA9323-0KD10
	4P	–	3VA9214-0KD10	3VA9124-0KD10	3VA9324-0KD10
Plug-in units, complete kits					
	• Scope of supply: – Plug-in base – Conversion kit – Mounting screw kit				
	Number of poles				
	3P	3VA9113-0KP00	3VA9213-0KP00	3VA9123-0KP00	3VA9323-0KP00
	4P	3VA9114-0KP00	3VA9214-0KP00	3VA9124-0KP00	3VA9324-0KP00
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	3VA9113-0KP10	3VA9213-0KP10	3VA9123-0KP10	3VA9323-0KP10
	4P	3VA9114-0KP10	3VA9214-0KP10	3VA9124-0KP10	3VA9324-0KP10

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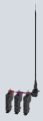
	3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24
Cable cages for plug-in/draw-out units (spare part)				
 • Cable duct for routing of the required cables from the internal accessories on the back of the circuit breaker				
Number of poles				
3P/4P	3VA9157-0KB02	3VA9257-0KB02	3VA9167-0KB02	3VA9367-0KB02
Door feedthroughs				
	–	3VA9257-0KT00	3VA9167-0KT00	3VA9367-0KT00
Autotrip plungers (spare part)				
 **Version**				
Plug-in unit	3VA9157-0KP81	3VA9257-0KP81	3VA9267-0KP81	3VA9457-0KP81
Draw-out unit	–	3VA9257-0KD81	3VA9267-0KD81	3VA9457-0KD81

Accessories

Communication links for draw-out unit



Scope of supply	Article No.
Set of cables with three special position signaling switches, 3VA9987-0KC10 connecting cables	3VA9987-0KC00

Position signaling switches for draw-out unit and plug-in unit

	Article No.
	3VA9987-0KB00

Connecting cables

Purpose	Article No.
Connection of position signaling switches for communication with COM060	3VA9987-0KC10

Crank handles for draw-out units

Version	Scope of supply	Article No.
Insulated	Including crank handle holder	3VA9987-0KD81

Auxiliary circuit connectors

• Each auxiliary circuit connector is designed for 4 cables.

Version	Article No.
For all draw-out units	3VA9987-0KD80
For all plug-in units	3VA9987-0KP80

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

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	3VA9980-0LF40

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Residual current devices RCD

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

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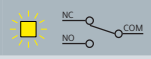
2

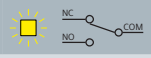
Mounted onto the side (left)

- 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		
								COM		TRIP 	COM	
3-pole	RCD510	Type A	0.03 ... 5 A.	0 ... 3 s	127 ... 480 V AC	50/60 Hz	1	–	–	■	■	–
4-pole	RCD310	Type A	0.03 ... 5 A.	instantaneous	127 ... 480 V AC	50/60 Hz	1	–	–	■	■	–
	RCD510	Type A	0.03 ... 5 A.	0 ... 3 s	127 ... 480 V AC	50/60 Hz	1	–	–	■	■	–

Mounted below (under trip unit)

- Can be mounted onto molded case circuit breakers

Number of poles	Type	Sensitivity [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		
								COM		TRIP 	COM	
3-pole	RCD520	Type A	0.03 ... 5 A.	0 ... 3 s	127 ... 480 V AC	50/60 Hz	1	–	–	■	■	–
	RCD520B [1][4] new	Type B	0.03 ... 5 A.	0 ... 10 s	127 ... 690 V AC	0 ... 100 kHz	1	■	–	■	■	–
		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	■	■	■	■	■
4-pole	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] new	Type B	0.03 ... 5 A.	0 ... 10 s	127 ... 690 V AC	0 ... 100 kHz	1	■	–	■	■	–
		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 monitoring devices, page 11/1

