

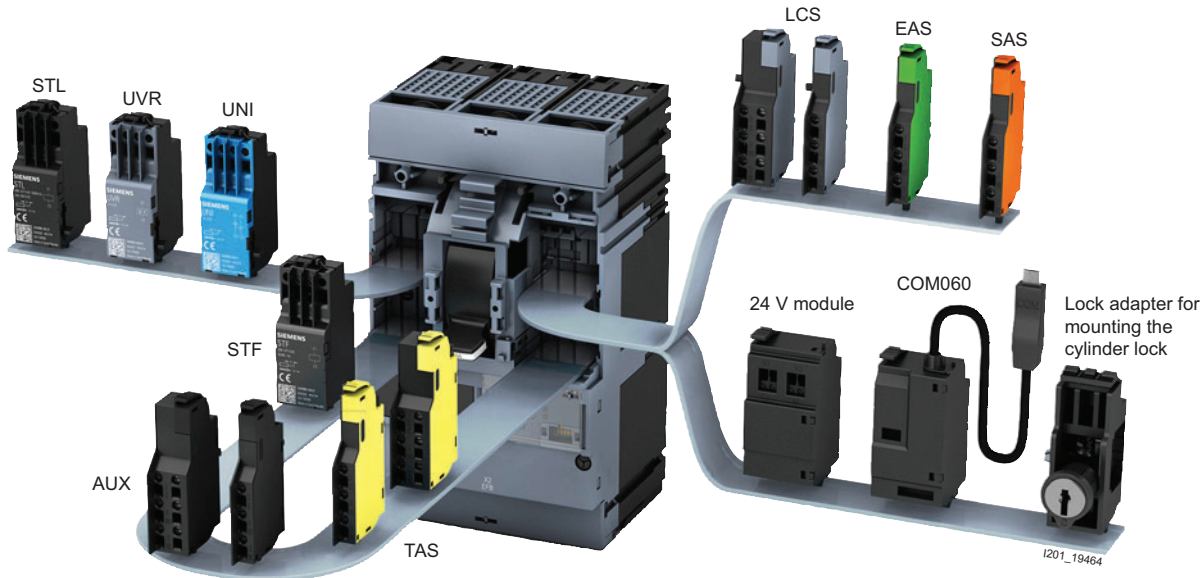
Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Internal accessories

Overview

Color coding of accessories



A color coding system has been used to clearly identify the specific functions of individual accessories:

Color	Auxiliary switches and alarm switches (changeover contacts)	Auxiliary releases
Black	Auxiliary switch AUX	<ul style="list-style-type: none"> • Shunt trip left STL • Shunt trip flexible STF
Gray	Leading changeover switch LCS	Undervoltage release UVR
Yellow	Trip alarm switch TAS	--
Orange	Short circuit alarm switch SAS	--
Green	Electrical alarm switch EAS	--
Blue	--	Universal release UNI

Auxiliary switches

All auxiliary and alarm switches for the 3VA molded case circuit breakers and switch disconnectors belong to an integrated range of accessories. They are consistently designed as changeover contacts. The auxiliary switches can be simply snapped into place and connected up in the accessories compartment provided on the front face of the unit to the left and right of the handle.

The purpose of the auxiliary switches AUX is to signal the position of the main contacts of the molded case circuit breaker. The contacts of the auxiliary switches open and close simultaneously with the main contacts of the molded case circuit breaker.

Leading changeover switches LCS signal the opening of the main contacts with a lead time of 20 ms in advance of the circuit breaker trips and are used for load shedding, for example.

Trip alarm switches TAS signal every circuit breaker tripping operation, regardless of the cause of the trip. The trip alarm switches are actuated whenever the molded case circuit breaker switches to the TRIP position.

Electrical alarm switches EAS are actuated as soon as the main contacts of the molded case circuit breaker open in the event that the breaker is tripped by the ETU.

Special electronic-compatible variants are available for applications which require the auxiliary switch signals to be linked to automation systems.

Auxiliary releases

Auxiliary releases allow remote electrical tripping of the circuit breaker. They can be used to monitor control or main circuits in order to implement a protective system against accidental restart following a power failure, for example.

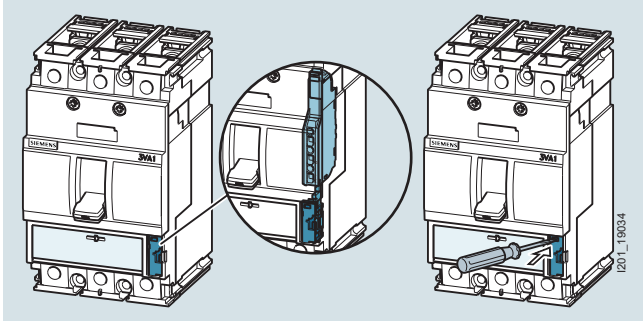
Undervoltage releases trip the 3VA molded case circuit breaker in the event that the rated voltage of a monitored circuit drops below a minimum permissible limit or fails altogether.

Shunt trips can be used to trip the 3VA molded case circuit breaker remotely. The STF variant can be mounted in either the left-hand or the right-hand accessories compartment. The STL and STL (EI) types are specifically designed for mounting in the left-hand compartment and are very low-consumption devices. The STL (EI) variant can be used to implement electrical interlocks between molded case circuit breakers.

A universal release is a single, 21-mm-wide component in which a shunt trip and an undervoltage release are combined. These are subject to the same tripping conditions as the individual devices.

Short circuit alarm switches SAS

Short circuit alarm switches signal tripping operations only if they have been initiated by a short circuit. Tripping due to a short circuit is also indicated on the molded case circuit breaker.



The tripping operation must be reset by deliberate acknowledgement of the fault before the molded case circuit breaker can be switched to ON again.

Note

Short circuit alarm switches are only compatible with 3VA1 molded case circuit breakers. On breakers equipped with Electronic Trip Units, the short circuit alarm function is performed by the Electronic Trip Unit (ETU) and the EFB external function box.

3VA with internal accessories preassembled at the factory

The basic circuit breakers with -0AA0 at the end of the article number are supplied without installed internal accessories.

Due to the high number of different internal accessory components available and the associated flexibility of use, it is not possible to represent all options with an article number for circuit breakers and installed internal accessories.

However, it is possible to order a basic circuit breaker with pre-defined combinations of internal accessories that are installed at the factory. This concerns a selection of different auxiliary releases and auxiliary/alarm switch combinations especially for each basic circuit breaker type.

Benefits

- The internal accessories are extremely easy to install. No tools are required because they are simply snapped into place in the accessories compartments to the left and right of the handle.
- The accessories are connected by screw terminals for auxiliary conductors with a cross-section of up to 2.5 mm². The terminals are mounted on the front of the unit for easy access.
- All auxiliary and alarm switches are designed as changeover contacts and therefore provide a high degree of flexibility for planning and installation purposes.
- Slimline auxiliary and alarm switches HQ and double-width auxiliary and alarm switches HP are suitable for use in applications involving diverse types of signaling contact and with high continuous currents.
- With two conductors per contact point for the auxiliary and alarm switches HP, looping through is extremely easy.
- Symbols engraved in the lid of the accessories compartment indicate the possible mounting positions of the internal accessories.

In the case of factory installation, an installation surcharge is levied for the installed internal accessories.

The normal delivery time for equipped 3VA breakers is 10 working days. The best possible delivery times are only achieved when the individual components are ordered.

Basic circuit breakers with pre-installed internal accessories can only be ordered by registered customers using the 3VA Configurator:

www.siemens.com/lowvoltage/configurator-3VA

3VA molded-case circuit breaker ▶ Language

The configuration is complete. You can order this product. Additional actions

Basic configuration | Release | Form type | Main conductor connection | **Auxiliary release/auxiliary switch** | Mountable accessories | Result | CAD/CAE 1.81

Assembly option

Self-assembly

When selecting factory installation by Siemens, an assembly surcharge will be added to the value of the built-in components. The standard delivery time for fitted 3VA switches is 10 working days. The best possible delivery times will only be offered on purchase of the components.

Auxiliary release

No auxiliary release

STL 24 V AC 50/60 Hz / 12-30

STL 110-127 V AC 50/60 Hz / DC

STL 208-277 V AC 50/60 Hz / 220-250 V DC

UVR 24 V DC

UVR 120-127 V AC 50/60 Hz

UVR 208-230 V AC 50/60 Hz

UNI 24 V DC

Slot assignment

Auxiliary switch/alarm switch

Without auxiliary/alarm switches

Type HP 2 AUX

Type HQ 2 AUX

Type HQ 3 AUX

Type HQ 4 AUX

Type HQ 1 AUX + 1 TAS

Type HP 1 AUX + 1 TAS

Type HQ 2 AUX + 1 TAS

Type HP 2 AUX + 1 TAS

Type HQ 1 AUX + 1 TAS + 1 EAS

Type HQ 2 AUX + 1 TAS + 1 EAS

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Internal accessories

Design

2

Internal accessories		3VA11 2-pole	3VA10 3 and 4-pole	3VA11 3 and 4-pole	3VA12 3 and 4-pole
Optional equipment		160 A	100 A	160 A	250 A
Slot No.:		23 22 21	23 22 21 11 12 13	23 22 21 11 12 13	24 23 22 21 11 12 13 14
Auxiliary switch	Type				
Auxiliary switch	AUX_HQ	x x x	x x x x x x	x x x x x x	x x x x x x x x
	AUX_HQ_el	x x x	x x x x x x	x x x x x x	x x x x x x x x
	AUX_HP	x		x	x x x
Leading changeover switch	LCS_HQ				
	LCS_HQ_el				
	LCS_HP				
Alarm switch	Type				
Trip alarm switch	TAS_HQ	x x	x x x x	x x x x	x x x x
	TAS_HQ_el	x x	x x x x	x x x x	x x x x
	TAS_HP	x		x	x
Short circuit alarm switch	SAS_HQ				
	SAS_HQ_el				
Auxiliary release	Type				
Shunt trip flexible	STF	x	x	x	x
Shunt trip left	STL	x	x	x	x
	STL (EI)	x	x	x	x
Residual current release	RCR ¹⁾				
Undervoltage release	UVR	x	x	x	x
Universal release	UNI	x	x	x	x
Other					
Cylinder lock (type Ronis)			x	x	x

¹⁾ Included in the scope of supply for side mounted residual current devices

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Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Internal accessories

Internal accessories Optional equipment		3VA13/14 3 and 4-pole										3VA15 3 and 4-pole													
		630 A										1000 A													
Slot No.:		25	24	23	22	21	11	12	13	14	15	25	24	23	22	21	11	12	13	14	15				
Auxiliary switch	Type																								
Auxiliary switch	AUX_HQ	x	x	x	x	x		x	x	x	x	x		x	x	x	x	x		x	x	x	x	x	
	AUX_HQ_el	x	x	x	x	x		x	x	x	x	x		x	x	x	x	x		x	x	x	x	x	
	AUX_HP			x	x				x	x					x	x					x	x			
Leading changeover switch	LCS_HQ							x													x				
	LCS_HQ_el							x													x				
	LCS_HP								x													x			
Alarm switch	Type																								
Trip alarm switch	TAS_HQ			x	x			x	x						x	x									
	TAS_HQ_el			x	x			x	x						x	x									
	TAS_HP			x				x							x										
Short circuit alarm switch	SAS_HQ																								x
	SAS_HQ_el																								x
Auxiliary release	Type																								
Shunt trip flexible	STF					x																			
Shunt trip left	STL					x																			
	STL (EI)					x																			
Undervoltage release	UVR					x																			
Universal release	UNI					x																			
Other																									
Cylinder lock (type Ronis)																									x

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Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Internal accessories

2

Internal accessories		3VA20/21/22 3-pole	3VA20/21/22 4-pole																				
Optional equipment		24 23 22 21 11 12 13 14	34 33 32 31 24 23 22 21 11 12 13 14																				
Slot No.:		250 A								250 A													
Auxiliary switch	Type																						
Auxiliary switch	AUX_HQ	x	x	x	x					x	x	x	x					x	x	x	x		
	AUX_HQ_el	x	x	x	x					x	x	x	x					x	x	x	x		
	AUX_HP	x		x				x	x	x		x				x	x	x		x			
Leading changeover switch	LCS_HQ							x												x			
	LCS_HQ_el							x												x			
	LCS_HP							x												x			
Alarm switch	Type																						
Trip alarm switch	TAS_HQ		x	x			x	x					x	x				x	x				
	TAS_HQ_el		x	x			x	x					x	x				x	x				
	TAS_HP		x				x						x					x					
Electrical alarm switch	EAS_HQ																				x		
	EAS_HQ_el																				x		
Auxiliary release	Type																						
Shunt trip flexible	STF		x					x												x			
Shunt trip left	STL		x																	x			
	STL (EI)		x																	x			
Undervoltage release	UVR		x																	x			
Universal release	UNI		x																	x			
ETU/communication	Type																						
Breaker data server communication module	COM060								x												x		
24 V module									x												x		
Other																							
Cylinder lock (type Ronis)									x												x		

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Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Internal accessories

Internal accessories Optional equipment		3VA23/24 3-pole										3VA23/24 4-pole																				
		25	24	23	22	21	11	12	13	14	15	35	34	33	32	31	25	24	23	22	21	11	12	13	14	15						
Auxiliary switch	Type																															
Auxiliary switch	AUX_HQ	x	x	x	x	x		x	x	x	x	x		x	x	x	x	x		x	x	x	x	x		x	x	x	x	x		
	AUX_HQ_el	x	x	x	x	x		x	x	x	x	x		x	x	x	x	x		x	x	x	x	x		x	x	x	x	x		
	AUX_HP			x	x				x	x				x	x							x	x				x	x				
Leading changeover switch	LCS_HQ							x																								
	LCS_HQ_el							x																								
	LCS_HP									x																						
Alarm switch	Type																															
Trip alarm switch	TAS_HQ			x	x			x	x																							
	TAS_HQ_el			x	x			x	x																							
	TAS_HP					x				x																						
Electrical alarm switch	EAS_HQ																															x
	EAS_HQ_el																															x
Auxiliary release	Type																															
Shunt trip flexible	STF					x																									x	
Shunt trip left	STL					x																										
	STL (EI)					x																										
Undervoltage release	UVR					x																										
Universal release	UNI					x																										
ETU/communication	Type																															
Breaker data server communication module	COM060																														x	
24 V module																																x
Other																																
Cylinder lock (type Ronis)																															x	

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Molded Case Circuit Breakers

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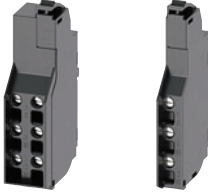
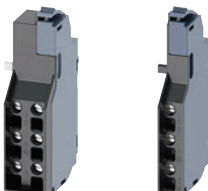
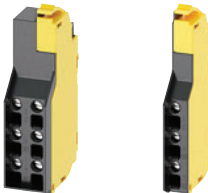


Internal accessories

2

Internal accessories		3VA25 3-pole										3VA25 4-pole																					
Optional equipment		3VA25 3-pole										3VA25 4-pole																					
Slot No.:		24	23	22	21							11	12	13	14	15	16	24	23	22	21							11	12	13	14	15	16
Auxiliary switch	Type																																
	AUX_HQ	x	x	x	x								x	x	x	x		x	x	x	x							x	x	x	x		
	AUX_HQ_el	x	x	x	x								x	x	x	x		x	x	x	x							x	x	x	x		
Auxiliary switch	AUX_HP	x		x								x		x			x		x							x		x					
			x									x		x				x								x		x					
Leading changeover switch	LCS_HQ											x														x							
	LCS_HQ_el											x														x							
	LCS_HP											x														x							
Alarm switch	Type																																
	TAS_HQ											x	x													x	x						
	TAS_HQ_el											x	x													x	x						
Trip alarm switch	TAS_HP											x														x							
Electrical alarm switch	EAS_HQ																x													x			
	EAS_HQ_el																x													x			
Auxiliary release	Type																																
	Shunt trip flexible			x																x													
	Shunt trip left	STL			x															x													
STL (EI)				x															x														
Undervoltage release	UVR			x															x														
Universal release	UNI			x															x														
ETU/communication	Type																																
	Breaker data server communication module																x													x			
Module 24 V																x													x				

I201_19504

Selection and ordering data

	Version	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
Auxiliary switches and alarm switches (changeover contacts)							
 3VA9988-0AA11 3VA9988-0AA12	Auxiliary switch AUX						
	Type/switching capacity/size	Electronic-compatible					
	HP/high switching capacity/2 slots	--	3VA9988-0AA11		1	1 unit	1CB
	HQ/compact size/1 slot	--	3VA9988-0AA12		1	1 unit	1CB
	HQ_el/compact size/1 slot	✓	3VA9988-0AA13		1	1 unit	1CB
 3VA9988-0AA21 3VA9988-0AA22	Leading changeover switch LCS						
	Type/switching capacity/size	Electronic-compatible					
	HP/high switching capacity/2 slots	--	3VA9988-0AA21		1	1 unit	1CB
	HQ/compact size/1 slot	--	3VA9988-0AA22		1	1 unit	1CB
	HQ_el/compact size/1 slot	✓	3VA9988-0AA23		1	1 unit	1CB
 3VA9988-0AB11 3VA9988-0AB12	Trip alarm switch TAS						
	Type/switching capacity/size	Electronic-compatible					
	HP/high switching capacity/2 slots	--	3VA9988-0AB11		1	1 unit	1CB
	HQ/compact size/1 slot	--	3VA9988-0AB12		1	1 unit	1CB
	HQ_el/compact size/1 slot	✓	3VA9988-0AB13		1	1 unit	1CB
 3VA9988-0AB32	Short circuit alarm switch SAS (3VA1 only)						
	For molded case circuit breakers/ Article No. stem	Electronic-compatible					
	For 3VA10, 3VA11						
	• HQ/compact size/1 slot	--	3VA9988-0AB32		1	1 unit	1CB
	• HQ_el/compact size/1 slot	✓	3VA9988-0AB33		1	1 unit	1CB
	For 3VA12, 3VA13 and 3VA14						
	• HQ/compact size/1 slot	--	3VA9988-0AB34		1	1 unit	1CB
	• HQ_el/compact size/1 slot	✓	3VA9988-0AB35		1	1 unit	1CB
 3VA9988-0AB22	Electrical alarm switch EAS (3VA2 only)						
	Type/switching capacity/size	Electronic-compatible					
	HQ/compact size/1 slot	--	3VA9988-0AB22		1	1 unit	1CB
	HQ_el/compact size/1 slot	✓	3VA9988-0AB23		1	1 unit	1CB

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Internal accessories

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	Version	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG	
Undervoltage releases								
 <p>3VA9908-0BB15</p>	Undervoltage release UVR							
	50/60 Hz V AC	V DC						
	--	12	3VA9908-0BB10		1	1 unit	1CB	
	--	24	3VA9908-0BB11		1	1 unit	1CB	
	--	48	3VA9908-0BB12		1	1 unit	1CB	
	--	60	3VA9908-0BB13		1	1 unit	1CB	
	--	125 ... 127	3VA9908-0BB14		1	1 unit	1CB	
	--	220 ... 230	3VA9908-0BB15		1	1 unit	1CB	
	--	250	3VA9908-0BB16		1	1 unit	1CB	
	24	--	3VA9908-0BB20		1	1 unit	1CB	
	48	--	3VA9908-0BB21		1	1 unit	1CB	
	60	--	3VA9908-0BB22		1	1 unit	1CB	
	110	--	3VA9908-0BB23		1	1 unit	1CB	
	120 ... 127	--	3VA9908-0BB24		1	1 unit	1CB	
	208 ... 230	--	3VA9908-0BB25		1	1 unit	1CB	
380 ... 400	--	3VA9908-0BB26		1	1 unit	1CB		
440 ... 480	--	3VA9908-0BB27		1	1 unit	1CB		
Shunt trip left								
 <p>3VA9988-0BL33</p>	Shunt trip left STL							
	50/60 Hz V AC	V DC						
	--	12	3VA9988-0BL10		1	1 unit	1CB	
	24	24 ... 30	3VA9988-0BL30		1	1 unit	1CB	
	48 ... 60	48 ... 60	3VA9988-0BL31		1	1 unit	1CB	
	110 ... 127	110 ... 127	3VA9988-0BL32		1	1 unit	1CB	
	208 ... 277	220 ... 250	3VA9988-0BL33		1	1 unit	1CB	
	--	12	3VA9988-0BL10		1	1 unit	1CB	
	380 ... 600	--	3VA9988-0BL20		1	1 unit	1CB	
	Shunt trip left STL (EI)							
50/60 Hz V AC	V DC							
--	24	3VA9988-0BM10		1	1 unit	1CB		
Shunt trip flexible STF								
 <p>3VA9988-0BA23</p>	Shunt trip flexible							
	50/60 Hz V AC	V DC						
	24	--	3VA9988-0BA20		1	1 unit	1CB	
	48 ... 60	--	3VA9988-0BA21		1	1 unit	1CB	
	110 ... 127	--	3VA9988-0BA22		1	1 unit	1CB	
	208 ... 277	--	3VA9988-0BA23		1	1 unit	1CB	
	380 ... 500	--	3VA9988-0BA24		1	1 unit	1CB	
	600	--	3VA9988-0BA25		1	1 unit	1CB	
	Universal release UNI							
	 <p>3VA9908-0BD13</p>	Universal release						
50/60 Hz V AC		V DC						
--		12	3VA9908-0BD11		1	1 unit	1CB	
--		24	3VA9908-0BD12		1	1 unit	1CB	
--	48	3VA9908-0BD13		1	1 unit	1CB		
Time-delay device for undervoltage releases								
 <p>3VA9988-0BF22</p>	Time-delay device							
	V AC	V DC	Delay time					
	110	110	Fixed	3VA9988-0BF21	1	1 unit	1CB	
	230	230	Fixed	3VA9988-0BF22	1	1 unit	1CB	
--	24	Fixed	3VA9988-0BF23	1	1 unit	1CB		

Overview

Manual operators are provided to facilitate manual operation of the 3VA molded case circuit breakers, either directly at the circuit breaker or through the door or side wall of the cubicle.