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			3VA11	3VA12	3VA20 3VA21	3VA22	3VA23	3VA24
Monitoring mode (tripping can be disabled as an option)	**Remote test/ remote reset**	**Communication-capable**						
■	–	–	3VA9113-0RS20 [6]	3VA9213-0RS20 [7]	–	–	–	–
■	–	–	3VA9114-0RS10 [6]	–	–	–	–	–
■	–	–	3VA9114-0RS20 [6]	3VA9214-0RS20 [7]	–	–	–	–
Monitoring mode (tripping can be disabled as an option)	**Remote test/ remote reset**	**Communication-capable**						
–	–	–	3VA9113-0RL20	3VA9213-0RL20	–	–	–	–
■	–	–	3VA9113-0RL21	–	–	–	–	–
■	■	■	–	–	3VA9123-0RL30	3VA9223-0RL30	3VA9323-0RL30	3VA9423-0RL30
–	–	–	3VA9114-0RL10	–	–	–	–	–
–	–	–	3VA9114-0RL20	3VA9214-0RL20	–	–	–	–
■	–	–	3VA9114-0RL21	–	–	–	–	–
■	■	■	–	–	3VA9124-0RL30	3VA9224-0RL30	3VA9324-0RL30	3VA9424-0RL30
			3VA9988-0BR10	3VA9988-0BR10	–	–	–	–

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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	$I_{leading\ axis} = (I_1 + I_2 + I_3)/3$	A	–	■	–	□	■
Asymmetry of the phase currents	I_{nba}	%	–	■	–	□	■
THD of the 3 phases	$THDI_1$, $THDI_2$, $THDI_3$	%	–	■	–	□	■
Voltage							
Phase voltages incl. mean value	U_{12}, U_{23}, U_{31}, U_{phavg}	V	–	■	□	□	■
Voltages to N conductor incl. mean value	U_{1N}, U_{2N}, U_{3N}, U_{Navg}	V	–	■	–	□	■
Voltage unbalance		%	–	■	–	□	■
THD phase/phase and phase/N	$THDI_1$, $THDI_2$, $THDI_3$	%	–	■	–	□	■
Power							
Active power, total and per phase	P_1, P_2, P_3, P_{tot}	kW	–	■	□ (P_{tot})	□	■
Apparent power, total and per phase	S_1, S_2, S_3, S_{tot}	kVA	–	■	–	□	■
Reactive power, total and per phase	Q_1, Q_2, Q_3, Q_{tot}	kVAr	–	■	□	□	■
Power factor of the fundamental	P_{F1}, P_{F2}, P_{F3}, P_{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

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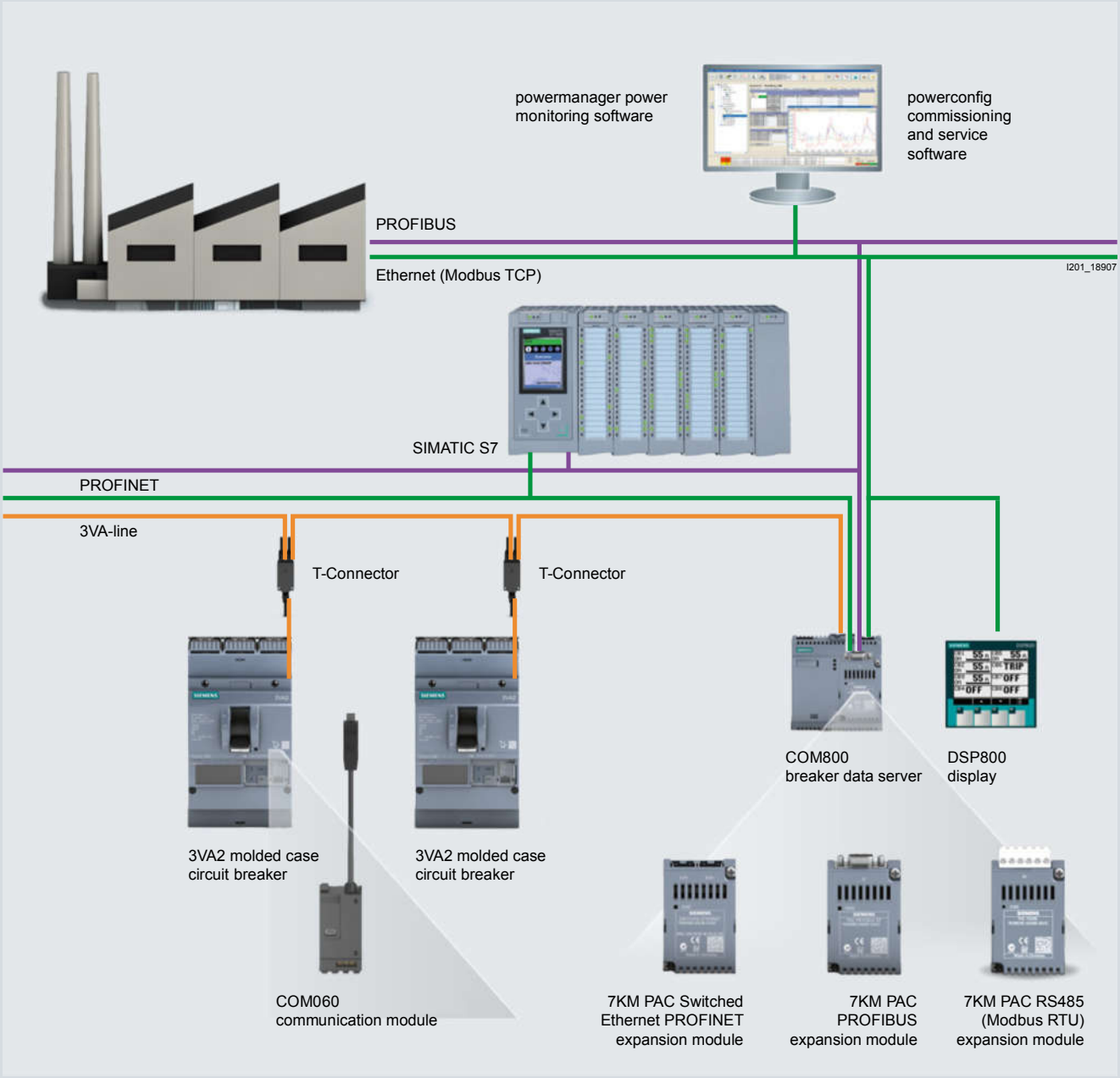

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Communication

Breaker data server

COM800 breaker data servers

Version	Article No.
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	3VA9987-0TA10

COM100 breaker data servers

Version	Article No.
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	3VA9987-0TA20

7KM PAC PROFIBUS DP expansion modules

Purpose	Article No.
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.	7KM9300-0AB01-0AA0

7KM PAC Switched Ethernet PROFINET expansion modules

Purpose	Article No.
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, PROFIenergy and Modbus TCP protocols.	7KM9300-0AE01-0AA0

7KM PAC RS485 Modbus RTU expansion modules

Purpose	Article No.
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.	7KM9300-0AM00-0AA0

Interfaces to IEC 61850 new

- 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] Designed for quantities of max. 20 devices, each with 50 data points

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

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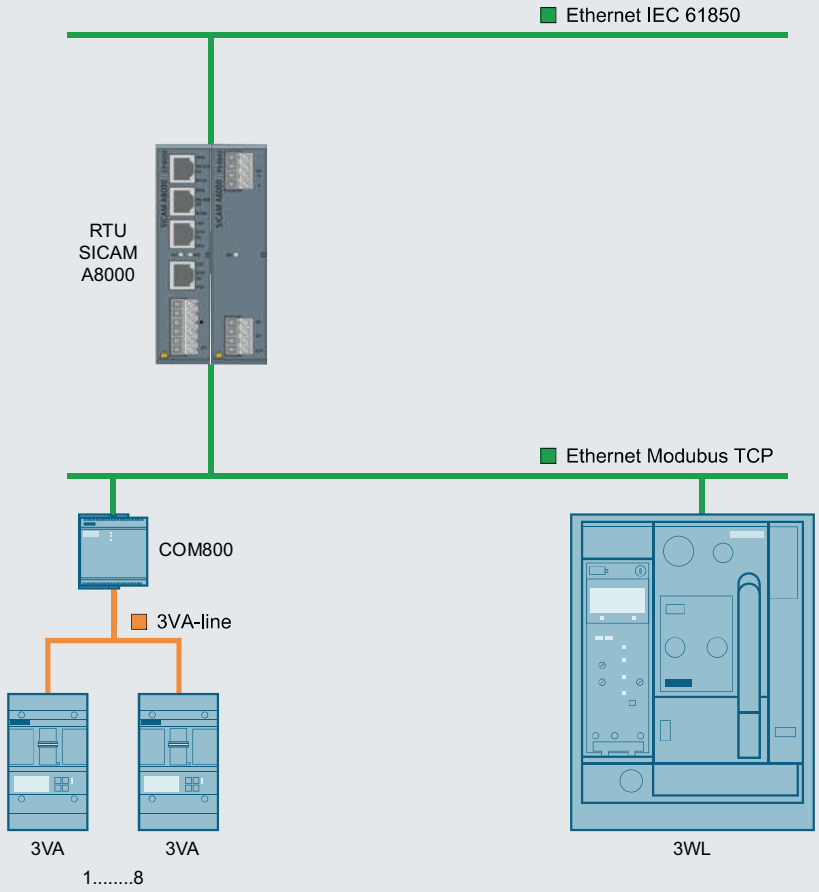