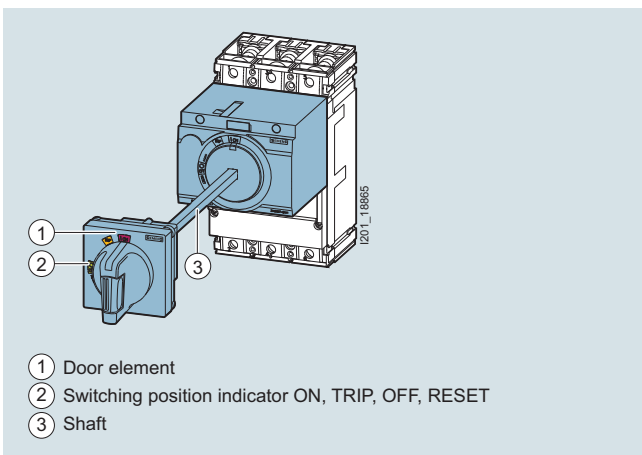
Front mounted rotary operator

The front mounted rotary operator is mounted directly on the molded case circuit breaker and is available with or without a door interlocking system. It meets the requirements for degree of protection IP30. The door interlock locks the cubicle door when the molded case circuit breaker is closed, but can be deliberately overridden if necessary.



Door mounted rotary operator

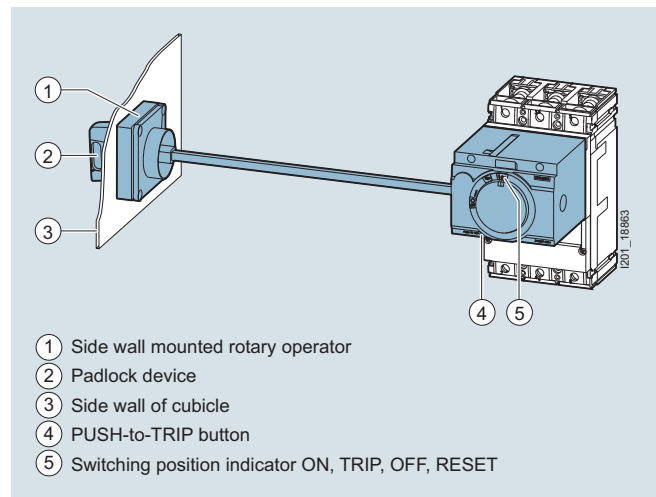
The door mounted rotary operator enables operation of the molded case circuit breaker from the cubicle door. The door element meets the requirements for degree of protection IP65 and features a door interlocking system and tolerance compensation. A variable depth adapter can be deployed to allow use of the door mounted rotary operator in conjunction with draw-out units. A supplementary handle can be attached directly to the shaft shoulder to allow convenient operation of the molded case circuit breaker when the cubicle door is open (i.e. when the control element is decoupled).



- ① Door element
- ② Switching position indicator ON, TRIP, OFF, RESET
- ③ Shaft

Side wall mounted rotary operator

The side wall mounted rotary operator is designed for installation in the cubicle side wall. It is available optionally with short shaft and mounting plate for mounting directly adjacent to the cubicle wall. The wall element meets the requirements for degree of protection IP65.



- ① Side wall mounted rotary operator
- ② Padlock device
- ③ Side wall of cubicle
- ④ PUSH-to-TRIP button
- ⑤ Switching position indicator ON, TRIP, OFF, RESET

All manual operators as well as the supplementary handle for the door mounted rotary operator are also available in a version for use in EMERGENCY-OFF applications. These are colored a conspicuous yellow/red for easier identification.

Interlocking methods

All manual operators are designed to allow locking of the operator at the handle and at the rotary operator with up to three padlocks in each case. It is also possible to fit a cylinder lock which can be used either to lock or to interlock molded case circuit breakers depending on the application.

If the cylinder lock is applied as a lock, it can be used to prevent the molded case circuit breaker from closing. The key can be removed at any time. If the lock is used to create an interlock, the key can be removed only when it is in the OFF position, allowing the creation of an interlock by the use of a single key for several breakers.

Active illumination

The manual operators are also available in illuminated variants in which the handle is illuminated red, yellow or green via LEDs (24 V DC) depending on the position of the breaker. This means that the switching position of the molded case circuit breaker can be immediately identified, even when light conditions are poor. This option can also be retrofitted.

Benefits

- Convenient circuit breaker operation inside and outside the cubicle
- Locking, blocking and interlocking for all manual operators prevents unauthorized breaker operation
- Conspicuously colored variant for EMERGENCY-OFF circuits
- Illumination for clear indication of the breaker status even when light conditions are poor
- All manual operators meet the standards for isolating characteristics defined by IEC/EN 60947-1


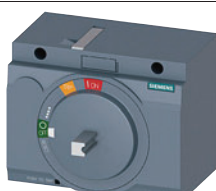
Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Manual operators

Selection and ordering data

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Version	For molded case circuit breakers/ Article No. stem	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG			
								3VA10 3VA11	3VA12	3VA20 3VA21 3VA22
Front mounted rotary operators										
 3VA9267-0EK11	Front mounted rotary operators <ul style="list-style-type: none"> • Rotary operator • Handle • For IEC • Degree of protection IP30 • For 3-pole and 4-pole breakers 									
	Type	Color								
• Standard, without illumination kit	Gray	✓	--	--	--	--	3VA9157-0EK11	1	1 unit	1CB
		--	✓	--	--	--	3VA9257-0EK11	1	1 unit	1CB
		--	--	✓	--	--	3VA9267-0EK11	1	1 unit	1CB
		--	--	--	✓	--	3VA9467-0EK11	1	1 unit	1CB
		--	--	--	--	✓	3VA9687-0EK11	1	1 unit	1CB
• Standard, with illumination kit	Gray	✓	--	--	--	--	3VA9157-0EK13	1	1 unit	1CB
		--	✓	--	--	--	3VA9257-0EK13	1	1 unit	1CB
		--	--	✓	--	--	3VA9267-0EK13	1	1 unit	1CB
		--	--	--	✓	--	3VA9467-0EK13	1	1 unit	1CB
• EMERGENCY-OFF, without illumination kit	Yellow-red	✓	--	--	--	--	3VA9157-0EK15	1	1 unit	1CB
		--	✓	--	--	--	3VA9257-0EK15	1	1 unit	1CB
		--	--	✓	--	--	3VA9267-0EK15	1	1 unit	1CB
		--	--	--	✓	--	3VA9467-0EK15	1	1 unit	1CB
		--	--	--	--	✓	3VA9687-0EK15	1	1 unit	1CB
• EMERGENCY-OFF, with illumination kit	Yellow-red	✓	--	--	--	--	3VA9157-0EK17	1	1 unit	1CB
		--	✓	--	--	--	3VA9257-0EK17	1	1 unit	1CB
		--	--	✓	--	--	3VA9267-0EK17	1	1 unit	1CB
		--	--	--	✓	--	3VA9467-0EK17	1	1 unit	1CB
• Standard, with door interlock	Gray	✓	--	--	--	--	3VA9157-0EK21	1	1 unit	1CB
		--	✓	--	--	--	3VA9257-0EK21	1	1 unit	1CB
		--	--	✓	--	--	3VA9267-0EK21	1	1 unit	1CB
		--	--	--	✓	--	3VA9467-0EK21	1	1 unit	1CB
		--	--	--	--	✓	3VA9687-0EK21	1	1 unit	1CB
• Standard, with door interlock, with illumination kit	Gray	✓	--	--	--	--	3VA9157-0EK23	1	1 unit	1CB
		--	✓	--	--	--	3VA9257-0EK23	1	1 unit	1CB
		--	--	✓	--	--	3VA9267-0EK23	1	1 unit	1CB
		--	--	--	✓	--	3VA9467-0EK23	1	1 unit	1CB
• EMERGENCY-OFF, with door interlock	Yellow-red	✓	--	--	--	--	3VA9157-0EK25	1	1 unit	1CB
		--	✓	--	--	--	3VA9257-0EK25	1	1 unit	1CB
		--	--	✓	--	--	3VA9267-0EK25	1	1 unit	1CB
		--	--	--	✓	--	3VA9467-0EK25	1	1 unit	1CB
		--	--	--	--	✓	3VA9687-0EK25	1	1 unit	1CB
• EMERGENCY-OFF, with door interlock, with illumination kit	Yellow-red	✓	--	--	--	--	3VA9157-0EK27	1	1 unit	1CB
		--	✓	--	--	--	3VA9257-0EK27	1	1 unit	1CB
		--	--	✓	--	--	3VA9267-0EK27	1	1 unit	1CB
		--	--	--	✓	--	3VA9467-0EK27	1	1 unit	1CB
 3VA9267-0GK00	Gray	✓	--	--	--	--	3VA9157-0GK00	1	1 unit	1CB
		--	✓	--	--	--	3VA9257-0GK00	1	1 unit	1CB
		--	--	✓	--	--	3VA9267-0GK00	1	1 unit	1CB
		--	--	--	✓	--	3VA9467-0GK00	1	1 unit	1CB
		--	--	--	--	✓ ¹⁾	3VA9687-0GK00	1	1 unit	1CB

¹⁾ This version already includes the adapter 8UD1900-4DA00.

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Manual operators

Version	For molded case circuit breakers/ Article No. stem					SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25						

Door mounted rotary operators

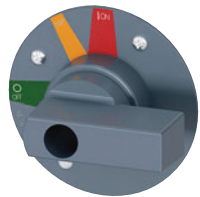


3VA9267-0FK21

Door mounted rotary operator

- Rotary operator
- Shaft 300 mm (325 mm for 1000 A)
- Mounting tolerance compensation
- Handle with masking plate 75 x 75 mm
- Degree of protection IP65
- For 3-pole and 4-pole breakers

Type	Color	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25	Article No.	Price	PU	PS	PG
• Standard	Gray	✓	--	--	--	--	3VA9157-0FK21		1	1 unit	1CB
		--	✓	--	--	--	3VA9257-0FK21		1	1 unit	1CB
		--	--	✓	--	--	3VA9267-0FK21		1	1 unit	1CB
		--	--	--	✓	--	3VA9467-0FK21		1	1 unit	1CB
		--	--	--	--	✓	3VA9687-0FK21		1	1 unit	1CB
• Standard, with illumination kit	Gray	✓	--	--	--	--	3VA9157-0FK23		1	1 unit	1CB
		--	✓	--	--	--	3VA9257-0FK23		1	1 unit	1CB
		--	--	✓	--	--	3VA9267-0FK23		1	1 unit	1CB
		--	--	--	✓	--	3VA9467-0FK23		1	1 unit	1CB
• EMERGENCY-OFF	Yellow-red	✓	--	--	--	--	3VA9157-0FK25		1	1 unit	1CB
		--	✓	--	--	--	3VA9257-0FK25		1	1 unit	1CB
		--	--	✓	--	--	3VA9267-0FK25		1	1 unit	1CB
		--	--	--	✓	--	3VA9467-0FK25		1	1 unit	1CB
		--	--	--	--	✓	3VA9687-0FK25		1	1 unit	1CB
• EMERGENCY-OFF, with illumination kit	Yellow-red	✓	--	--	--	--	3VA9157-0FK27		1	1 unit	1CB
		--	✓	--	--	--	3VA9257-0FK27		1	1 unit	1CB
		--	--	✓	--	--	3VA9267-0FK27		1	1 unit	1CB
		--	--	--	✓	--	3VA9467-0FK27		1	1 unit	1CB
• Standard, without tolerance compensation NEW	Gray	✓	--	--	--	--	3VA9157-0FK61		1	1 unit	1CB
		--	✓	--	--	--	3VA9257-0FK61		1	1 unit	1CB
		--	--	✓	--	--	3VA9267-0FK61		1	1 unit	1CB
		--	--	--	✓	--	3VA9467-0FK61		1	1 unit	1CB
		--	--	--	--	✓	3VA9687-0FK61		1	1 unit	1CB



3VA9487-0GC01

Supplementary handle for door mounted rotary operator

For operation when cabinet door is open

Type	Color	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25	Article No.	Price	PU	PS	PG
• Standard	Gray	✓	✓	--	--	--	3VA9287-0GC01		1	1 unit	1CB
		--	--	✓	--	--	3VA9487-0GC01		1	1 unit	1CB
		--	--	--	✓	--	3VA9487-0GC11		1	1 unit	1CB
• EMERGENCY-OFF	Yellow-red	✓	✓	--	--	--	3VA9287-0GC05		1	1 unit	1CB
		--	--	✓	--	--	3VA9487-0GC05		1	1 unit	1CB
		--	--	--	✓	--	3VA9487-0GC15		1	1 unit	1CB

Shaft

Versions	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25	Article No.	Price	PU	PS	PG
• 8 mm	✓	✓	✓	✓	--	8UD1900-2WA00		1	1 unit	1CB
	✓	✓	✓	✓	--	8UD1900-2WB00		1	1 unit	1CB
• 12 mm	--	--	--	--	✓	8UD1900-4WA00		1	1 unit	1CB
	--	--	--	--	✓	8UD1900-4WB00		1	1 unit	1CB



8UD1900-2WB00



8UD1900-4WB00

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC




Manual operators

	Version	For molded case circuit breakers/ Article No. stem					SD	Article No. www.siemens.com/ product?Article.No.	Price per PU	PU (UNIT, SET, M)	PS	PG
		3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25						
	Adapter for shaft											
	Versions											
	<ul style="list-style-type: none"> 8 mm x 8 mm With door mounted rotary operator and side wall mounted rotary operator 	✓	✓	✓	✓	--		8UD1900-2DA00		1	1 unit	1CB
8UD1900-2DA00												
	<ul style="list-style-type: none"> 12 mm x 12 mm With door mounted rotary operator 	--	--	--	--	✓		8UD1900-4DA00		1	1 unit	1CB
8UD1900-4DA00												
	Door coupling											
	Versions											
	<ul style="list-style-type: none"> 8 mm x 8 mm 	✓	✓	✓	✓	--		8UD1900-2HA00		1	1 unit	1CB
8UD1900-2HA00												
	<ul style="list-style-type: none"> 12 mm x 12 mm 	--	--	--	--	✓		8UD1900-4HA00		1	1 unit	1CL
8UD1900-4HA00												
	Mounting tolerance compensation											
	Versions											
	<ul style="list-style-type: none"> 8 mm x 8 mm 	✓	✓	✓	✓	--		8UD1900-2GA00		1	1 unit	1CB
8UD1900-2GA00												
	<ul style="list-style-type: none"> 12 mm x 12 mm 	--	--	--	--	✓		8UD1900-4GA00		1	1 unit	1CL
8UD1900-4GA00												
	Fixing bracket for shaft	✓	✓	--	--	--		3VA9287-0GA80		1	1 unit	1CB
		--	--	✓	✓	--		3VA9487-0GA80		1	1 unit	1CB
3VA9487-0GA80												
	Variable depth adapter 8 8 mm							3VA9487-0GB10		1	1 unit	1CB
3VA9487-0GB10												

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Manual operators

Version	For molded case circuit breakers/ SD				Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG		
	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24 d							
Side wall mounted rotary operators											
<div style="display: flex; align-items: flex-start;"> <div style="flex: 1;">  <p>3VA9267-0PK11</p> </div> <div style="flex: 4;"> <p>Side wall mounted rotary operators</p> <ul style="list-style-type: none"> • Without mounting plate <ul style="list-style-type: none"> - Rotary operator with shaft 300 mm - Handle with masking plate 75 x 75 mm - Degree of protection IP65 - For 3-pole and 4-pole breakers </div> </div>											
Type		Color									
• Standard		Gray		✓	--	--	--	3VA9157-0PK11	1	1 unit	1CB
				--	✓	--	--	3VA9257-0PK11	1	1 unit	1CB
				--	--	✓	--	3VA9267-0PK11	1	1 unit	1CB
				--	--	--	✓	3VA9467-0PK11	1	1 unit	1CB
• Standard, with illumination kit		Gray		✓	--	--	--	3VA9157-0PK13	1	1 unit	1CB
				--	✓	--	--	3VA9257-0PK13	1	1 unit	1CB
				--	--	✓	--	3VA9267-0PK13	1	1 unit	1CB
				--	--	--	✓	3VA9467-0PK13	1	1 unit	1CB
• EMERGENCY-OFF		Yellow-red		✓	--	--	--	3VA9157-0PK15	1	1 unit	1CB
				--	✓	--	--	3VA9257-0PK15	1	1 unit	1CB
				--	--	✓	--	3VA9267-0PK15	1	1 unit	1CB
				--	--	--	✓	3VA9467-0PK15	1	1 unit	1CB
• EMERGENCY-OFF, with illumination kit		Yellow-red		✓	--	--	--	3VA9157-0PK17	1	1 unit	1CB
				--	✓	--	--	3VA9257-0PK17	1	1 unit	1CB
				--	--	✓	--	3VA9267-0PK17	1	1 unit	1CB
				--	--	--	✓	3VA9467-0PK17	1	1 unit	1CB
Side wall mounted rotary operators											
<div style="display: flex; align-items: flex-start;"> <div style="flex: 1;">  <p>3VA9267-0PK51</p> </div> <div style="flex: 4;"> <p>Side wall mounted rotary operators</p> <ul style="list-style-type: none"> • With mounting plate <ul style="list-style-type: none"> - Rotary operator with short shaft - Handle with masking plate 75 x 75 mm - Degree of protection IP65 - For 3-pole and 4-pole breakers </div> </div>											
Type		Color									
• Standard		Gray		✓	--	--	--	3VA9157-0PK51	1	1 unit	1CB
				--	✓	--	--	3VA9257-0PK51	1	1 unit	1CB
				--	--	✓	--	3VA9267-0PK51	1	1 unit	1CB
				--	--	--	✓	3VA9467-0PK51	1	1 unit	1CB
• Standard, with illumination kit		Gray		✓	--	--	--	3VA9157-0PK53	1	1 unit	1CB
				--	✓	--	--	3VA9257-0PK53	1	1 unit	1CB
				--	--	✓	--	3VA9267-0PK53	1	1 unit	1CB
				--	--	--	✓	3VA9467-0PK53	1	1 unit	1CB
• EMERGENCY-OFF		Yellow-red		✓	--	--	--	3VA9157-0PK55	1	1 unit	1CB
				--	✓	--	--	3VA9257-0PK55	1	1 unit	1CB
				--	--	✓	--	3VA9267-0PK55	1	1 unit	1CB
				--	--	--	✓	3VA9467-0PK55	1	1 unit	1CB
• EMERGENCY-OFF, with illumination kit		Yellow-red		✓	--	--	--	3VA9157-0PK57	1	1 unit	1CB
				--	✓	--	--	3VA9257-0PK57	1	1 unit	1CB
				--	--	✓	--	3VA9267-0PK57	1	1 unit	1CB
				--	--	--	✓	3VA9467-0PK57	1	1 unit	1CB
Extended DIN rail for N/PE terminal											
<div style="display: flex; align-items: flex-start;"> <div style="flex: 1;">  <p>3VA9987-0GL30</p> </div> <div style="flex: 4;"> <p>Extended DIN rail for N/PE terminal</p> <ul style="list-style-type: none"> • For mounting plate • Up to 250 A </div> </div>											
								3VA9987-0GL30	1	1 unit	1CB

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Manual operators

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Version	For molded case circuit breakers/ Article No. stem					SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25	d					

Handles



8UD1731-0AB11

Handles		Type		Color		Tolerance compensation		Availability		Article No.	Price	PU	PS	PG	
• With masking plate															
• Standard	Gray	Without	✓	✓	✓	--	--	8UD1721-0AB11	1	1 unit	1CB				
		With	✓	✓	✓	--	--	8UD1721-0AB21	1	1 unit	1CB				
		Without	--	--	--	✓	--	8UD1731-0AB11	1	1 unit	1CB				
		With	--	--	--	✓	--	8UD1731-0AB21	1	1 unit	1CB				
		Without	--	--	--	--	✓	8UD1741-0AB11	1	1 unit	1CB				
	With	--	--	--	--	✓	8UD1741-0AB21	1	1 unit	1CB					
	• EMERGENCY-OFF	Yellow-red	Without	✓	✓	✓	--	--	8UD1721-0AB15	1	1 unit	1CB			
			With	✓	✓	✓	--	--	8UD1721-0AB25	1	1 unit	1CB			
			Without	--	--	--	✓	--	8UD1731-0AB15	1	1 unit	1CB			
			With	--	--	--	✓	--	8UD1731-0AB25	1	1 unit	1CB			
Without			--	--	--	--	✓	8UD1741-0AB15	1	1 unit	1CB				
With	--	--	--	--	✓	8UD1741-0AB25	1	1 unit	1CB						
Spare part: Handle lever extension		--	--	--	--	--	✓	3VA9987-0SC10	1	1 unit	1CB				
Note		--	--	--	✓	NEW	--	3VA9487-0SC10	1	1 unit	1CB				
The handle lever extension is already included in the scope of supply of the breakers.															









Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Manual operators

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Version	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
General accessories for manual operators						
 3VA9087-0SX10		Labeling plate for manual operators			1	10 units 1CB
 8UD1900-0KA20		Illumination kit for manual operators 24 V DC voltage	For molded case circuit breakers			
		3VA1, 100 ... 250 A	Front mounted rotary operators	8UD1900-0KA10	1	1 unit 1CB
		3VA2, 100 ... 630 A	Front mounted rotary operators	8UD1900-0KA20	1	1 unit 1CB
		3VA1, 3VA2, 100 ... 630 A	Door mounted rotary operator and side wall mounted rotary operator	8UD1900-0KA20	1	1 unit 1CB
 8UD1900-0MB01		Cylinder lock (type Kaba) • For door mounted rotary operator and side wall mounted rotary operator (in the masking plate) • Standard masking plate	Key 1	8UD1900-0MB01	1	1 unit 1CB
			Key 2	8UD1900-0NB01	1	1 unit 1CB
			Key 3	8UD1900-0PB01	1	1 unit 1CB
			Key 4	8UD1900-0QB01	1	1 unit 1CB
 8UD1900-0MB05		Cylinder lock (type Kaba) • For door mounted rotary operator and side wall mounted rotary operator (in the masking plate) • EMERGENCY-OFF masking plate	Key 1	8UD1900-0MB05	1	1 unit 1CB
			Key 2	8UD1900-0NB05	1	1 unit 1CB
			Key 3	8UD1900-0PB05	1	1 unit 1CB
			Key 4	8UD1900-0QB05	1	1 unit 1CB
 3VA9980-0VL10		Cylinder lock (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	Key 1	3VA9980-0VL10	1	1 unit 1CB
			Key 3	3VA9980-0VL30	1	1 unit 1CB
			Key 4	3VA9980-0VL40	1	1 unit 1CB
		Note	The cylinder lock adapter for rotary operators is also needed for locking or interlocking circuit breakers via rotary operators.			
 3VA9980-0LF20		Cylinder lock adapter for rotary operators To mount the cylinder lock in the rotary operator (also possible with door mounted rotary operator and side wall mounted rotary operator)	For molded case circuit breakers			
		3VA1, 3VA2, 100 ... 630 A		3VA9980-0LF20	1	1 unit 1CB
	3VA1/3VA2, 1000 A NEW			3VA9680-0LF20	1	1 unit 1CB

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Motor operators

Overview

MO310 side mounted motor operator

The MO310 side mounted motor operator is optimized for use in the area of electrical installation. It is mounted on the side of the 3VA1 molded case circuit breaker and, thanks to the cover size of 45 mm, is suitable for side-by-side arrangement with miniature circuit breakers.

The MO310 motor operator can also be locked with several padlocks.

MO320 front mounted motor operator

The MO320 motor operator is mounted on the front of the 3VA molded case circuit breaker and opens and closes the molded case circuit breaker by means of control cable commands (e.g. from pushbuttons or a PLC). It can also be operated manually, however, and a handle is provided on the unit for this purpose.

The motor operator also features a clear switching position indicator which indicates ON and OFF and, via LED, whether the circuit breaker has tripped (TRIP). The motor operator therefore meets the standards for isolating characteristics defined by IEC/EN 60947-1. It is thus possible to identify the switching position of the molded case circuit breaker at any time.

Two different reset modes can be selected, i.e. in one mode, the operator resets the molded case circuit breaker automatically and in the other, it waits for confirmation by an OFF signal before it resets the breaker.

Furthermore, the motor operator can be locked in the OFF position by means of several padlocks.



Benefits

- Remote operation of the molded case circuit breaker by means of control cable commands
- Clear switching position indication including TRIP provides a quick visual overview and prevents operating errors
- Locking capability prevents unauthorized operations
- Meets the standards for isolating characteristics defined by IEC/EN 60947-1
- All motor operators are suitable for use with 3 and 4-pole molded case circuit breakers.

Design

- The MO320 motor operator is simply snapped into position on a mounting frame which is installed instead of the accessories lid of the molded case circuit breaker.

Technical specifications

MO310 motor operator	3VA1
	160 A
Degree of protection	IP20, with cover frame IP30
Rated control supply voltage (operating range of control supply voltage)	42 V ... 60 V AC/ 24 V ... 60 V DC (0.85 ... 1.26) 110 V ... 230 V AC/ 110 V ... 250 V DC (0.85 ... 1.1)
Rating	250 W, max. 500 W (60 ms)
Make time, typically	< 300 ms
Break time, typically	< 300 ms

MO320 motor operator	3VA1		3VA2	
	160 A	250 A	250 A	630 A
Degree of protection	IP20, with cover frame IP30			
Rated control supply voltage (operating range of control supply voltage)	24 V ... 60 V DC (0.85 ... 1.26) 110 V ... 230 V AC/ 110 V ... 250 V DC (0.85 ... 1.1)			
Rating	250 W, max. 500 W (60 ms)			
Make time, typically	< 800 ms	< 800 ms	< 1000 ms	< 1700 ms
Break time, typically	< 800 ms	< 800 ms	< 1000 ms	< 1400 ms

Selection and ordering data

Version	For molded case circuit breakers/ Article No. stem				SD	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24						
Motor operators										
Side mounted motor operator (MO310)										
Versions										
• 24 ... 60 V DC 42 ... 60 V AC	✓	--	--	--		3VA9117-0HB10		1	1 unit	1CB
• 110 ... 230 V AC, 110 ... 250 V DC	✓	--	--	--		3VA9117-0HB20		1	1 unit	1CB
Motor operator without stored energy operator (MO320)										
Versions										
• 24 ... 60 V DC	✓	--	--	--		3VA9157-0HA10		1	1 unit	1CB
	--	✓	--	--		3VA9257-0HA10		1	1 unit	1CB
	--	--	✓	--		3VA9267-0HA10		1	1 unit	1CB
	--	--	--	✓		3VA9467-0HA10		1	1 unit	1CB
• 110 ... 230 V AC, 110 ... 250 V DC	✓	--	--	--		3VA9157-0HA20		1	1 unit	1CB
	--	✓	--	--		3VA9257-0HA20		1	1 unit	1CB
	--	--	✓	--		3VA9267-0HA20		1	1 unit	1CB
	--	--	--	✓		3VA9467-0HA20		1	1 unit	1CB



Overview**Motor operator with stored energy operator (SEO520) NEW**

The motor operator with stored energy operator (SEO520) supplements the portfolio of 3VA motor operators with a synchronizable remote operator with optional communication link.

The motor operator with stored energy operator 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 spring assemblies can also be charged manually using a supplied tool to enable them to also be operated without supply voltage.

The SEO520 is equipped with an external voltage module in the control supply voltages 24 V DC, 42-60 V AC/DC and 110-230 V AC / 110-250 V DC that can be plugged in and out quickly, thus ensuring quick access to the main terminals of the 3VA molded case circuit breaker.

In addition to the front-accessible MO320 motor operator, another reset mode is also available. Further to automatic reset and reset via an OFF signal, the SEO520 has the option of being able to be reset after confirmation by an acknowledge signal.

Note:

On account of the fast switching times, the SEO520 cannot be used with a leading changeover switch LCS.

Communication option

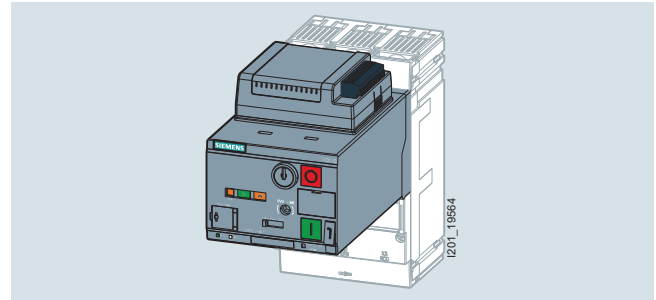
The SEO520 is also optionally available with communication functionality. A connection with the COM060 communication module integrates it into the communication environment of the 3VA molded case circuit breakers and ensures that the molded case circuit breaker can also be switched via the supported communication networks and the powerconfig and powermanager software packages.

Additional functions

Furthermore, the motor operator with stored energy operator can be locked in the OFF position by up to three padlocks. An optionally mountable cylinder lock (type Ronis) can be used to interlock the operating mode (manual/automatic).

The motor operator with stored energy operator features a clear indication of the breaker status which can mechanically indicate ON and OFF and, via LED, whether the circuit breaker has tripped (TRIP). The SEO520 therefore meets the standards for isolating characteristics defined by IEC/EN 60947-1.

A mechanical operating cycles counter can be optionally mounted that counts the operating cycles of the SEO520.

**Benefits**

- Synchronization capability with fast switching on and off by means of two spring assemblies
- Remote operation of the molded case circuit breaker by means of control cable commands or communication
- Locking capability prevents unauthorized operations
- Meets the standards for isolating characteristics defined by IEC/EN 60947-1

Technical specifications



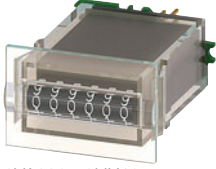


SEO520 motor operator	3VA2
	100/160/250 A
Degree of protection	IP20, with cover frame IP30
Rated control supply voltage (operating range of control supply voltage)	24 V DC (0.85 ... 1.26) 42 V ... 60 V AC/ 42 V ... 60 V DC (0.85 ... 1.26) 110 V ... 230 V AC/ 110 V ... 250 V DC (0.85 ... 1.1)
Rating	300, max. 500 (60 ms)
Make time	< 80 ms
Break time	< 80 ms

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Motor operators

Selection and ordering data

	Version for molded case circuit breakers/frame size 3VA2 100 A, 160 A, 250 A	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	
Motor operators NEW								
Motor operator with stored energy operator (SEO520)								
Versions								
 3VA9267-0HC10  3VA9267-0HC30	Without a communication link		• 24 V DC		1	1 unit	1CB	
			• 42 ... 60 V AC/DC		1	1 unit	1CB	
			• 110 ... 230 V AC, 110 ... 250 V DC		1	1 unit	1CB	
			With a communication link	• 24 V DC		1	1 unit	1CB
				• 110 ... 230 V AC, 110 ... 250 V DC		1	1 unit	1CB
 3VA9987-0HX10	Mechanical operating cycles counter For installation in the SEO520		3VA9987-0HX10		1	1 unit	1CB	
 3VA9980-0LF30	Cylinder lock adapter for SEO520 For installing cylinder locks in the SEO520		3VA9980-0LF30		1	1 unit	1CB	
 3VA9980-0VL10	Cylinder lock (type Ronis) • Includes a lock with 2 keys • For locking the operating mode (manual/auto/lock)	Key 1	3VA9980-0VL10		1	1 unit	1CB	
		Key 3	3VA9980-0VL30		1	1 unit	1CB	
		Key 4	3VA9980-0VL40		1	1 unit	1CB	

Overview

The proper functioning and in particular the safety of electrical installations does not just depend on the quality and design of the components, but also on the method of installation.

The following aspects of electrical installations are of crucial importance for the implementation of a safe, properly functioning connection to the 3VA molded case circuit breakers:

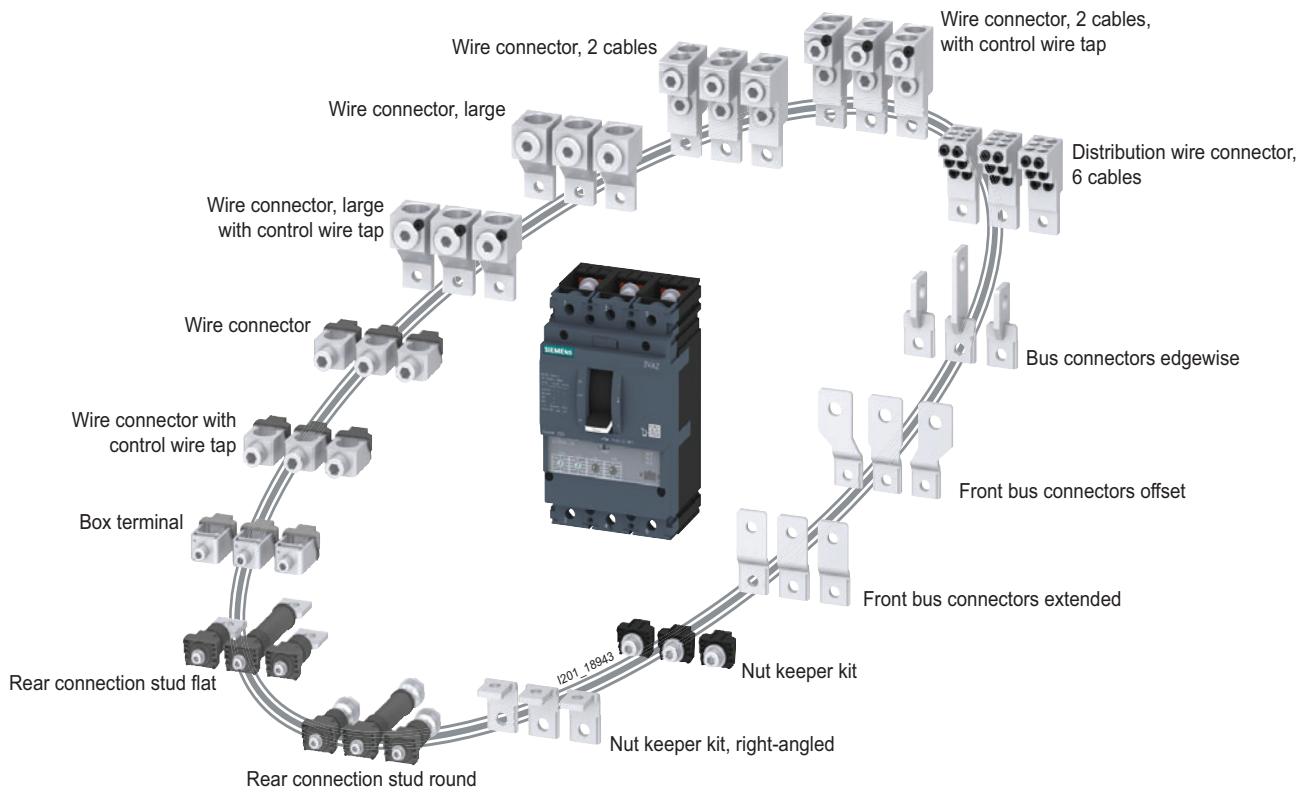
- Installation, e.g. connection to cables or busbars
- Dimensioning of the cables and busbars
- Installation medium, e.g. rigid or flexible

The following catalog pages provide all the information needed to ensure that a 3VA molded case circuit breaker is safely connected.

Connection technology for the 3VA molded case circuit breaker

The connection technology of the 3VA molded case circuit breaker is designed to support uncomplicated and convenient commissioning of the 3VA molded case circuit breakers and to meet all installation requirements.

To meet this objective, an extensive portfolio of connection components is available.







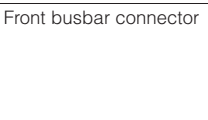


Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Connection technology

3VA1 conductor cross-sections

Connection technology	Cable medium	Cables and busbars	Dimensions	3VA1			
				3VA10 / 3VA11	3VA12	3VA13 / 3VA14	3VA15
 Box terminal	Solid cable	Cu cable	mm ²	1 x 1.5 ... 16	1 x 6 ... 16	--	--
	Stranded cable	Cu cable	mm ²	1 x 1.5 ... 70	1 x (6 ... 120), 1 x (50 ... 185)	1 x 35 ... 300 ¹⁾	--
	Finely stranded cable	Cu cable	mm ²	1 x 1.5 ... 50	1 x (10 ... 95), 1 x (95 ... 150)	1 x 25 ... 240 ¹⁾	--
	Finely stranded with insulated end sleeve	Cu cable	mm ²	1 x 1.5 ... 50	1 x (6 ... 95), 1 x (50 ... 150)	1 x 25 ... 240 ¹⁾	--
	Flexible copper busbar	Flexible busbar	mm x mm	1 x 2x ..6x [13 x 0.5] ... 1 x 2x ..9x [9 x 0.8]	1 x 2x ..6x [13 x 0.5] ... 1 x 2x ..6x [15.5 x 0.8] ... 1 x 2x ..6x [20 x 1]	1 x 2x ..10x [20 x 1] ... 1 x 2x ..10x [24 x 1]	--
 Wire connectors	Solid cable	Cu/Al cable	mm ²	1st terminal: 1 x 1.5/4 ... 10; 2nd terminal: 1 x 10 ... 16	--	--	--
	Stranded cable	Cu/Al cable	mm ²	1st terminal: 1 x 1.5/4 ... 10; 2nd terminal: 1 x 10 ... 95	1 x 35 ... 185	1 x 50 ... 300 ¹⁾	--
	Finely stranded cable	Cu cable	mm ²	1st terminal: 1 x 1.5/4 ... 10; 2nd terminal: 1 x 10 ... 35	1 x 35 ... 150	1 x 50 ... 240 ¹⁾	--
	Finely stranded with insulated end sleeve	Cu cable	mm ²	1st terminal: 1 x 1.5/4 ... 10; 2nd terminal: 1 x 10 ... 35	1 x 35 ... 150	1 x 50 ... 240 ¹⁾	--
 Wire connector, large	Solid cable			--	--	--	--
	Stranded cable	Cu/Al cable	mm ²	1 x 25 ... 150	1 x 50 ... 240	--	--
	Finely stranded cable	Cu cable	mm ²	1 x 25 ... 120	1 x 50 ... 185	--	--
	Finely stranded with insulated end sleeve	Cu cable	mm ²	1 x 25 ... 95	1 x 50 ... 185	--	--
 Wire connector for 2 cables	Solid cable			--	--	--	--
	Stranded cable	Cu/Al cable	mm ²	--	2 x 25 ... 150	2 x 70 ... 300	2 x 120 ... 300
	Finely stranded cable	Cu cable	mm ²	--	2 x 25 ... 150	2 x 70 ... 240	2 x 185
	Finely stranded with insulated end sleeve	Cu cable	mm ²	--	2 x 25 ... 70	2 x 70 ... 185	2 x 120 ... 185
 Distribution wire connector for 6 cables	Solid cable	Cu/Al cable	mm ²	6 x 1.5/4 ... 16	6 x 1.5/4 ... 16	6 x 1.5/4 ... 16	--
	Stranded cable	Cu/Al cable	mm ²	6 x 1.5/4 ... 35	6 x 1.5/4 ... 35	6 x 1.5/4 ... 35	--
	Finely stranded cable	Cu cable	mm ²	6 x 1.5 ... 25	6 x 1.5 ... 25	6 x 1.5 ... 25	--
	Finely stranded with insulated end sleeve	Cu cable	mm ²	6 x 1.5 ... 25	6 x 1.5 ... 25	6 x 1.5 ... 25	--
 Wire connector for 3 cables	Solid cable			--	--	--	--
	Stranded cable	Cu/Al cable	mm ²	--	--	--	3x 120 ... 185
	Finely stranded cable	Cu cable	mm ²	--	--	--	--
	Finely stranded with insulated end sleeve	Cu cable	mm ²	--	--	--	3x 120
 Front busbar connector	Direct (width x height)	Busbar	mm x mm	17 x 6.5	25 x 8	35 x 10	50 x 28
	Front bus connectors extended	Busbar	mm x mm	22 x 8	32 x 10	40 x 12.5	50 x 28
	Front bus connectors offset	Busbar	mm x mm	30 x 8	35 x 10	60 x 12.5	--







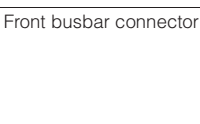
¹⁾ Only approved up to rated current 400 A

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Connection technology

3VA2 conductor cross-sections

Connection technology	Cable medium	Cables and busbars	Dimensions	3VA2		
				3VA20 / 3VA21 / 3VA22	3VA23 / 3VA24	3VA25
	Solid cable	Cu cable	mm ²	1 x 6 ... 16	--	--
	Stranded cable	Cu cable	mm ²	1 x (6 ... 120), 1 x (25 ... 185)	1 x 35 ... 300 ¹⁾	--
	Finely stranded cable	Cu cable	mm ²	1 x (10 ... 95), 1 x (35 ... 150)	1 x 25 ... 240 ¹⁾	--
	Finely stranded with insulated end sleeve	Cu cable	mm ²	1 x (6 ... 95), 1 x (25 ... 150)	1 x 25 ... 240 ¹⁾	--
	Flexible copper busbar	Flexible busbar	mm x mm	1 x 2x .6x [13 x 0.5] ... 1 x 2x .6x [15.5 x 0.8] ... 1 x 2x .6x [20 x 1]	1 x 2x ..10x [20 x 1] ... 1 x 2x ..10x [24 x 1]	--
	Solid cable	Cu/Al cable	mm ²	1 x 1.5/4 ... 16	--	--
	Stranded cable	Cu/Al cable	mm ²	1 x 1.5/4 ... 50 1 x 16 ... 185	1 x 50 ... 300 ¹⁾	--
	Finely stranded cable	Cu cable	mm ²	1 x (1.5 ... 35), 1 x (25 ... 150)	1 x 50 ... 240 ¹⁾	--
	Finely stranded with insulated end sleeve	Cu cable	mm ²	1 x (1.5 ... 35), 1 x (16 ... 120)	1 x 50 ... 240 ¹⁾	--
	Solid cable			--	--	--
	Stranded cable	Cu/Al cable	mm ²	1 x 50 ... 240	--	--
	Finely stranded cable	Cu cable	mm ²	1 x 50 ... 185	--	--
	Finely stranded with insulated end sleeve	Cu cable	mm ²	1 x 50 ... 185	--	--
	Solid cable			--	--	--
	Stranded cable	Cu/Al cable	mm ²	2 x 25 ... 150	2 x 70 ... 300	2 x 120 ... 300
	Finely stranded cable	Cu cable	mm ²	2 x 25 ... 150	2 x 70 ... 240	2 x 185
	Finely stranded with insulated end sleeve	Cu cable	mm ²	2 x 25 ... 70	2 x 70 ... 185	2 x 120 ... 185
	Solid cable	Cu/Al cable	mm ²	6 x 1.5/4 ... 16	6 x 1.5/4 ... 16	--
	Stranded cable	Cu/Al cable	mm ²	6 x 1.5/4 ... 35	6 x 1.5/4 ... 35	--
	Finely stranded cable	Cu cable	mm ²	6 x 1.5 ... 25	6 x 1.5 ... 25	--
	Finely stranded with insulated end sleeve	Cu cable	mm ²	6 x 1.5 ... 25	6 x 1.5 ... 25	--
	Solid cable	Cu/Al cable	mm ²	--	--	--
	Stranded cable	Cu/Al cable	mm ²	--	--	3 x 120 ... 185
	Finely stranded cable	Cu cable	mm ²	--	--	--
	Finely stranded with insulated end sleeve	Cu cable	mm ²	--	--	3 x 120
	Direct (width x height)	Busbar	mm x mm	25 x 8	35 x 10	50 x 28
	Front bus connectors extended	Busbar	mm x mm	32 x 10	40 x 12.5	50 x 28
	Front bus connectors offset	Busbar	mm x mm	35 x 10	60 x 12.5	--

¹⁾ Only approved up to rated current 400 A

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

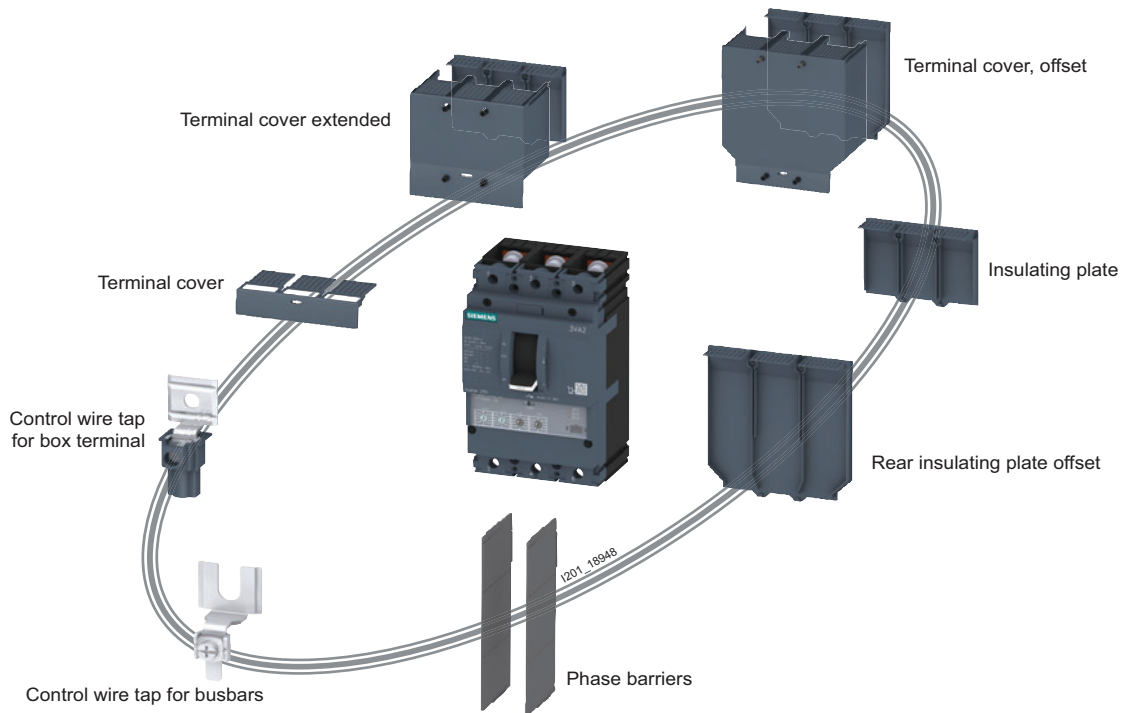
Connection technology

Further connection accessories

Insulation/auxiliary conductor connections

The connection accessories portfolio includes an extensive selection of insulating components (phase barriers, terminal

covers, etc.). Auxiliary conductor connections for box terminals and busbars are also available.



Terminal covers

Terminal covers are insulating and sealable insulation accessories which protect against accidental contact with main current paths. When mounted on the circuit breaker, terminal covers at the front provide degree of protection IP4x and when correctly installed at the infeed and load ends of the breaker, degree of protection IP2x. All terminal covers have a recess on the inside face which can be drilled out if necessary so that safe isolation can be afforded by commercially available voltage detectors.

- Short terminal covers are normally installed for all types of front termination which do not exceed the geometric dimensions of the molded case circuit breaker (the termination area) (e.g. box terminal, nut keeper kit, etc.).
- Extended terminal covers are required when bar extensions or external terminals (i.e. terminals which exceed the dimensions of the termination area of the molded case circuit breaker) are installed. The extended terminal cover consists of two parts, an insulating plate and the top half of the terminal cover. Both parts are attached by screws and thus afford the degrees of protection specified above.
- Offset terminal covers are required when front bus connectors offset are installed. The extended terminal cover consists of two parts, a rear insulating plate offset and the top half of the terminal cover. Both parts are attached by screws and thus afford the degrees of protection specified above.

Insulating plates

The purpose of insulating plates is to insulate the main terminals of the molded case circuit breaker from the mounting plate (cubicle).

- Insulating plate: in combination with bus connector extended, for example
- Rear insulating plate offset: in combination with front bus connectors offset, for example

Control wire taps

All wire connectors can be ordered with or without control wire tap (see page 2/14, [Front terminals](#)). The following accessories are available to allow the implementation of a control wire tap in combination with a box terminal or busbar connection:

- Control wire tap for box terminal: This terminal is fastened by screws in the box terminal with the cable.
- Control wire tap for busbars: This terminal is attached by screws directly to the busbar.

All control wire taps are rated for a maximum load of 15 A. Cables of up to 2.5 mm² can be connected.

Benefits




- High degree of flexibility
- Cables and busbars can be connected quickly and easily to the 3VA molded case circuit breaker
- Extensive selection of connection accessories

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Connection technology – suitable for all installation types (fixed-mounted, plug-in and draw-out versions)

Selection and ordering data

Version	Minimum for stranded cable	Maximum for stranded cable	For molded case circuit breakers/ Article No. stem					SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
			3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25						
Box terminals suitable for all installation types (fixed-mounted, plug-in and draw-out versions)													
 <p>3VA9163-0JA12</p> <p>Box terminal</p> <ul style="list-style-type: none"> • Connection of Cu cable • Included in scope of supply: 3 single terminals 	1.5 mm ²	70 mm ²	✓	--	--	--	--						
	6 mm ²	120 mm ²	--	✓	--	--	--						
	50 mm ²	185 mm ²	--	✓	--	--	--						
	6 mm ²	120 mm ²	--	--	✓	--	--						
	25 mm ²	185 mm ²	--	--	✓	--	--						
	35 mm ²	300 mm ²	--	--	--	✓ ¹⁾	--						
 <p>3VA9164-0JA12</p> <p>Box terminal</p> <ul style="list-style-type: none"> • Connection of Cu cable • Included in scope of supply: 4 single terminals 	1.5 mm ²	70 mm ²	✓	--	--	--	--						
	6 mm ²	120 mm ²	--	✓	--	--	--						
	50 mm ²	185 mm ²	--	✓	--	--	--						
	6 mm ²	120 mm ²	--	--	✓	--	--						
	25 mm ²	185 mm ²	--	--	✓	--	--						
	35 mm ²	300 mm ²	--	--	--	✓ ¹⁾	--						
Wire connectors suitable for all installation types (fixed-mounted, plug-in and draw-out versions)													
 <p>3VA9103-0JB11</p> <p>Wire connector</p> <ul style="list-style-type: none"> • Connection of Cu/Al cable • Included in scope of supply: 3 single terminals 	1.5 mm ²	10 mm ²	✓ NEW	--	--	--	--						
	10 mm ²	95 mm ²	✓	--	--	--	--						
	35 mm ²	185 mm ²	--	✓	--	--	--						
	1.5 mm ²	50 mm ²	--	--	✓	--	--						
	16 mm ²	185 mm ²	--	--	✓	--	--						
 <p>3VA9503-0JB23</p> <p>Wire connector, 2 cables</p> <ul style="list-style-type: none"> • Connection of Cu/Al cable • Included in scope of supply: 3 single terminals and 1 terminal cover, short 	120 mm ²	300 mm ²	--	--	--	--	✓						
 <p>3VA9503-0JB32</p> <p>Wire connector, 3 cables</p> <ul style="list-style-type: none"> • Connection of Cu/Al cable • Included in scope of supply: 3 single terminals and 1 terminal cover, short 	120 mm ²	185 mm ²	--	--	--	--	✓ NEW						
 <p>3VA9104-0JB11</p> <p>Wire connector</p> <ul style="list-style-type: none"> • Connection of Cu/Al cable • Included in scope of supply: 4 single terminals 	1.5 mm ²	10 mm ²	✓ NEW	--	--	--	--						
	10 mm ²	95 mm ²	✓	--	--	--	--						
	35 mm ²	185 mm ²	--	✓	--	--	--						
	1.5 mm ²	50 mm ²	--	--	✓	--	--						
	16 mm ²	185 mm ²	--	--	✓	--	--						
	50 mm ²	300 mm ²	--	--	--	✓ ²⁾	--						

1) Only approved up to rated current 400 A





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

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Connection technology – suitable for all installation types (fixed-mounted, plug-in and draw-out versions)

2



Version	Minimum for stranded cable	Maximum for stranded cable	For molded case circuit breakers/ Article No. stem					SD	Article No. www.siemens.com/ product?Article.No.	Price per PU	PU (UNIT, SET, M)	PS	PG
			3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25						
 Wire connector, 2 cables • Connection of Cu/Al cable • Included in scope of supply: 4 single terminals and 1 terminal cover, short 3VA9504-OJB23	120 mm ²	300 mm ²	--	--	--	--	✓	3VA9504-OJB23		1	1 unit	1CB	
	120 mm ²	185 mm ²	--	--	--	--	✓ NEW	3VA9504-OJB32		1	1 unit	1CB	
 Wire connector with control wire tap • Connection of Cu/Al cable • Included in scope of supply: 3 single terminals 3VA9103-OJG11	1.5 mm ²	10 mm ²	✓ NEW	--	--	--	--	3VA9113-OJG10		1	1 unit	1CB	
	10 mm ²	95 mm ²	✓	--	--	--	--	3VA9113-OJG11		1	1 unit	1CB	
	35 mm ²	185 mm ²	--	✓	--	--	--	3VA9253-OJG12		1	1 unit	1CB	
	1.5 mm ²	50 mm ²	--	--	✓	--	--	3VA9103-OJG11		1	1 unit	1CB	
	16 mm ²	185 mm ²	--	--	✓	--	--	3VA9263-OJG12		1	1 unit	1CB	
	50 mm ²	300 mm ²	--	--	--	✓ ¹⁾	--	3VA9383-OJG13		1	1 unit	1CB	
 Wire connector, 2 cables, with control wire tap • Connection of Cu/Al cable • Included in scope of supply: 3 single terminals and 1 terminal cover, short 3VA9503-OJG23	120 mm ²	300 mm ²	--	--	--	--	✓	3VA9503-OJG23		1	1 unit	1CB	
	120 mm ²	185 mm ²	--	--	--	--	✓ NEW	3VA9503-OJG32		1	1 unit	1CB	
 Wire connector with control wire tap • Connection of Cu/Al cable • Included in scope of supply: 4 single terminals 3VA9104-OJG11	1.5 mm ²	10 mm ²	✓ NEW	--	--	--	--	3VA9114-OJG10		1	1 unit	1CB	
	10 mm ²	95 mm ²	✓	--	--	--	--	3VA9114-OJG11		1	1 unit	1CB	
	35 mm ²	185 mm ²	--	✓	--	--	--	3VA9254-OJG12		1	1 unit	1CB	
	1.5 mm ²	50 mm ²	--	--	✓	--	--	3VA9104-OJG11		1	1 unit	1CB	
	16 mm ²	185 mm ²	--	--	✓	--	--	3VA9264-OJG12		1	1 unit	1CB	
50 mm ²	300 mm ²	--	--	--	✓ ¹⁾	--	3VA9384-OJG13		1	1 unit	1CB		





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

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Connection technology – suitable for all installation types (fixed-mounted, plug-in and draw-out versions)

Version	Minimum for stranded cable	Maximum for stranded cable	For molded case circuit breakers/ Article No. stem					SD	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
			3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25						
 <p>Wire connector, 2 cables, with control wire tap • Connection of Cu/Al cable • Included in scope of supply: 4 single terminals and 1 terminal cover, short</p> <p>3VA9504-0JG23</p>	120 mm ²	300 mm ²	--	--	--	--	✓				1	1 unit	1CB
 <p>Wire connector, 3 cables, with control wire tap • Connection of Cu/Al cable • Included in scope of supply: 4 single terminals and 1 terminal cover, short</p> <p>3VA9504-0JG32</p>	120 mm ²	185 mm ²	--	--	--	--	✓ NEW				1	1 unit	1CB






Version	Max. tap width	Max. tap thickness	For molded case circuit breakers/ Article No. stem					SD	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
			3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25						
Nut keeper kits suitable for all installation types (fixed-mounted, plug-in and draw-out versions)													
 <p>Nut keeper kit Included in scope of supply: • 3 single terminals</p> <p>3VA9203-0QA00</p>	17 mm	6.5 mm	✓	--	--	--	--				1	1 unit	1CB
	25 mm	8 mm	--	✓	--	--	--				1	1 unit	1CB
	25 mm	8 mm	--	--	✓	--	--				1	1 unit	1CB
	35 mm	10 mm	--	--	--	✓	--				1	1 unit	1CB
 <p>Nut keeper kit Included in scope of supply: • Nut keeper kit for 3-pole breakers • 1 terminal cover</p> <p>3VA9603-0QA00</p>	50 mm	28 mm	--	--	--	--	✓				1	1 unit	1CB
 <p>Nut keeper kit Included in scope of supply: • 4 single terminals</p> <p>3VA9204-0QA00</p>	17 mm	6.5 mm	✓	--	--	--	--				1	1 unit	1CB
	25 mm	8 mm	--	✓	--	--	--				1	1 unit	1CB
	25 mm	8 mm	--	--	✓	--	--				1	1 unit	1CB
	35 mm	10 mm	--	--	--	✓	--				1	1 unit	1CB
 <p>Nut keeper kit Included in scope of supply: • Nut keeper kit for 4-pole breakers • 1 terminal cover</p> <p>3VA9604-0QA00</p>	50 mm	28 mm	--	--	--	--	✓				1	1 unit	1CB

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Connection technology – suitable for all installation types (fixed-mounted, plug-in and draw-out versions)






2

Version	Max. tap width	Max. tap thickness	For molded case circuit breakers/ Article No. stem						SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
			3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25							
Bus connectors extended suitable for all installation types (fixed-mounted, plug-in and draw-out versions)														
 3VA9263-0QB00	Front bus connectors extended Included in scope of supply: • 3 single terminals • 2 phase barriers	22 mm	8 mm	✓	--	--	--	--		3VA9153-0QB00		1	1 unit	1CB
		32 mm	10 mm	--	✓	--	--	--		3VA9253-0QB00		1	1 unit	1CB
		32 mm	10 mm	--	--	✓	--	--		3VA9263-0QB00		1	1 unit	1CB
		40 mm	12.5 mm	--	--	--	✓	--		3VA9483-0QB00		1	1 unit	1CB
 3VA9603-0QB00	Front bus connectors extended Included in scope of supply: • 3 single terminals • 2 phase barriers	50 mm	28 mm	--	--	--	--	✓		3VA9603-0QB00		1	1 unit	1CB
 3VA9264-0QB00	Front bus connectors extended Included in scope of supply: • 4 single terminals • 3 phase barriers	22 mm	8 mm	✓	--	--	--	--		3VA9154-0QB00		1	1 unit	1CB
		32 mm	10 mm	--	✓	--	--	--		3VA9254-0QB00		1	1 unit	1CB
		32 mm	10 mm	--	--	✓	--	--		3VA9264-0QB00		1	1 unit	1CB
		40 mm	12.5 mm	--	--	--	✓	--		3VA9484-0QB00		1	1 unit	1CB
 3VA9604-0QB00	Front bus connectors extended Included in scope of supply: • 4 single terminals • 3 phase barriers	50 mm	28 mm	--	--	--	--	✓		3VA9604-0QB00		1	1 unit	1CB
 3VA9263-0QC00	Front bus connectors offset Included in scope of supply: • 3 single terminals • 2 phase barriers Distance between pole centers: 100/160 A = 35 mm 250 A = 45 mm 400/630 A = 70 mm	30 mm	8 mm	✓	--	--	--	--		3VA9153-0QC00		1	1 unit	1CB
		35 mm	10 mm	--	✓	--	--	--		3VA9253-0QC00		1	1 unit	1CB
		35 mm	10 mm	--	--	✓	--	--		3VA9263-0QC00		1	1 unit	1CB
		60 mm	12.5 mm	--	--	--	✓	--		3VA9483-0QC00		1	1 unit	1CB

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Connection technology – suitable for all installation types (fixed-mounted, plug-in and draw-out versions)