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Communication

Accessories for communication

T-connectors (spare part)

Purpose	Article No.
Provides a stub connection to the COM060 and loops through to the next circuit breaker.	3VA9987-0TG10

DIN rail adapters

Purpose	Article No.
For snapping the T-Connector onto a DIN rail.	3VA9987-0TG11

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

Length	Article No.
0.4 m	3VA9987-0TC10
1 m	3VA9987-0TC20
2 m	3VA9987-0TC30
4 m	3VA9987-0TC40

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

Length	Article No.
0.4 m	3VA9987-0TF20
0.8 m	3VA9987-0TF10

Additional bus terminating resistors (spare part)

Purpose	Article No.
For COM800 and COM060	3VA9987-0TE10

Voltage tap for external N conductors (spare part)

Purpose	Article No.
Cable for connection of the star point for the metering function of the 8-series ETU, length 1.5 m	3VA9987-0UC10

External current transformer for N conductors

Purpose	Rated current I_n	Article No.
For 3VA2 3-pole molded case circuit breakers, for 5 and 8-series ETUs, including connecting cables	25 ... 150 A	3VA9007-0NA10
	160 ... 350 A	3VA9107-0NA10
	400 ... 630 A	3VA9307-0NA10

External current transformers as straight-through transformers

Rated current I_n	Article No.
25 ... 150 A	3VA9077-0NA10
160 ... 350 A	3VA9177-0NA10
400 ... 630 A	3VA9377-0NA10
600 ... 1250 A	3VA9677-0NA10

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

Article No.
3VA9907-0NB10

Display

DSP800 displays

Purpose	Article No.
For displaying the status and measured values of up to eight devices • 3VA2 via COM800/100 • 3VA27 • 3WL10 • 3WL11-13 • PAC3200T	3VA9987-0TD10

System overview, page 2/20

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	Article No.
For connection to the ETU of 3VA2 molded case circuit breakers	3VA9987-0UA10

Connecting cables for EFB300

Length	Purpose	Article No.
1.5 m	For 3VA2 with EFB	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	Connection	Article No.
For activation of the ETU and initiation of a test tripping operation	On the front interface of the ETU	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	Connection	Article No.
Initiation of a test tripping operation	On the front interface of the ETU (3VA and IEC 3WL ETU release 2)	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	Connection	Article No.
Initiation of various test tripping operations (LSING), ETU parameterization	On the front interface of the ETU	3VA9987-0MB10

External power supplies for TD500 (spare part)

Voltage	Article No.
110 ... 240 V	3VA9987-0MX10

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

Article No.
3VA9987-0MY10

System overview, page 2/20

Locking, blocking and interlocking

			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)		3VA9980-0VL10	
		Key 3 (lock number 3)		3VA9980-0VL30	
		Key 4 (lock number 4)		3VA9980-0VL40	
	Adapter kit for mounting the cylinder lock (type Ronis) in the accessories compartment of the molded case circuit breaker		3VA9157-0LF10	3VA9257-0LF10	3VA9167-0LF10
	Locking device for toggle operating mechanism		3VA9088-0LB10		3VA9388-0LB10
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)		3VA9980-0VL10	
		Key 3 (lock number 3)		3VA9980-0VL30	
		Key 4 (lock number 4)		3VA9980-0VL40	
	Sliding bar interlock		3VA9158-0VF30	3VA9258-0VF30	3VA9168-0VF30
	Module for handle interlock using a Bowden cable		3VA9157-0VF10	3VA9257-0VF10	3VA9167-0VF10
	Bowden cable	Length 0.6 m		3VA9980-0VC10	
		Length 1.0 m		3VA9980-0VC20	
		Length 1.5 m		3VA9980-0VC30	
	Rear interlock with rod	Circuit breaker, fixed-mounted		3VA9088-0VM10	
		Plug-in/draw-out technology		3VA9088-0VM30	
	Mounting frame for rear interlock with rod	Profile rails	3VA9088-0VK10	–	–
		Mounting panels	3VA9158-0VK20	3VA9258-0VK20	3VA9268-0VK20