	Version	Max. tap width	Max. tap thickness	For molded case circuit breakers/ Article No. stem				SD	Article No. www.siemens.com/product?Article.No.	Price per PU	PU (UNIT, SET, M)	PS	PG
				3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24						
 3VA9263-QQC00	Front bus connectors offset Included in scope of supply: • 3 single terminals • 2 phase barriers Distance between pole centers: 100/160 A = 35 mm 250 A = 45 mm 400/630 A = 70 mm	30 mm	8 mm	✓	--	--	--	3VA9153-QQC00		1	1 unit	1CB	
		35 mm	10 mm	--	✓	--	--	3VA9253-QQC00		1	1 unit	1CB	
		35 mm	10 mm	--	--	✓	--	3VA9263-QQC00		1	1 unit	1CB	
		60 mm	12.5 mm	--	--	--	✓	3VA9483-QQC00		1	1 unit	1CB	
 3VA9263-QQD00	Bus connectors edgewise Included in scope of supply: • 3 single terminals • 2 phase barriers	20 mm	6 mm	✓	--	--	--	3VA9153-QQD00		1	1 unit	1CB	
		25 mm	7 mm	--	✓	--	--	3VA9253-QQD00		1	1 unit	1CB	
		25 mm	7 mm	--	--	✓	--	3VA9263-QQD00		1	1 unit	1CB	
		40 mm	8 mm	--	--	--	✓	3VA9483-QQD00		1	1 unit	1CB	
 3VA9264-QQD00	Bus connectors edgewise Included in scope of supply: • 4 single terminals • 3 phase barriers	20 mm	6 mm	✓	--	--	--	3VA9154-QQD00		1	1 unit	1CB	
		25 mm	7 mm	--	✓	--	--	3VA9254-QQD00		1	1 unit	1CB	
		25 mm	7 mm	--	--	✓	--	3VA9264-QQD00		1	1 unit	1CB	
		40 mm	8 mm	--	--	--	✓	3VA9484-QQD00		1	1 unit	1CB	
 3VA9223-QQG00	Nut keeper kit right-angled¹⁾ Included in scope of supply: • 3 single terminals • 2 phase barriers	22 mm	8 mm	✓	--	--	--	3VA9113-QQG00		1	1 unit	1CB	
		32 mm	10 mm	--	✓	--	--	3VA9213-QQG00		1	1 unit	1CB	
		32 mm	10 mm	--	--	✓	--	3VA9223-QQG00		1	1 unit	1CB	
		40 mm	12.5 mm	--	--	--	✓	3VA9403-QQG00		1	1 unit	1CB	
 3VA9224-QQG00	Nut keeper kit right-angled¹⁾ Included in scope of supply: • 4 single terminals • 3 phase barriers	22 mm	8 mm	✓	--	--	--	3VA9114-QQG00		1	1 unit	1CB	
		32 mm	10 mm	--	✓	--	--	3VA9214-QQG00		1	1 unit	1CB	
		32 mm	10 mm	--	--	✓	--	3VA9224-QQG00		1	1 unit	1CB	
		40 mm	12.5 mm	--	--	--	✓	3VA9404-QQG00		1	1 unit	1CB	

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

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Connection technology – suitable for all installation types (fixed-mounted, plug-in and draw-out versions)

Version	For molded case circuit breakers/ Article No. stem				SD	Article No. www.siemens.com/ product?Article.No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24						
Rear connection studs flat suitable for all installation types (fixed-mounted, plug-in and draw-out versions)										
 3VA9203-0QE00	Rear connection stud flat Included in scope of supply: • 2 short connection studs flat • 1 long connection stud flat	✓	--	--	--		3VA9113-0QE00	1	1 unit	1CB
		--	✓	--	--		3VA9213-0QE00	1	1 unit	1CB
		--	--	✓	--		3VA9203-0QE00	1	1 unit	1CB
		--	--	--	✓		3VA9403-0QE00	1	1 unit	1CB
 3VA9204-0QE00	Rear connection stud flat Included in scope of supply: • 2 short connection studs flat • 2 long connection studs flat	✓	--	--	--		3VA9114-0QE00	1	1 unit	1CB
		--	✓	--	--		3VA9214-0QE00	1	1 unit	1CB
		--	--	✓	--		3VA9204-0QE00	1	1 unit	1CB
		--	--	--	✓		3VA9404-0QE00	1	1 unit	1CB
 3VA9201-0QE10	Rear connection stud flat Included in scope of supply: • 1 short connection stud flat	✓	--	--	--		3VA9111-0QE10	1	1 unit	1CB
		--	✓	--	--		3VA9211-0QE10	1	1 unit	1CB
		--	--	✓	--		3VA9201-0QE10	1	1 unit	1CB
		--	--	--	✓		3VA9401-0QE10	1	1 unit	1CB
 3VA9201-0QE20	Rear connection stud flat Included in scope of supply: • 1 long connection stud flat	✓	--	--	--		3VA9111-0QE20	1	1 unit	1CB
		--	✓	--	--		3VA9211-0QE20	1	1 unit	1CB
		--	--	✓	--		3VA9201-0QE20	1	1 unit	1CB
		--	--	--	✓		3VA9401-0QE20	1	1 unit	1CB
Rear connection studs round suitable for all installation types (fixed-mounted, plug-in and draw-out versions)										
 3VA9203-0QF00	Rear connection stud round Included in scope of supply: • 1 long connection stud round • 2 short connection studs round	✓	--	--	--		3VA9113-0QF00	1	1 unit	1CB
		--	✓	--	--		3VA9213-0QF00	1	1 unit	1CB
		--	--	✓	--		3VA9203-0QF00	1	1 unit	1CB
		--	--	--	✓		3VA9403-0QF00	1	1 unit	1CB
 3VA9204-0QF00	Rear connection stud round Included in scope of supply: • 2 long connection studs round • 2 short connection studs round	✓	--	--	--		3VA9114-0QF00	1	1 unit	1CB
		--	✓	--	--		3VA9214-0QF00	1	1 unit	1CB
		--	--	✓	--		3VA9204-0QF00	1	1 unit	1CB
		--	--	--	✓		3VA9404-0QF00	1	1 unit	1CB
 3VA9201-0QF10	Rear connection stud round Included in scope of supply: • 1 short connection stud round	✓	--	--	--		3VA9111-0QF10	1	1 unit	1CB
		--	✓	--	--		3VA9211-0QF10	1	1 unit	1CB
		--	--	✓	--		3VA9201-0QF10	1	1 unit	1CB
		--	--	--	✓		3VA9401-0QF10	1	1 unit	1CB
 3VA9111-0QF20	Rear connection stud round Included in scope of supply: • 1 long connection stud round	✓	--	--	--		3VA9111-0QF20	1	1 unit	1CB
		--	✓	--	--		3VA9211-0QF20	1	1 unit	1CB
		--	--	✓	--		3VA9201-0QF20	1	1 unit	1CB
		--	--	--	✓		3VA9401-0QF20	1	1 unit	1CB

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Connection technology – specially for fixed mounting

Version	For molded case circuit breakers/ Article No. stem					SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25						

Phase barriers suitable for all installation types (fixed-mounted, plug-in and draw-out versions)



3VA9262-0WA00

Phase barriers

Included in scope of supply:
• 2 phase barriers

✓	--	--	--	--		3VA9152-0WA00		1	1 unit	1CB
--	✓	--	--	--		3VA9252-0WA00		1	1 unit	1CB
--	--	✓	--	--		3VA9262-0WA00		1	1 unit	1CB
--	--	--	✓	--		3VA9482-0WA00		1	1 unit	1CB
--	--	--	--	✓		3VA9602-0WA00		1	1 unit	1CB

Version	Max. tap width	Max. tap thickness	For molded case circuit breakers/ Article No. stem					SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
			3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25						

Bus connectors extended specially for fixed mounting



3VA9151-0QB00

Front bus connectors extended

Included in scope of supply:
• 1 busbar connection piece







	22 mm	8 mm	✓	--	--	--		3VA9151-0QB00		1	1 unit	1CB
--	-------	------	---	----	----	----	--	----------------------	--	---	--------	-----

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Connection technology – specially for fixed mounting








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Version	Minimum for stranded cable	Maximum for stranded cable	For molded case circuit breakers/ Article No. stem				SD	Article No. www.siemens.com/product?Article.No.	Price per PU	PU (UNIT, SET, M)	PS	PG
			3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24						
Wire connectors specially for fixed mounting												
 Wire connector, large • Connection of Cu/Al cable • Included in scope of supply: - 2 single terminals - 1 terminal cover extended - 1 insulating plate 3VA9112-0JJ12	25 mm ²	150 mm ²	✓	--	--	--		3VA9112-0JJ12		1	1 unit	1CB
	50 mm ²	240 mm ²	--	✓	--	--		3VA9113-0JJ12		1	1 unit	1CB
 Wire connector, large • Connection of Cu/Al cable • Included in scope of supply: - 3 single terminals - 1 terminal cover extended - 1 insulating plate 3VA9113-0JJ12	25 mm ²	150 mm ²	✓	--	--	--		3VA9113-0JJ12		1	1 unit	1CB
	50 mm ²	240 mm ²	--	✓	--	--		3VA9213-0JJ13		1	1 unit	1CB
	50 mm ²	240 mm ²	--	--	✓	--		3VA9223-0JJ13		1	1 unit	1CB
 Wire connector, large • Connection of Cu/Al cable • Included in scope of supply: - 4 single terminals - 1 terminal cover extended - 1 insulating plate 3VA9114-0JJ12	25 mm ²	150 mm ²	✓	--	--	--		3VA9114-0JJ12		1	1 unit	1CB
	50 mm ²	240 mm ²	--	✓	--	--		3VA9214-0JJ13		1	1 unit	1CB
	50 mm ²	240 mm ²	--	--	✓	--		3VA9224-0JJ13		1	1 unit	1CB
 Wire connector, large, with control wire tap • Connection of Cu/Al cable • Included in scope of supply: - 2 single terminals - 1 terminal cover extended - 1 insulating plate 3VA9112-0JC12	25 mm ²	150 mm ²	✓	--	--	--		3VA9112-0JC12		1	1 unit	1CB
	50 mm ²	240 mm ²	--	✓	--	--		3VA9113-0JC12		1	1 unit	1CB
 Wire connector, large, with control wire tap • Connection of Cu/Al cable • Included in scope of supply: - 3 single terminals - 1 terminal cover extended - 1 insulating plate 3VA9223-0JC13	25 mm ²	150 mm ²	✓	--	--	--		3VA9113-0JC12		1	1 unit	1CB
	50 mm ²	240 mm ²	--	✓	--	--		3VA9213-0JC13		1	1 unit	1CB
	50 mm ²	240 mm ²	--	--	✓	--		3VA9223-0JC13		1	1 unit	1CB
 Wire connector, large, with control wire tap • Connection of Cu/Al cable • Included in scope of supply: - 4 single terminals - 1 terminal cover extended - 1 insulating plate 3VA9114-0JC12	25 mm ²	150 mm ²	✓	--	--	--		3VA9114-0JC12		1	1 unit	1CB
	50 mm ²	240 mm ²	--	✓	--	--		3VA9214-0JC13		1	1 unit	1CB
	50 mm ²	240 mm ²	--	--	✓	--		3VA9224-0JC13		1	1 unit	1CB

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Connection technology – specially for fixed mounting



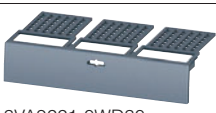





Version	Minimum for stranded cable	Maximum for stranded cable	For molded case circuit breakers/ Article No. stem				SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
			3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24						
 Wire connector, 2 cables • Connection of Cu/Al cable • Included in scope of supply: - 3 single terminals - 1 terminal cover extended - 1 insulating plate 3VA9223-0JJ22	2 x 25 mm ²	2 x 150 mm ²	--	✓	--	--	3VA9213-0JJ22		1	1 unit	1CB	
	2 x 25 mm ²	2 x 150 mm ²	--	--	✓	--	3VA9223-0JJ22		1	1 unit	1CB	
	2 x 70 mm ²	2 x 300 mm ²	--	--	--	✓	3VA9403-0JJ23		1	1 unit	1CB	
 Wire connector, 2 cables • Connection of Cu/Al cable • Included in scope of supply: - 4 single terminals - 1 terminal cover extended - 1 insulating plate 3VA9224-0JJ22	2 x 25 mm ²	2 x 150 mm ²	--	✓	--	--	3VA9214-0JJ22		1	1 unit	1CB	
	2 x 25 mm ²	2 x 150 mm ²	--	--	✓	--	3VA9224-0JJ22		1	1 unit	1CB	
	2 x 70 mm ²	2 x 300 mm ²	--	--	--	✓	3VA9404-0JJ23		1	1 unit	1CB	
 Wire connector, 2 cables, with control wire tap • Connection of Cu/Al cable • Included in scope of supply: - 3 single terminals - 1 terminal cover extended - 1 insulating plate 3VA9223-0JC22	2 x 25 mm ²	2 x 150 mm ²	--	✓	--	--	3VA9213-0JC22		1	1 unit	1CB	
	2 x 25 mm ²	2 x 150 mm ²	--	--	✓	--	3VA9223-0JC22		1	1 unit	1CB	
	2 x 70 mm ²	2 x 300 mm ²	--	--	--	✓	3VA9403-0JC23		1	1 unit	1CB	
 Wire connector, 2 cables, with control wire tap • Connection of Cu/Al cable • Included in scope of supply: - 4 single terminals - 1 terminal cover extended - 1 insulating plate 3VA9224-0JC22	2 x 25 mm ²	2 x 150 mm ²	--	✓	--	--	3VA9214-0JC22		1	1 unit	1CB	
	2 x 25 mm ²	2 x 150 mm ²	--	--	✓	--	3VA9224-0JC22		1	1 unit	1CB	
	2 x 70 mm ²	2 x 300 mm ²	--	--	--	✓	3VA9404-0JC23		1	1 unit	1CB	
 Distribution wire connector, 6 cables • Connection of Cu/Al cable • Included in scope of supply: - 2 single terminals - 1 terminal cover extended - 1 insulating plate 3VA9112-0JF60	6 x 1.5 mm ²	6 x 35 mm ²	✓	--	--	--	3VA9112-0JF60		1	1 unit	1CB	
 Distribution wire connector, 6 cables • Connection of Cu/Al cable • Included in scope of supply: - 3 single terminals - 1 terminal cover extended - 1 insulating plate 3VA9223-0JF60	6 x 1.5 mm ²	6 x 35 mm ²	✓	--	--	--	3VA9113-0JF60		1	1 unit	1CB	
			--	✓	--	--	3VA9213-0JF60		1	1 unit	1CB	
			--	--	✓	--	3VA9223-0JF60		1	1 unit	1CB	
			--	--	--	✓	3VA9303-0JF60		1	1 unit	1CB	
 Distribution wire connector, 6 cables • Connection of Cu/Al cable • Included in scope of supply: - 4 single terminals - 1 terminal cover extended - 1 insulating plate 3VA9224-0JF60	6 x 1.5 mm ²	6 x 35 mm ²	✓	--	--	--	3VA9114-0JF60		1	1 unit	1CB	
			--	✓	--	--	3VA9214-0JF60		1	1 unit	1CB	
			--	--	✓	--	3VA9224-0JF60		1	1 unit	1CB	
			--	--	--	✓	3VA9304-0JF60		1	1 unit	1CB	

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Connection technology – specially for fixed mounting







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Version	For molded case circuit breakers/ Article No. stem				SD	Article No. www.siemens.com/ product?Article.No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24						
Terminal covers specially for fixed mounting										
 3VA9111-0WD10	Terminal cover for 1-pole breakers	✓	--	--	--		3VA9111-0WD10	1	1 unit	1CB
	 3VA9111-0WD20	Terminal cover for 2-pole breakers	✓	--	--	--		3VA9111-0WD20	1	1 unit
 3VA9221-0WD30		Terminal cover for 3-pole breakers	✓	--	--	--		3VA9111-0WD30	1	1 unit
	--		✓	--	--		3VA9211-0WD30	1	1 unit	1CB
	--		--	✓	--		3VA9221-0WD30	1	1 unit	1CB
	--		--	--	✓		3VA9481-0WD30	1	1 unit	1CB
 3VA9221-0WD40	Terminal cover for 4-pole breakers	✓	--	--	--		3VA9111-0WD40	1	1 unit	1CB
		--	✓	--	--		3VA9211-0WD40	1	1 unit	1CB
		--	--	✓	--		3VA9221-0WD40	1	1 unit	1CB
		--	--	--	✓		3VA9481-0WD40	1	1 unit	1CB
 3VA9111-0WF20	Terminal cover extended, 2-pole Including insulating plate	✓	--	--	--		3VA9111-0WF20	1	1 unit	1CB
		 3VA9221-0WF30	Terminal cover extended for 3-pole breakers Including insulating plate	✓	--	--	--		3VA9111-0WF30	1
--	✓			--	--		3VA9211-0WF30	1	1 unit	1CB
--	--			✓	--		3VA9221-0WF30	1	1 unit	1CB
--	--			--	✓		3VA9481-0WF30	1	1 unit	1CB
 3VA9221-0WF40	Terminal cover extended for 4-pole breakers Including insulating plate	✓	--	--	--		3VA9111-0WF40	1	1 unit	1CB
		--	✓	--	--		3VA9211-0WF40	1	1 unit	1CB
		--	--	✓	--		3VA9221-0WF40	1	1 unit	1CB
		--	--	--	✓		3VA9481-0WF40	1	1 unit	1CB
 3VA9221-0WG30	Terminal cover offset for 3-pole breakers Including insulating plate	✓	--	--	--		3VA9111-0WG30	1	1 unit	1CB
		--	✓	--	--		3VA9211-0WG30	1	1 unit	1CB
		--	--	✓	--		3VA9221-0WG30	1	1 unit	1CB
		--	--	--	✓		3VA9401-0WG30	1	1 unit	1CB

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Connection technology – specially for fixed mounting





Version	For molded case circuit breakers/ Article No. stem				SD	Article No. www.siemens.com/ product?Article.No.	Price per PU	PU (UNIT, SET, M)	PS	PG	
	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24							
 <p>Terminal cover offset for 4-pole breakers Including insulating plate</p>	✓	--	--	--		3VA9111-0WG40		1	1 unit	1CB	
	--	✓	--	--		3VA9211-0WG40		1	1 unit	1CB	
	--	--	✓	--		3VA9221-0WG40		1	1 unit	1CB	
	--	--	--	✓		3VA9401-0WG40		1	1 unit	1CB	
3VA9221-0WG40											
Insulating plates specially for fixed mounting											
 <p>Insulating plate, 2-pole</p>	✓	--	--	--		3VA9111-0WJ20		1	1 unit	1CB	
	3VA9111-0WJ20										
	 <p>Insulating plate, 3-pole</p>	✓	--	--	--		3VA9111-0WJ30		1	1 unit	1CB
		--	✓	--	--		3VA9211-0WJ30		1	1 unit	1CB
--		--	✓	--		3VA9221-0WJ30		1	1 unit	1CB	
--		--	--	✓		3VA9481-0WJ30		1	1 unit	1CB	
3VA9221-0WJ30											
 <p>Insulating plate, 4-pole</p>	✓	--	--	--		3VA9111-0WJ40		1	1 unit	1CB	
	--	✓	--	--		3VA9211-0WJ40		1	1 unit	1CB	
	--	--	✓	--		3VA9221-0WJ40		1	1 unit	1CB	
	--	--	--	✓		3VA9481-0WJ40		1	1 unit	1CB	
3VA9221-0WJ40											
 <p>Insulating plate offset, 3-pole</p>	✓	--	--	--		3VA9111-0WK30		1	1 unit	1CB	
	--	✓	--	--		3VA9211-0WK30		1	1 unit	1CB	
	--	--	✓	--		3VA9221-0WK30		1	1 unit	1CB	
	--	--	--	✓		3VA9481-0WK30		1	1 unit	1CB	
3VA9221-0WK30											
 <p>Insulating plate offset, 4-pole</p>	✓	--	--	--		3VA9111-0WK40		1	1 unit	1CB	
	--	✓	--	--		3VA9211-0WK40		1	1 unit	1CB	
	--	--	✓	--		3VA9221-0WK40		1	1 unit	1CB	
	--	--	--	✓		3VA9481-0WK40		1	1 unit	1CB	
3VA9221-0WK40											

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Connection technology – specially for fixed mounting









2

Version	For molded case circuit breakers/ Article No. stem				SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24						
Control wire taps specially for fixed mounting										
 3VA9200-0WB00	Control wire tap for box terminal					3VA9110-0WB00		1	10 units	1CB
						3VA9200-0WB00		1	10 units	1CB
						3VA9480-0WB00		1	10 units	1CB
 3VA9200-0WC00	Control wire tap for busbar					3VA9110-0WC00		1	10 units	1CB
						3VA9200-0WC00		1	10 units	1CB
						3VA9480-0WC00		1	10 units	1CB
DC insulating plates specially for fixed mounting										
 3VA9113-0SG10	DC insulating plate for 3VA1									
	Versions • For fixed-mounted molded case circuit breakers									
	- 3-pole					3VA9113-0SG10		1	10 units	1CB
- 4-pole					3VA9114-0SG10		1	10 units	1CB	
Side plate specially for fixed mounting										
 3VA9112-0SG20	Side plate for 3VA1									
	Versions • For fixed-mounted molded case circuit breakers									
	- 2-pole					3VA9112-0SG20		1	5 units	1CB

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Connection technology – specially for plug-in and draw-out units



Version	For molded case circuit breakers/ Article No. stem				SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24						
Terminal covers specially for plug-in and draw-out units										
Terminal cover for plug-in/draw-out unit (spare part)										
<ul style="list-style-type: none"> To provide circuit breaker touch protection For mounting on the molded case circuit breaker 										
Versions										
 3-pole Included in scope of supply: Cover for infeed and outgoing side	✓	--	--	--		3VA9113-0KB01		1	1 unit	1CB
	--	✓	--	--		3VA9213-0KB01		1	1 unit	1CB
	--	--	✓	--		3VA9123-0KB01		1	1 unit	1CB
	--	--	--	✓		3VA9353-0KB01		1	1 unit	1CB
 3VA9123-0KB01 4-pole Included in scope of supply: Cover for infeed and outgoing side	✓	--	--	--		3VA9114-0KB01		1	1 unit	1CB
	--	✓	--	--		3VA9214-0KB01		1	1 unit	1CB
	--	--	✓	--		3VA9124-0KB01		1	1 unit	1CB
	--	--	--	✓		3VA9354-0KB01		1	1 unit	1CB
 3VA9124-0KB01	Terminal cover for plug-in or draw-out socket									
	<ul style="list-style-type: none"> For touch protection in the termination area of the plug-in or draw-out socket For mounting on the plug-in or draw-out socket 									
	Versions									
	 3-pole	✓	--	--	--		3VA9153-0KB03		1	1 unit
--		✓	--	--		3VA9253-0KB03		1	1 unit	1CB
--		--	✓	--		3VA9163-0KB03		1	1 unit	1CB
--		--	--	✓		3VA9353-0KB03		1	1 unit	1CB
 3VA9154-0KB03	✓	--	--	--		3VA9154-0KB03		1	1 unit	1CB
	--	✓	--	--		3VA9254-0KB03		1	1 unit	1CB
	--	--	✓	--		3VA9164-0KB03		1	1 unit	1CB
	--	--	--	✓		3VA9354-0KB03		1	1 unit	1CB
 3VA9153-0KB04	Terminal cover, extended, for plug-in or draw-out socket									
	<ul style="list-style-type: none"> For touch protection in the termination area of the plug-in or draw-out socket For mounting on the plug-in or draw-out socket 1 insulating plate 									
	Versions									
	 3-pole	✓	--	--	--		3VA9153-0KB04		1	1 unit
--		✓	--	--		3VA9253-0KB04		1	1 unit	1CB
--		--	✓	--		3VA9163-0KB04		1	1 unit	1CB
--		--	--	✓		3VA9353-0KB04		1	1 unit	1CB
 3VA9154-0KB04	✓	--	--	--		3VA9154-0KB04		1	1 unit	1CB
	--	✓	--	--		3VA9254-0KB04		1	1 unit	1CB
	--	--	✓	--		3VA9164-0KB04		1	1 unit	1CB
	--	--	--	✓		3VA9354-0KB04		1	1 unit	1CB



Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Connection technology – specially for plug-in and draw-out units

2

Version	For molded case circuit breakers/ Article No. stem				SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG			
	3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24									
Terminal cover, offset, for plug-in or draw-out socket <ul style="list-style-type: none"> For touch protection in the termination area of the plug-in or draw-out socket For mounting on the plug-in or draw-out socket 1 insulating plate 													
Versions													
 3VA9153-OKB05	• 3-pole				✓	--	--	--	✓	3VA9153-OKB05	1	1 unit	1CB
					--	✓	--	--		3VA9253-OKB05	1	1 unit	1CB
					--	--	✓	--		3VA9163-OKB05	1	1 unit	1CB
					--	--	--	✓		3VA9353-OKB05	1	1 unit	1CB
 3VA9154-OKB05	• 4-pole				✓	--	--	--	✓	3VA9154-OKB05	1	1 unit	1CB
					--	✓	--	--		3VA9254-OKB05	1	1 unit	1CB
					--	--	✓	--		3VA9164-OKB05	1	1 unit	1CB
					--	--	--	✓		3VA9354-OKB05	1	1 unit	1CB







Version	Minimum for stranded cable	Maximum for stranded cable	For molded case circuit breakers/ Article No. stem				SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG	
			3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24							
Wire connectors specially for plug-in and draw-out units													
 3VA9153-0JC12	Wire connector, large, with control wire tap		25 mm ²	150 mm ²	✓	--	--	--	✓	3VA9153-0JC12	1	1 unit	1CB
			50 mm ²	240 mm ²	--	✓	--	--		3VA9253-0JC13	1	1 unit	1CB
			50 mm ²	240 mm ²	--	--	✓	--		3VA9263-0JC13	1	1 unit	1CB
 3VA9154-0JC12	Wire connector, large, with control wire tap		25 mm ²	150 mm ²	✓	--	--	--	✓	3VA9154-0JC12	1	1 unit	1CB
			50 mm ²	240 mm ²	--	✓	--	--		3VA9254-0JC13	1	1 unit	1CB
			50 mm ²	240 mm ²	--	--	✓	--		3VA9264-0JC13	1	1 unit	1CB

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Connection technology – specially for plug-in and draw-out units

2

Version	Minimum for stranded cable	Maximum for stranded cable	For molded case circuit breakers/ Article No. stem				SD	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
			3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24						
 <p>Wire connector, 2 cables, with control wire tap Included in scope of supply: • 3 single terminals • 1 terminal cover extended • 1 insulating plate</p>	2 x 25 mm ²	2 x 150 mm ²	--	✓	--	--	3VA9253-0JC22		1	1 unit	1CB	
	2 x 25 mm ²	2 x 150 mm ²	--	--	✓	--	3VA9263-0JC22		1	1 unit	1CB	
	2 x 70 mm ²	2 x 300 mm ²	--	--	--	✓	3VA9483-0JC23		1	1 unit	1CB	
 <p>Wire connector, 2 cables, with control wire tap Included in scope of supply: • 4 single terminals • 1 terminal cover extended • 1 insulating plate</p>	2 x 25 mm ²	2 x 150 mm ²	--	✓	--	--	3VA9254-0JC22		1	1 unit	1CB	
	2 x 25 mm ²	2 x 150 mm ²	--	--	✓	--	3VA9264-0JC22		1	1 unit	1CB	
	2 x 70 mm ²	2 x 300 mm ²	--	--	--	✓	3VA9484-0JC23		1	1 unit	1CB	
 <p>Distribution wire connector, 6 cables Included in scope of supply: • 3 single terminals • 1 terminal cover extended • 1 insulating plate</p>	6 x 1.5 mm ²	6 x 35 mm ²	✓	--	--	--	3VA9153-0JF60		1	1 unit	1CB	
	6 x 1.5 mm ²	6 x 35 mm ²	--	✓	--	--	3VA9253-0JF60		1	1 unit	1CB	
	6 x 1.5 mm ²	6 x 35 mm ²	--	--	✓	--	3VA9263-0JF60		1	1 unit	1CB	
	6 x 1.5 mm ²	6 x 35 mm ²	--	--	--	✓	3VA9383-0JF60		1	1 unit	1CB	
 <p>Distribution wire connector, 6 cables Included in scope of supply: • 4 single terminals • 1 terminal cover extended • 1 insulating plate</p>	6 x 1.5 mm ²	6 x 35 mm ²	✓	--	--	--	3VA9154-0JF60		1	1 unit	1CB	
	6 x 1.5 mm ²	6 x 35 mm ²	--	✓	--	--	3VA9254-0JF60		1	1 unit	1CB	
	6 x 1.5 mm ²	6 x 35 mm ²	--	--	✓	--	3VA9264-0JF60		1	1 unit	1CB	
	6 x 1.5 mm ²	6 x 35 mm ²	--	--	--	✓	3VA9384-0JF60		1	1 unit	1CB	
Control wire taps specially for plug-in and draw-out units												
 <p>Control wire tap for box terminal</p>			✓	--	--	--	3VA9150-0WB00		1	10 units	1CB	
			--	✓	✓	--	3VA9280-0WB00		1	10 units	1CB	
			--	--	--	✓	3VA9480-0WB00		1	10 units	1CB	
 <p>Control wire tap for busbar</p>			✓	--	--	--	3VA9150-0WC00		1	10 units	1CB	
			--	✓	✓	--	3VA9280-0WC00		1	10 units	1CB	
			--	--	--	✓	3VA9480-0WC00		1	10 units	1CB	

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Plug-in and draw-out technology

Overview

Using plug-in and draw-out technology the 3VA molded-case circuit breakers can be installed/removed or replaced quickly and safely. In this case, the cables or busbars of the main current paths are connected to the taps of the plug-in socket or the draw-out socket.

The termination areas of the sockets for these versions are designed in the same way as those of the molded case circuit breakers but, due to the different requirements for creepages and clearances, have slightly different dimensions.

This means that all connections without insulating measures (e.g. box terminals) from the range of breakers can also be used with the socket for plug-in or draw-out units.

Connections with insulating measures have their own article numbers and are listed below.

A 3VA molded case circuit breaker in the plug-in or draw-out version has plug-in contacts on the input and load side of the main terminals. When the circuit breaker is plugged or moved into the socket, the plug-in contacts slide into the socket-side tulip contacts and connect the main current paths with the circuit breaker. In addition, auxiliary circuit connectors can be used to connect the auxiliary and control signals from the internal accessories of the molded case circuit breaker to the outside.

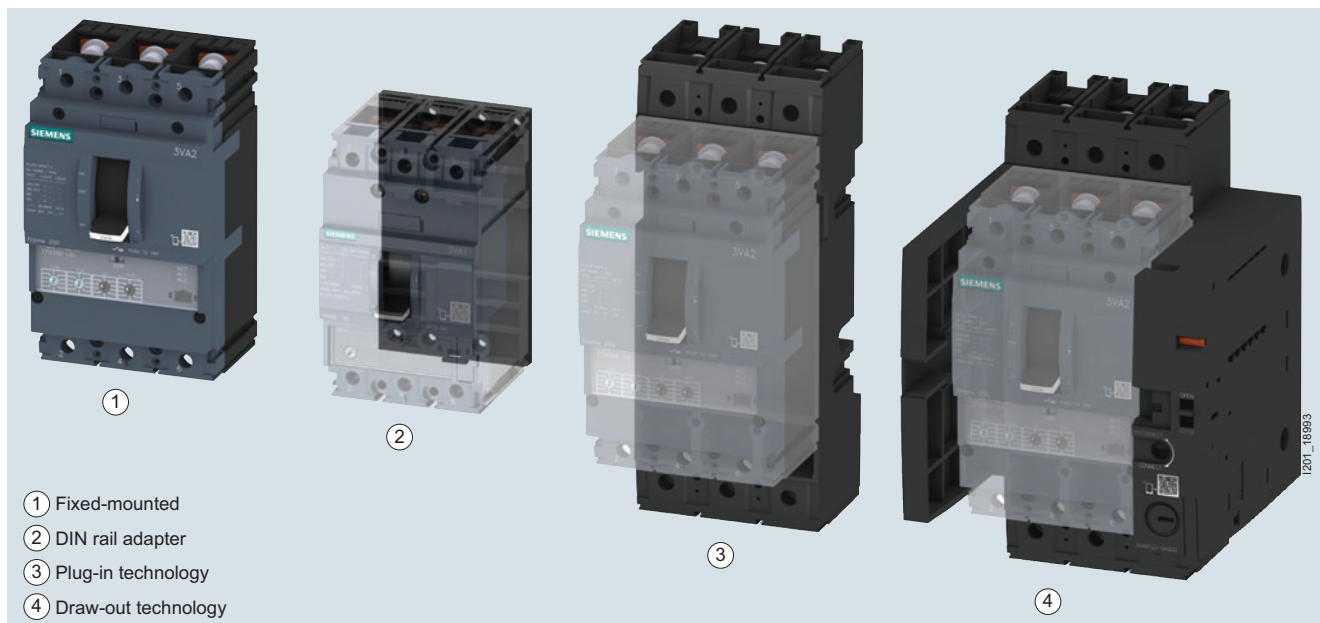
The main differences between plug-in units and draw-out units are convenience of operation and the potential for functional expansion.

Plug-in technology

Plug-in technology is the less expensive and more space-saving of the two solutions. The plug-in version of the molded case circuit breaker is equipped with plug-in contacts on the back of the 3VA molded case circuit breaker. These make a friction-locked and keyed connection with the corresponding mating connectors in the plug-in socket. The plug-in unit can be supplied as a complete kit or as a conversion kit for breakers including screw-fastened terminal covers.

Installation variants

3VA molded case circuit breakers are available in the following installation variants:



- ① Fixed-mounted
- ② DIN rail adapter
- ③ Plug-in technology
- ④ Draw-out technology

Draw-out technology

Draw-out versions of the molded case circuit breaker are also equipped with plug-in contacts at the main current paths. In addition, side walls including guide and support bolts are bolted to the sides of the molded case circuit breaker. With this version, the mating component is the draw-out socket. It is also equipped with a guide mechanism via which the molded case circuit breaker is moved into the draw-out socket by means of a handle in order to connect the breaker to the main circuits. The operator can clearly read from a position indicator whether the breaker is properly connected to the main circuits or safely isolated from them (so that it can be withdrawn).

Position signaling switches which transmit the position information CONNECT, TEST, and DISCONNECT can be integrated in the right-hand side wall of the draw-out unit. A special set of position signaling switches transfers the position data to the COM060 communication module via a preassembled wire.

The draw-out complete kit as well as the draw-out conversion kit for one breaker are available. Both kits include screw-fastened terminal covers for the breaker. The crank handle for the draw-out unit must be ordered separately.

Benefits

- Molded case circuit breakers can be replaced quickly and easily for the purpose of overhaul or servicing
- Electrical isolation and clearly visible isolating distance
- Socket can be interlocked to prevent the 3VA molded case circuit breaker from being plugged in or moved in
- Identical connection technology for all molded case circuit breakers, whether they are plug-in, draw-out or fixed-mounted units
- Test of the auxiliary and control circuit connections in the test position of the draw-out unit possible without contacted main current paths





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Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Plug-in and draw-out technology

Selection and ordering data



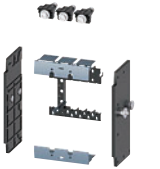
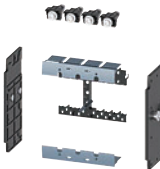
Version	For molded case circuit breakers/ Article No. stem				SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24						
Plug-in socket										
Plug-in unit, complete kit Comprising: • Plug-in socket • Conversion kit • Mounting screw kit										
Versions										
 3VA9123-0KP00	• 3-pole	✓	--	--	--	3VA9113-0KP00		1	1 unit	1CB
		--	✓	--	--	3VA9213-0KP00		1	1 unit	1CB
		--	--	✓	--	3VA9123-0KP00		1	1 unit	1CB
		--	--	--	✓	3VA9323-0KP00		1	1 unit	1CB
 3VA9124-0KP00	• 4-pole	✓	--	--	--	3VA9114-0KP00		1	1 unit	1CB
		--	✓	--	--	3VA9214-0KP00		1	1 unit	1CB
		--	--	✓	--	3VA9124-0KP00		1	1 unit	1CB
		--	--	--	✓	3VA9324-0KP00		1	1 unit	1CB
Plug-in unit, conversion kit Comprising: • Screw-fastened terminal covers for molded case circuit breakers • Plug-in contacts • Cable cages • Autotrip plunger										
Versions										
 3VA9123-0KP10	• 3-pole	✓	--	--	--	3VA9113-0KP10		1	1 unit	1CB
		--	✓	--	--	3VA9213-0KP10		1	1 unit	1CB
		--	--	✓	--	3VA9123-0KP10		1	1 unit	1CB
		--	--	--	✓	3VA9323-0KP10		1	1 unit	1CB
 3VA9124-0KP10	• 4-pole	✓	--	--	--	3VA9114-0KP10		1	1 unit	1CB
		--	✓	--	--	3VA9214-0KP10		1	1 unit	1CB
		--	--	✓	--	3VA9124-0KP10		1	1 unit	1CB
		--	--	--	✓	3VA9324-0KP10		1	1 unit	1CB

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Plug-in and draw-out technology

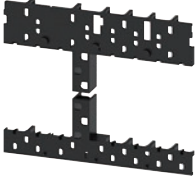

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Version	For molded case circuit breakers/ Article No. stem				SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24						
Draw-out units										
Draw-out unit, complete kit Comprising: • Draw-out socket • Conversion kit • Mounting screw kit										
Versions										
 3VA9123-0KD00  3VA9124-0KD00	• 3-pole				--	✓	--	--	3VA9213-0KD00	1 1 unit 1CB
					--	--	✓	--	3VA9123-0KD00	1 1 unit 1CB
					--	--	--	✓	3VA9323-0KD00	1 1 unit 1CB
	• 4-pole				--	✓	--	--	3VA9214-0KD00	1 1 unit 1CB
					--	--	✓	--	3VA9124-0KD00	1 1 unit 1CB
					--	--	--	✓	3VA9324-0KD00	1 1 unit 1CB
Note The crank handle for the draw-out unit must be ordered separately.										
Draw-out unit, conversion kit Conversion kit comprising: • Screw-fastened terminal covers for molded case circuit breakers • Side walls • Plug-in contacts • Cable cages • Autotrip plungers										
Versions										
 3VA9123-0KD10  3VA9124-0KD10	• 3-pole				--	✓	--	--	3VA9213-0KD10	1 1 unit 1CB
					--	--	✓	--	3VA9123-0KD10	1 1 unit 1CB
					--	--	--	✓	3VA9323-0KD10	1 1 unit 1CB
	• 4-pole				--	✓	--	--	3VA9214-0KD10	1 1 unit 1CB
					--	--	✓	--	3VA9124-0KD10	1 1 unit 1CB
					--	--	--	✓	3VA9324-0KD10	1 1 unit 1CB

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Plug-in and draw-out technology

Version	For molded case circuit breakers/ Article No. stem				SD	Article No. www.siemens.com/ product?Article.No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24						
Cable cage										
 <p>3VA9167-0KB02</p>	Cable cage for plug-in/draw-out unit 3/4-pole (spare part)									
	Cable duct for routing of the required cables from the internal accessories on the back of the circuit breaker									
	✓	--	--	--		3VA9157-0KB02		1	1 unit	1CB
	--	✓	--	--		3VA9257-0KB02		1	1 unit	1CB
--	--	✓	--		3VA9167-0KB02		1	1 unit	1CB	
--	--	--	✓		3VA9367-0KB02		1	1 unit	1CB	
Door feedthrough										
 <p>3VA9167-0KT00</p>	Door feedthrough									
	--	✓	--	--		3VA9257-0KT00		1	1 unit	1CB
	--	--	✓	--		3VA9167-0KT00		1	1 unit	1CB
--	--	--	✓		3VA9367-0KT00		1	1 unit	1CB	








Version	For molded case circuit breakers/ Article No. stem				SD	Article No. www.siemens.com/ product?Article.No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24						
Spare part: Autotrip plunger										
 <p>3VA9457-0KP81</p>	Autotrip plunger									
	• Accessories for plug-in unit									
	✓	--	--	--		3VA9157-0KP81		1	1 unit	1CB
	--	✓	--	--		3VA9257-0KP81		1	1 unit	1CB
	--	--	✓	--		3VA9267-0KP81		1	1 unit	1CB
	--	--	--	✓		3VA9457-0KP81		1	1 unit	1CB
• Accessories for draw-out unit										
--	✓	--	--		3VA9257-0KD81		1	1 unit	1CB	
--	--	✓	--		3VA9267-0KD81		1	1 unit	1CB	
--	--	--	✓		3VA9457-0KD81		1	1 unit	1CB	

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Plug-in and draw-out technology

2

Version	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
Other accessories						
 <p>3VA9987-0KC00</p>		<p>Communication link for draw-out unit Comprising:</p> <ul style="list-style-type: none"> • Cable kit with 3 special position signaling switches • Connecting cable 3VA9987-0KC10 			1	1 unit 1CB
 <p>3VA9987-0KB00</p>		<p>Position signaling switches</p> <ul style="list-style-type: none"> • For draw-out unit • For plug-in unit 			1	1 unit 1CB
 <p>3VA9987-0KC10</p>		<p>Spare part: connecting cable To connect the position signaling switches for communication with the COM060</p>			1	1 unit 1CB
 <p>3VA9987-0KD81</p>		<p>Crank handle for draw-out unit Insulated, incl. crank holder</p>			1	1 unit 1CB
 <p>3VA9987-0KD80</p>		<p>Auxiliary circuit connector</p> <p>Versions</p> <ul style="list-style-type: none"> • For all draw-out units • For all plug-in units 			1	1 unit 1CB
		<p>Note</p> <p>Each auxiliary circuit connector is designed for 4 cables.</p>			1	1 unit 1CB
Other accessories						
 <p>3VA9980-0VL10</p>		<p>Cylinder lock (type Ronis)</p> <ul style="list-style-type: none"> • 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 <p>Not for 3VA15/3VA25!</p>	<p>Key 1 (lock number 1)</p> <p>Key 3 (lock number 3)</p> <p>Key 4 (lock number 4)</p>		1	1 unit 1CB
 <p>3VA9980-0LF40</p>		<p>Cylinder lock adapter for draw-out unit</p> <ul style="list-style-type: none"> • For fitting a cylinder lock in the right-hand side wall of the draw-out unit • To prevent unauthorized withdrawal or insertion of the circuit breaker into the draw-out unit • Circuit breaker can be locked in the CONNECT, TEST and DISCONNECT positions 			1	1 unit 1CB

Overview

Residual current devices can be used to prevent hazardous residual currents that could cause injury to personnel and livestock, and damage to property. These are available as accessory components for the 3VA series.