[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)

System overview, page 2/20

3VA13 3VA14	
3VA23 3VA24	3VA15 3VA25

Locking

		Use in	Locking in OFF position	Locking in ON position	Front mounting	Rear mounting	Interlocked breakers
3VA9980-0VL10 3VA9980-0VL30 3VA9980-0VL40	– – –	Breakers, motor-drive mechanisms, manual operators, withdraw-able technology	■	■	■	–	–
3VA9367-0LF10	3VA9587-0LF10	Circuit breaker	■	■	■	–	–
3VA9388-0LB10	3VA9588-0LB10	Circuit breaker	■	■	■	–	–

Interlocking

		Use in	Locking in OFF position	Locking in ON position	Front mounting	Rear mounting	Interlocked breakers
3VA9980-0VL10 3VA9980-0VL30 3VA9980-0VL40	– – –	Breakers, manual operators	■	■	■	–	Unlimited
3VA9368-0VF30	–	Circuit breaker	–	–	■	–	3
3VA9367-0VF10	3VA9587-0VF10	Circuit breaker	–	–	■	–	3
3VA9980-0VC10 3VA9980-0VC20 3VA9980-0VC30							
3VA9088-0VM10	3VA9588-0VM10 [1) 2)]	Circuit breaker, fixed-mounted	–	–	–	■	2
3VA9088-0VM30	3VA9588-0VM10 [1) 2)]	Plug-in/draw-out technology				■	
–	–		–	–	–	■	
3VA9468-0VK20	–						

System overview, page 2/20

Cover frame and mounting

		3VA10 3VA11	3VA12
Cover frames for door cutouts for molded case circuit breakers			
			
Number of poles	**Door cut-out with trip unit**		
3P	No	3VA9053-0SB10	3VA9253-0SB10
	Yes	3VA9053-0SB20	3VA9253-0SB20
4P	No	3VA9054-0SB10	3VA9254-0SB10
	Yes	3VA9054-0SB20	3VA9254-0SB20
Cover frames for MO320 motor operators			
			
Purpose			
MO320 motor operator		3VA9053-0SB20	3VA9257-0SB30
Motor operator with SEO520 stored energy operator		–	–
Cover frames for RCD320, RCD520 and RCD820 residual current devices			
			
Number of poles			
3P		3VA9053-0SB10	3VA9253-0SB10
4P		3VA9054-0SB10	3VA9254-0SB10
Cover frames for front mounted rotary operators			
			
		3VA9053-0SB10	3VA9253-0SB10
Cover frames for door feedthroughs			
			
		–	3VA9253-0SB20
Labeling plates for cover frame			
			
		3VA9087-0SX10	
Adapters for DIN rails for 3VA1 molded case circuit breakers			
			
Number of poles			
1P		3VA9181-0SH10	–
2P		3VA9182-0SH10	–
3P and 4P		3VA9187-0SH10	–
3P and 4P in connection with RCD310 or RCD510		3VA9187-0SH20	–
Mounting screw kits			
			
Purpose	**Number of poles**		
For fixed-mounted breakers	1P	3VA9111-0SS10	–
	2P and 3P (apart from 125 A/160 A with 55 kA and 70 kA)	3VA9116-0SS10	
	3P (125 A/160 A with 55 kA and 70 kA) and 4P	3VA9114-0SS10	
	3P	–	–
	4P	–	–
	3P and 4P	–	–
For plug-in technology	–	3VA9114-0SS10	
For plug-in and draw-out technology	–	–	3VA9114-0SS10

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

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3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 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	–

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System overview

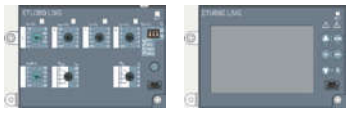
For a complete and verified configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/configurator-3VA27

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/ horizontal

Rear broadened

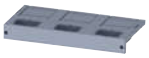
Front extended

Front 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 release (ST)

Closing coil (CC) / Remote reset magnet (RR)

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

Structure of the article numbers

Basic configuration with toggle operating mechanism

For a complete and verified configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/configurator-3VA27