Residual current devices of type A are available for the detection of purely sinusoidal AC residual currents and pulsating DC residual currents. If smooth DC residual currents can occur in an application, universal current-sensitive residual current devices (type B/B+) shall be used. If there is the need for enhanced preventative fire protection in an application it is recommended to use type B+.

The combination of molded case circuit breakers or switch disconnectors with mounted residual current devices complies with IEC 60947-2 Annex B, while the combination with modular residual current devices of type A complies with IEC 60947-2 Annex M.



"Basic" type residual current devices for 3VA1

The "Basic" type residual current devices are characterized by the following features:

- LEDs for signaling "ready" state and pre-alarms
- Tripped signal at device and via electrical contacts

Special features for RCD520B (type B): **NEW**

- LED for MONITORING MODE
- Pre-alarm via electrical contacts
- Selection between tripping characteristic and RCD/monitoring mode
- 3-pole version in 4-pole enclosure

On the residual current devices of the 5-series (RCD5.), tripping can be delayed by up to three seconds for type A and up to ten seconds for type B so that in the event of a fault, only the branch containing the fault is switched off by means of appropriate selective grading of the series-switched residual current devices. The device types of the 3-series (RCD3..) are instantaneous versions, in other words, they trip immediately.

RCD310 and RCD510

The RCD310/RCD510 can be combined with the 3VA1 molded case circuit breaker and the switch disconnector. They are mounted on the left side of the breaker. In the event of a residual current, the breaker is tripped by an RCR (residual current release) built into the left accessories compartment of the breaker.

RCD320, RCD520 and RCD520B

RCD320, RCD520 and RCD520B can be installed below the trip unit of the 3VA1 molded case circuit breaker. Equipping the molded case circuit breaker fully with internal accessories is easy because with these residual current devices, the molded case circuit breaker is tripped by a plunger that is already integrated into the residual current device and the circuit breaker.

"Advanced" type residual current devices for 3VA2

RCD820

"Advanced" residual current devices can detect fault type A currents up to 10 A and type AC up to 30 A. Status message can be forwarded via the large number of auxiliary contacts on the unit or via the communication connection. LEDs for signaling the "ready" state of the residual current device, the communication connection, and the two pre-alarms on the residual current device provide information on the current status on-site.

Modular residual current device for 3VA1/3VA2

As well as a residual current device mounted direct on the breaker, a modular solution is also available.

For further information, see chapter "Monitoring Devices" in the section on residual current devices (MRCD).

Benefits

RCD310 and RCD510

- Increased packaging density in the cubicle thanks to the compact L-shaped design
- Through-hole technology saves inconvenient wiring of the breaker and the residual current device
- Mounting of a DIN rail adapter enables attachment to a DIN rail
- Side-by-side arrangement with miniature circuit breakers possible thanks to 45 mm cover size
- Function of a shunt trip automatically integrated by RCR dual functionality
- Deliberate acknowledgment of a residual current prevents unintentional restart
- Can be used purely as a display unit

RCD320 and RCD520

- Compact design saves space in the cubicle
- Deliberate acknowledgment of a residual current prevents unintentional restart

Additional benefits with RCD520B: **NEW**

- Switchover between residual current monitoring or disconnection provides optimum protection and saves time during commissioning
- Universal application: Selectable tripping characteristic also permits use for enhanced fire protection

RCD820

- Communication connection or alternatively electrical contacts ensure fast status messages – even remotely
- Advanced RCD820 is also suitable for use as a display unit
- Staggered pre-alarms prevent/avoid plant downtimes
- Local presence not required thanks to remote test, acknowledgment and commissioning of the RCD820 via electrical contacts or communication

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Residual current devices

Selection and ordering data

Version	For molded case circuit breakers/ Article No. stem	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	3VA11 3VA12	d					

Residual current devices (RCD) for 3VA1

Type A (pulse current sensitive)

- Mounted on the side (left)
- Trip element (RCR) included in the scope of supply
- Can only be mounted on molded case circuit breakers and switch disconnectors with box terminal
- $U_g = 127 - 480 \text{ V AC}, 50/60 \text{ Hz}$

Notes

- 3VA11: 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.
- 3VA12: 1 set of box terminals is included in scope of supply of the RCD510 (3VA921.-0RS20).

RCD310

- 4-pole
- Rated residual response current, adjustable:
 $I_{\Delta n} = 0.03 - 0.05 - 0.1 - 0.3 - 0.5 - 1 - 3 - 5 \text{ A}$;
default: 30 mA
- instantaneous (INS)

✓

--

3VA9114-0RS10

1 1 unit 1CB



3VA9114-0RS10

RCD510

- Rated residual response current, adjustable:
 $I_{\Delta n} = 0.03 - 0.05 - 0.1 - 0.3 - 0.5 - 1 - 3 - 5 \text{ A}$;
default: 30 mA
- Delay time, adjustable:
 $\Delta t = \text{Instantaneous (INS)} - 0.06 - 0.15 - 0.3 - 0.5 - 1 - 2 - 3 \text{ s}$;
default: instantaneous (INS)

Versions

- 3-pole

✓

--

3VA9113-0RS20

1 1 unit 1CB

- 4-pole

✓

--

3VA9114-0RS20

1 1 unit 1CB



3VA9113-0RS20



3VA9114-0RS20

Spare part: Residual current release **NEW**

Residual current release (RCR)

- Accessories for side mounted RCD310 and RCD510
- Scope of supply: RCR, RCR-RCD cables
- For all side mounted residual current devices

3VA9988-0BR10

1 1 unit 1CB








3VA9988-0BR10

Molded Case Circuit Breakers

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Residual current devices

Version	For molded case circuit breakers/ Article No. stem	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
Residual current devices (RCD) for 3VA1							
Type A (pulse current sensitive) <ul style="list-style-type: none"> Mounted below (under trip unit) Can be mounted on molded case circuit breakers $U_e = 127 - 480$ V AC, 50/60Hz 							
 3VA9114-ORL10	RCD320	✓	--	3VA9114-ORL10	1	1 unit	1CB
<ul style="list-style-type: none"> 4-pole Rated residual response current, adjustable: $I_{\Delta n} = 0.03 - 0.05 - 0.1 - 0.3 - 0.5 - 1 - 3 - 5$ A; default: 30 mA instantaneous (INS) 							
 3VA9113-ORL20	RCD520						
<ul style="list-style-type: none"> Rated residual response current, adjustable: $I_{\Delta n} = 0.03 - 0.05 - 0.1 - 0.3 - 0.5 - 1 - 3 - 5$ A; default: 30 mA Delay time, adjustable: $\Delta t =$ Instantaneous (INS) - 0.06 - 0.15 - 0.3 - 0.5 - 1 - 2 - 3 s; default: instantaneous (INS) 							
 3VA9114-ORL20	Versions						
<ul style="list-style-type: none"> 3-pole 							
		✓	--	3VA9113-ORL20	1	1 unit	1CB
		--	✓	3VA9213-ORL20	1	1 unit	1CB
<ul style="list-style-type: none"> 4-pole 							
		✓	--	3VA9114-ORL20	1	1 unit	1CB
		--	✓	3VA9214-ORL20	1	1 unit	1CB
Type B and B+ (universal current sensitive) NEW in the range from 0 to 100 kHz <ul style="list-style-type: none"> According to IEC EN 60947-2 According to DIN VDE 0664-400 (type B+) Mounted below (under trip unit) Can be mounted on molded case circuit breakers $U_e = 127 - 690$ V AC, 50/60 Hz 							
 3VA9113-ORL21	RCD520B						
<ul style="list-style-type: none"> Rated residual response current, adjustable type B: $I_{\Delta n} = 0.03 - 0.05 - 0.1 - 0.3 - 0.5 - 1 - 3 - 5$ A; type B+: $I_{\Delta n} = 0.03 - 0.05 - 0.1 - 0.3$ A; default: 30 mA Delay time, adjustable: $\Delta t =$ Instantaneous (INS) - 0.06 - 0.15 - 0.3 - 0.5 - 1 - 2 - 3 - 5 - 10 s; default: instantaneous (INS) RCD or MONITORING mode adjustable default: RCD mode Tripping characteristic type B or type B+ adjustable default: Tripping characteristic type B 							
 3VA9114-ORL21	Versions NEW						
<ul style="list-style-type: none"> 3-pole 							
		✓	--	3VA9113-ORL21	1	1 unit	1CB
<ul style="list-style-type: none"> 4-pole 							
		✓	--	3VA9114-ORL21	1	1 unit	1CB

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Residual current devices

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Version	For molded case circuit breakers/ Article No. stem				SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	3VA20 3VA21	3VA22	3VA23	3VA24						

Residual current devices (RCD) for 3VA2

- Type A** (pulse current sensitive)
- Mounted below (under trip unit)
 - With energy infeed from below, the required auxiliary switch (AUX) must be ordered separately.
 - $U_e = 127 - 690 \text{ V AC}, 50/60 \text{ Hz}$

- RCD820**
- Rated residual response current, adjustable:
 $I_{\Delta n} = 0.03 - 0.05 - 0.1 - 0.3 - 0.5 - 1 - 3 - 5 - 10 - 30 \text{ A}$;
default: 30 mA
 - Delay time, adjustable:
 $\Delta t = 0 - 0.06 - 0.15 - 0.3 - 0.5 - 1 - 2 - 3 - 5 - 10 \text{ s}$;
default: instantaneous (INS)
 - Note: 30 A setting range only for type AC applications



3VA9123-ORL30



3VA9124-ORL30

Versions					SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
• 3-pole	✓	--	--	--		3VA9123-ORL30		1	1 unit	1CB
	--	✓	--	--		3VA9223-ORL30		1	1 unit	1CB
	--	--	✓	--		3VA9323-ORL30		1	1 unit	1CB
	--	--	--	✓		3VA9423-ORL30		1	1 unit	1CB
• 4-pole	✓	--	--	--		3VA9124-ORL30		1	1 unit	1CB
	--	✓	--	--		3VA9224-ORL30		1	1 unit	1CB
	--	--	✓	--		3VA9324-ORL30		1	1 unit	1CB
	--	--	--	✓		3VA9424-ORL30		1	1 unit	1CB

Version	For molded case circuit breakers/ Article No. stem				SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24						

Modular residual current device MRCD

For more information, see chapter "Monitoring Devices".



Overview**Metering function**

The Rogowski coils integrated in the 3VA2 molded case circuit breakers are capable of delivering particularly accurate current measurements. An additional voltage tap is integrated in molded case circuit breakers equipped with an 8-series ETU, which means that energy data can also be measured – the 3VA2 molded case circuit breaker therefore offers a range of metering functions similar to those available with the tried-and-tested 7KM PAC measuring device!

An external current transformer for N conductors is available to allow direct measurement of the neutral conductor current with 3-pole molded case circuit breakers. When the 3-pole circuit breaker is installed in the 4-pole network, it is advisable to deploy the voltage tap at the neutral conductor so that the neutral point of the voltage network can be fixed.

Communication via the COM800/COM100 breaker data server

The 3VA2 molded case circuit breaker utilizes a modern communication concept. This concept is based on the COM800 breaker data server which can link up to eight molded case circuit breakers to different bus systems. For applications involving only one 3VA2 molded case circuit breaker, the COM100 is an ideal alternative to the COM800 breaker data server.

The COM060 communication module in the molded case circuit breaker is wired via a T-Connector to the COM800/COM100 breaker data server. Integrated as standard in the COM800/COM100 breaker data server is an Ethernet interface with the Modbus TCP protocol to allow communication with powerconfig and the powermanager. Optional communication modules can be installed to provide different communication protocols. An additional benefit of this structure is that the communication costs per molded case circuit breaker decrease with every further circuit breaker that is connected to the COM800 breaker data server.

The communication equipment for the molded case circuit breakers can be installed and connected extremely easily, reliably and efficiently thanks to the connector system used. The 24 V DC supply to the Electronic Trip Units is also reliably provided by these connections. The breaker data server utilizes independent supplementary functions to deliver valuable information about the connected molded case circuit breakers and the power distribution system.

Flexible communication thanks to optional expansion modules

With COM800/COM100, the 3VA2 molded case circuit breakers can be integrated into the relevant communication networks via the following optional expansion modules:

- Switched Ethernet PROFINET
- PROFIBUS
- RS 485 (Modbus RTU)

The molded case circuit breakers can be integrated via PROFINET and PROFIBUS directly into the TIA Portal V14 and SIMATIC Energy Suite. GSDML and GSD files are available as support for STEP 7 V5 and other engineering systems.

DSP800 display

The DSP800 display can be used to show breaker information (status, measured values, parameters) on the cubicle door. It communicates via the integral Ethernet interface with the COM800/COM100 and is thus able to display the data of up to 8 3VA2 molded case circuit breakers simultaneously.

EFB300 external function box

The EFB300 external function box is linked directly to the ETU of the 3VA2 molded case circuit breaker by a cable. It provides four digital outputs and one digital input. The powerconfig commissioning and service software can be used to set which information is to be output from the ETU via the four digital outputs:

- All reasons for tripping, categorized according to LSING
- Overload alarms AL1 and AL2
- Pre-trip alarm from overload protection system
- Load shedding and load pick-up
- Temperature alarm
- Output of an energy pulse (S0 signal), in combination with an 8-series ETU only

A zone selective interlocking functionality (ZSI) can also be implemented via the module.

Note:

A TD500 or the COM060 and COM800/COM100 combination is needed to program a change in the output assignments with powerconfig.

TD300 and TD500 test devices

The TD300 activation and trip box is a mobile, battery-operated local test device. One of its functions is to provide a temporary power supply to the Electronic Trip Units (ETUs) so that they can be operated and parameterized. It is also used to test the tripping function of the molded case circuit breaker.

The TD500 mobile test device allows the proper functioning and connections of all connected system components to be tested at the breaker commissioning stage because it is capable of simulating every conceivable cause of breaker tripping. The molded case circuit breaker responds as if the emergency were real – it trips in accordance with the set parameters and transmits all alarm and trip signals to the connected components.

The TD500 test device can be used as a hand-held tester or in conjunction with a PC. In the latter case, the TD500 test device is connected to the PC via a supplied USB cable and acts as a gateway to the 3VA2 molded case circuit breaker. Using the powerconfig commissioning and service software, it is possible to read out or modify the setting parameters of the molded case circuit breaker and monitor the measured values.

Current and stored test operations can be documented in test reports using powerconfig. The test reports can be saved and printed in PDF format or saved in a csv file for further analysis.

Benefits

- The metering function integrated in 8-series ETUs can acquire energy data without requiring additional external transformers
- The COM800 breaker data server provides a cost-efficient communication interface for up to 8 3VA2 molded case circuit breakers
- Universal bus interfaces are available for the COM800/COM100 breaker data server
- Universal S0 interface for the output of energy pulses
- 100 test results can be stored with the TD500 test device
- Status and measured values of up to 8 molded case circuit breakers are displayed in the cubicle door using the DSP800

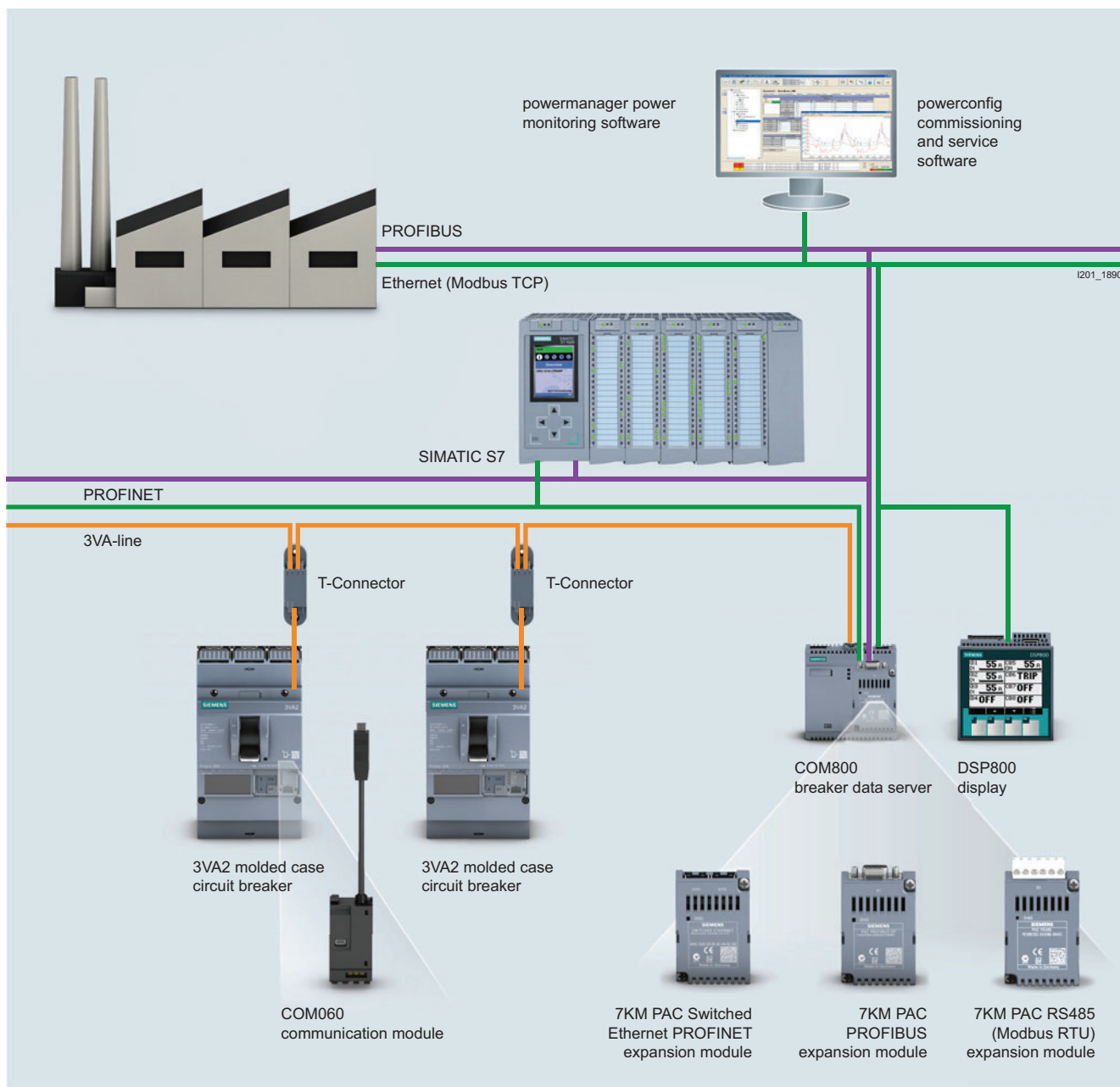
Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Communication and testing/commissioning devices

Design

2



Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Communication and testing/commissioning devices

Overview of the metering functions

Metering function ¹⁾	ETUs of the		Display		Communication COM800/COM100		
	5-series	8-series	Display in ETU	DSP800			
Current							
Phase and neutral conductor currents	I_1, I_2, I_3, I_N	A	✓	✓	👁️	👁️	👁️
Residual current to ground	I_g	A	✓	✓	👁️	👁️	👁️
Phase with highest load		A	✓	✓	👁️	👁️	👁️
Mean value over the three phase currents	$I_{LAVG} = (I_1 + I_2 + I_3)/3$	A	--	✓	--	👁️	👁️
Asymmetry of the phase currents	I_{nba}	%	--	✓	--	👁️	👁️
THD of the 3 phases	THDI ₁ , THDI ₂ , THDI ₃	%	--	✓	--	👁️	👁️
Voltage							
Phase voltages incl. mean value	$U_{12}, U_{23}, U_{31}, U_{phavg}$	V	--	✓	👁️	👁️	👁️
Voltages to N conductor incl. mean value	$U_{1N}, U_{2N}, U_{3N}, U_{Navg}$	V	--	✓	--	👁️	👁️
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	$PF_1, PF_2, PF_3, PF_{avg}$		--	✓	👁️ (PF_{avg})	👁️	👁️
Energy							
Active energy, infeed and feedback	E_p	kWh	--	✓	👁️	👁️	👁️
Reactive energy, infeed and feedback	E_q	kVArh	--	✓	--	👁️	👁️
Apparent energy	E_s	kVAh	--	✓	--	👁️	👁️
Frequency							
Present frequency	f	Hz	--	✓	👁️	👁️	👁️
Maximum pointer function							
Min./max. current, voltage, power	With time stamp		--	--	--	--	👁️

¹⁾ Depending on ETU version

✓ Available

-- Not available

👁️ Displayable

Accuracy specifications

Accuracy levels of the specified measured values of the 8-series ETU, including the integrated current sensors:

Measured value	Additional condition	Accuracy in % of the read-off measured value
Current	$0.08 \times I_b \dots 2 \times I_b$	±1%
Voltage (L-N)	$80 \text{ V} < U < 480 \text{ V}$	±1%
THD current	Up to the 19th harmonic $0.08 \times I_b \dots 2 \times I_b$	±5%
THD voltage	Up to the 19th harmonic $80 \text{ V} < U < 480 \text{ V}$	±5%
Power factor PF	$0.08 \times I_b \dots 2 \times I_b$	± 0.05% absolute
Active power	I_b and U_n as described below the table	Class 2 according to IEC 61557-12
Active energy	I_b and U_n as described below the table	Class 2 according to IEC 61557-12
Reactive power	$0.08 \times I_b \dots 2 \times I_b$	±2%
Apparent power	PF 0.6 inductive PF 0.8 capacitive	
Reactive energy	$0.08 \times I_b \dots 2 \times I_b$	±2%
Apparent energy	PF 0.6 inductive PF 0.8 capacitive	
Frequency	$80 \text{ V} < U < 480 \text{ V}$	±0.1%

Legend:

I_b is the maximum current in the relevant size.