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

Basic units and ETUs

				6	7	8	9	10	11	12
Rated current	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 380 ... 415 V	Toggle operating mechanism	55 kA				5				
		85 kA				6				
		110 kA				7				
Protection function solid-state	Without ETU							A		
	With ETU	ETU320	LI					B		
		ETU350	LSI					C		
		ETU360	LSIG					D		
		ETU650	LSI					E		
		ETU660	LSIG					F		
Trip units	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			
Number of poles	Fixed-mounted versions	3-pole							0	
		4-pole	Neutral left						1	
			Neutral right						2	
	Withdrawable	3-pole							3	
		4-pole	Neutral left						4	
			Neutral right						5	

Connection

			12
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

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

Alarm switch combinations

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

Auxiliary releases, closing coils

Closing coil (CC), remote reset magnet (RR)	Without		A
2nd auxiliary release	Without 2nd auxiliary release		A
	With undervoltage release (UVR)	24 V AC/DC	B
		30 V AC/DC	C
		48 V AC/DC	D
		60 V AC/DC	E
		110 ... 120 V AC/DC	F
		120 ... 127 V AC/DC	G
		220 ... 240 V AC/DC	H
		240 ... 250 V AC/DC	J
		380 ... 400 V AC/DC	K
		415 ... 440 V AC/DC	L
	With undervoltage release (UVR), delayable with external time-delay device Scope of supply: UVR + time-delay device	24 ... 30 V AC/DC	M
		110 ... 127 V AC/DC	N
		220 ... 250 V AC/DC	P
	With 2nd shunt release (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 release (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

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Structure of the article numbers

Basic configuration with stored energy operating mechanism

For a complete and verified configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/configurator-3VA27

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

Basic units and ETUs

				6	7	8	9	10	11	12
Rated current	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 380 ... 415 V	Stored energy operating mechanism	55 kA				1				
		85 kA				2				
		110 kA				3				
Protection function solid-state	Without ETU							A		
	With ETU	ETU320	LI					B		
		ETU350	LSI					C		
		ETU360	LSIG					D		
		ETU650	LSI					E		
		ETU660	LSIG					F		
Trip Units	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			
Number of poles	Fixed-mounted versions	3-pole							0	
		4-pole	Neutral left						1	
			Neutral right						2	
	Withdrawable	3-pole							3	
		4-pole	Neutral left						4	
			Neutral right						5	

Connections

			12
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

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

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

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 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 release (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 release (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

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Accessory options

Configure your molded case circuit breaker easily online at
www.siemens.com/lowvoltage/configurator-3VA27

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

3VA27..-.....-.... -Z Order code

2

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	400 A	✓	✓	B	0	4
			630 A	✓	✓	B	0	6
			800 A	✓	✓	B	0	8
			1000 A	✓	✓	B	1	0
			1200 A	✓	✓	B	1	2
	For setting the rated current I_n, with overload protection L = OFF	For ETU 6-series	400 A	✓	✓	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).

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

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

Accessories for motors

					Order code		
5-digit mechanical operating cycles counter					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)				K	5	5
Signaling switch	Ready-to-close signaling	1 CO contact digital 24 V DC		–	K	5	0
	Tripped signaling switch (S24)	1 CO contact digital 24 V DC			K	5	3
	Spring charged signaling switch (S21)	1 CO contact digital 24 V DC		–	K	5	4
Auxiliary switch	On / Off AUX	4 CO contacts digital 24 V DC			K	5	1
		2 CO contacts 400 V AC, and 2 CO contacts digital 24 V DC			K	5	2

Locking, blocking and interlocking

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

For molded case circuit breakers with stored energy operating mechanism

For molded case circuit breakers with toggle operating mechanism

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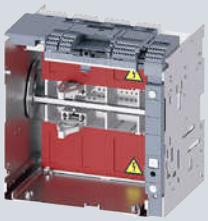
Guide frames

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	3VA27 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

Locking, blocking and interlocking

					Order code		
Locking device	To prevent movement of withdrawable circuit breaker	Cylinder lock, made by Ronis	๑	◢	R	7	8
		For no more than 3 8-mm padlocks	๑	◢	R	6	5
Locking mechanism	To prevent movement to disconnected position (only in combination with R78 or R65)		๑	◢	R	7	9

Auxiliary/signaling switches

					Order code		
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)	๑	◢	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.

๑ For molded case circuit breakers with stored energy operating mechanism

◢ For molded case circuit breakers with toggle operating mechanism

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