Example: 3VA21 $I_b = 160 \text{ A}$

U_n refers to the nominal voltage of the metering function;
between phase and neutral

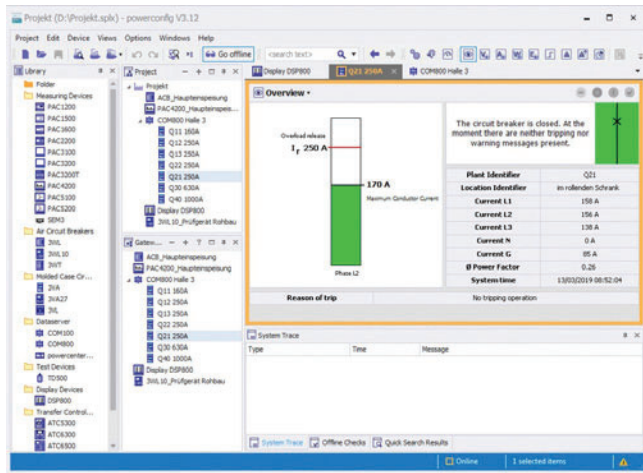
All specified accuracies refer to an ambient temperature of
 $23 \text{ °C} \pm 2 \text{ °C}$.

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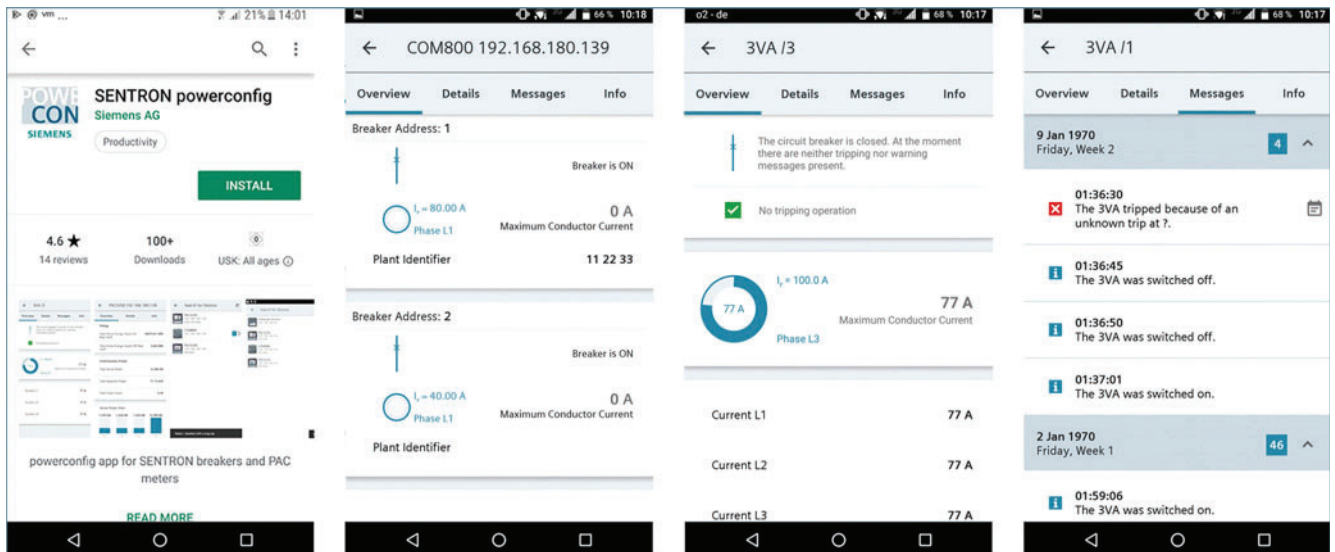
Communication and testing/commissioning devices

Commissioning and service software: powerconfig



- Commissioning and service software for 3VA2 molded case circuit breakers and all other electronic SENTRON components
- For Windows 7 Professional, Windows 8.1 Professional, Windows 2008 Server and Windows 10
- Connections via TD500 and Ethernet, PROFINET, PROFIBUS and RS 485.
- Languages: German, English, Chinese, Spanish, Portuguese, Italian, Turkish, Polish, Russian
- Enables complete use of the electronic components of the 3VA2 such as ETU, EFB300, DSP800, TD500
- Communication via PROFINET, PROFIBUS, Ethernet Modbus TCP and RS 485 with Modbus RTU
- see also chapter "Software" "Configuring, Visualizing and Controlling with SENTRON".
- powerconfig can be downloaded free of charge from Siemens Industry Online Support at <http://support.automation.siemens.com/WW/view/en/63452759>
- More information can be found on the Internet at: www.siemens.com/sentron

powerconfig for mobile devices



- Software for commissioning and service of the 3VA, 3WL molded case circuit breakers, PAC3200 and PAC4200
- Displays the current states and measured values
- Access by the powerconfig mobile app to data via WLAN access point that is connected via Modbus TCP to COM800/100 (for 3VA), COM35 (for 3WL) or PAC3200/4200
- Android version required for mobile devices such as smartphones or tablets: 6.0 or higher
- Available for downloading free of charge in the Google Play Store










Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Communication and testing/commissioning devices


Selection and ordering data

Version	For molded case circuit breakers/ Article No. stem	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
24 V module							
 <p>3VA9187-0TB50</p>	24 V module <ul style="list-style-type: none"> • 24 V DC • For mounting in the right-hand accessories compartment of the 3VA2 • Optional energy supply for the ETU, also includes continuous operation of the ETU display and the metering function of the ETU 8-series 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3VA9187-0TB50	1	1 unit	1CB
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3VA9387-0TB50	1	1 unit	1CB	
Communication accessories in the molded case circuit breaker							
 <p>3VA9187-0TB10</p>	COM060 communication module <ul style="list-style-type: none"> • For mounting in the right-hand accessories compartment of the 3VA2 molded case circuit breaker (including ETU power supply) • Communication with the COM800/COM100 breaker data server via the 3VA-line • Including a T-Connector 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3VA9187-0TB10	1	1 unit	1CB
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3VA9387-0TB10	1	1 unit	1CB	
Breaker data server							
 <p>3VA9987-0TA10</p>	COM800 breaker data server <ul style="list-style-type: none"> • 2 terminating resistors • Central communication module for connecting up to eight 3VA2 molded case circuit breakers via the 3VA-line • Ethernet 10/100 Mbps interface • Module slot for plugging on an optional PROFIBUS DP or PROFINET module 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3VA9987-0TA10	1	1 unit	1CB
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3VA9987-0TA20	1	1 unit	1CB	
 <p>3VA9987-0TA20</p>	COM100 breaker data server <ul style="list-style-type: none"> • 2 terminating resistors • Optimized, central communication module for connecting a 3VA2 molded case circuit breaker via the 3VA-line • Ethernet 10/100 Mbps interface • Module slot for plugging on an optional PROFIBUS DP or PROFINET module 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3VA9987-0TA20	1	1 unit	1CB
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3VA9987-0TA10	1	1 unit	1CB	
 <p>7KM9300-0AB01-0AA0</p>	7KM PAC PROFIBUS DP expansion module <ul style="list-style-type: none"> • The 7KM PAC PROFIBUS DP expansion module is used for connecting the COM800/COM100 breaker data server, and the 3VA molded case circuit breakers connected to it, to PROFIBUS DPV1. • The 7KM PAC PROFIBUS DP expansion module provides the status and measured quantities of the 3VA molded case circuit breaker for the PROFIBUS DP master. It receives information (e.g. commands) from the PROFIBUS DP master, and forwards this information to the 3VA molded case circuit breaker. 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7KM9300-0AB01-0AA0	1	1 unit	1DD
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	7KM9300-0AE01-0AA0	1	1 unit	1DD	
 <p>7KM9300-0AE01-0AA0</p>	7KM PAC Switched Ethernet PROFINET expansion module <ul style="list-style-type: none"> • The 7KM PAC Switched Ethernet PROFINET expansion module is used to connect the COM800/COM100 breaker data server, and the 3VA molded case circuit breakers connected to it, to PROFINET via two Ethernet interfaces. • The 7KM PAC Switched Ethernet PROFINET expansion module provides the status and measured quantities of the 3VA molded case circuit breakers to PROFINET via the PROFINET IO, PROFinergy and Modbus TCP protocols. 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7KM9300-0AE01-0AA0	1	1 unit	1DD
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	7KM9300-0AM00-0AA0	1	1 unit	1DD	
 <p>7KM9300-0AM00-0AA0</p>	7KM PAC RS 485 Modbus RTU expansion module <ul style="list-style-type: none"> • The 7KM PAC RS 485 Modbus expansion module is used to connect the COM800/COM100 breaker data server, and the 3VA molded case circuit breakers connected to it, to Modbus RTU. • The 7KM PAC RS 485 Modbus expansion module provides the status and measured quantities of the 3VA molded case circuit breaker for the Modbus RTU master. It receives information (e.g. commands) from the Modbus RTU master, and forwards this information to the 3VA molded case circuit breaker. 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7KM9300-0AM00-0AA0	1	1 unit	1DD
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	7KM9300-0AM00-0AA0	1	1 unit	1DD	

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC




Communication and testing/commissioning devices

Version	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
Accessories for communication						
 3VA9987-0TG10		T-Connector • Spare part • Provides spur line feeder to COM060 and loops through to the next circuit breaker.	3VA9987-0TG10	1	1 unit	1CB
 3VA9987-0TG11		DIN rail adapter For snapping the T-Connector onto a DIN rail.	3VA9987-0TG11	1	1 unit	1CB
 3VA9987-0TC10		Preassembled T-Connector-to-T-Connector or T-Connector-to-COM800/COM100 connecting cable • 0.4 m long	3VA9987-0TC10	1	1 unit	1CB
		• 1 m long	3VA9987-0TC20	1	1 unit	1CB
		• 2 m long	3VA9987-0TC30	1	1 unit	1CB
		• 4 m long	3VA9987-0TC40	1	1 unit	1CB
 3VA9987-0TF20		Preassembled connecting cable for extending the COM060-to-T-Connector spur line connection • 0.4 m long	3VA9987-0TF20	1	1 unit	1CB
		• 0.8 m long	3VA9987-0TF10	1	1 unit	1CB
 3VA9987-0TE10		Additional bus terminating resistors	3VA9987-0TE10	1	5 units	1CB
 3VA9987-0UC10		Voltage tap to external N conductor Cable for connecting the neutral point for the metering function of the 8-series ETU, length 1.5 m	3VA9987-0UC10	1	1 unit	1CB
 3VA9107-0NA10		External current transformer for N conductor Connection of an external current transformer for the N conductor for 3-pole 3VA2 molded case circuit breakers for 5-series and 8-series ETUs, including connecting cable	• $I_n = 25 \dots 150 \text{ A}$ 3VA9007-0NA10	1	1 unit	1CB
			• $I_n = 160 \dots 350 \text{ A}$ 3VA9107-0NA10	1	1 unit	1CB
			• $I_n = 400 \dots 630 \text{ A}$ 3VA9307-0NA10	1	1 unit	1CB
 3VA9077-0NA10		External current transformer as straight-through transformer NEW	• $I_n = 25 \dots 150 \text{ A}$ 3VA9077-0NA10	1	1 unit	1CB
			• $I_n = 160 \dots 350 \text{ A}$ 3VA9177-0NA10	1	1 unit	1CB
			• $I_n = 400 \dots 630 \text{ A}$ 3VA9377-0NA10	1	1 unit	1CB
			• $I_n = 600 \dots 1250 \text{ A}$ 3VA9677-0NA10	1	1 unit	1CB
		Spare part: cable for connecting external current transformer for N conductor	3VA9907-0NB10	1	1 unit	1CB

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Communication and testing/commissioning devices




Version	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	d					
Display						
		DSP800 display				
		<ul style="list-style-type: none"> For displaying the status, measured values and parameters of up to 8 3VA2 molded case circuit breakers and for up to 3 devices of 3WL1 size 0 and/or 3VA27 size 1600 A. Connection to the COM800/COM100 via Ethernet for displaying information of the COM800/COM100 and the connected 3VA2 molded case circuit breakers and for up to 3 devices of 3WL1 size 0 and/or 3VA27 size 1600 A. 				
3VA9987-0TD10		3VA9987-0TD10		1	1 unit	1CB
External function box						
		EFB300				
		<ul style="list-style-type: none"> External function box for connection to the ETU of the 3VA2 molded case circuit breakers 4 digital outputs for information output 1 digital input ZSI functionality S0 interface Including cable 1.5 m in length 				
3VA9987-0UA10		3VA9987-0UA10		1	1 unit	1CB
		Connecting cable for EFB300				
		Spare part				
		<ul style="list-style-type: none"> Length 1.5 m Length 3.0 m Length 3.0 m for 3VA2 with EFB and RCD820 				
		3VA9987-0UB10		1	1 unit	1CB
		3VA9987-0UB20		1	1 unit	1CB
		3VA9987-0UB30		1	1 unit	1CB
Test devices						
		TD300				
		<ul style="list-style-type: none"> Connection to the front interface of the ETU Test device for activating the ETU and triggering a test trip 				
3VA9987-0MA10		3VA9987-0MA10		1	1 unit	1CB

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Communication and testing/commissioning devices

2

	Version	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS PG
 <p>3VA9987-OMB10</p>	<p>TD500</p> <ul style="list-style-type: none"> • Connection to the front interface of the ETU • Initiation of various test trips (LSING) • USB interface for connection of a PC using powerconfig • ETU parameterization • Including adapter and connecting cable for 3VA2 and IEC 3WL molded case circuit breakers (ETU Release 2) • Including case 	d	3VA9987-OMB10		1	1 unit 1CB
 <p>3VA9987-OMX10</p>	<p>Spare part: external power supply for TD500 Spare part 110 ... 240 V AC</p>		3VA9987-OMX10		1	1 unit 1CB
 <p>3VA9987-OMY10</p>	<p>Spare part: cable for connecting the TD500 to the 3VA2 molded case circuit breaker</p>		3VA9987-OMY10		1	1 unit 1CB

Overview

With all types of 3VA molded case circuit breakers, a basic distinction is made between:

- Locking of molded case circuit breakers
- Interlocking of molded case circuit breakers

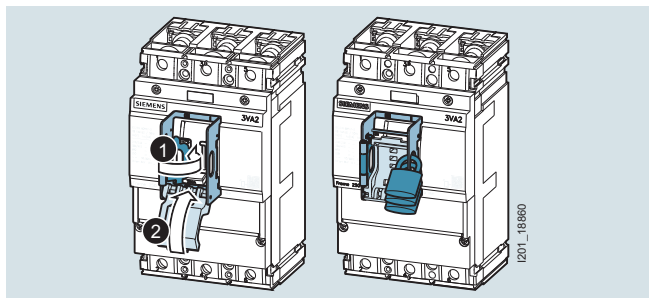
The padlock devices make it possible to lock the 3VA molded case circuit breaker in either the OFF or the ON operating position.

Using the interlocking technology, it is possible to mutually interlock two or more molded case circuit breakers. The interlock system is designed to ensure that no more than one molded case circuit breaker can be operated at a time. The following methods of interlocking can be used on 3VA molded case circuit breakers:

- Front interlock
- Rear interlock

Locking technologyPadlock device for the handle

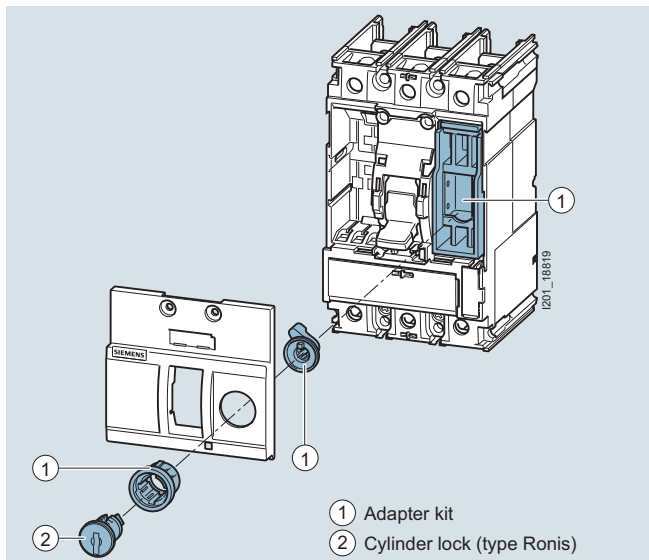
A padlock device mounted and latched on the handle allows the 3VA molded case circuit breaker to be locked in the OFF or the ON position.

Locking with cylinder lock

The 3VA molded case circuit breaker can also be locked in the OFF (O) or ON (I) position by means of a cylinder lock supplied by Ronis. This prevents further operation of the circuit breaker.

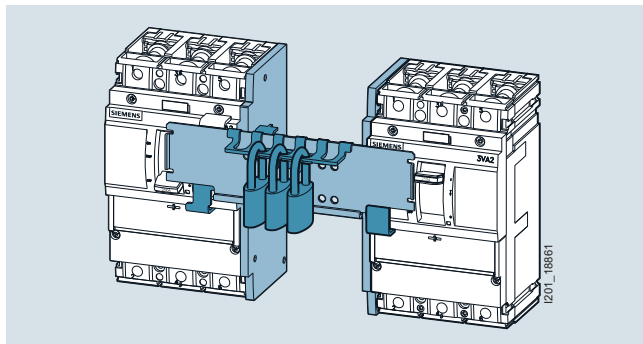
In order to lock a molded case circuit breaker in a specific operating state, the following two components need to be ordered.

- Cylinder lock (type Ronis)
- Lock adapter kit for mounting the cylinder lock in the accessories compartment

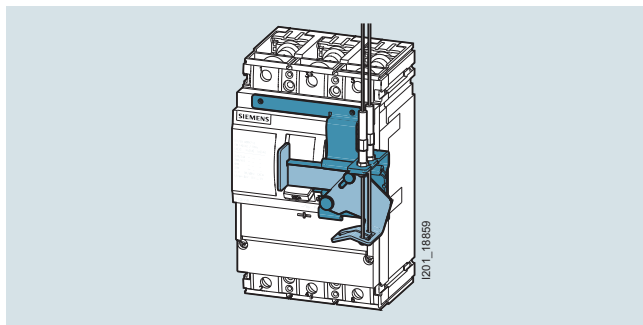
**Interlocking technology**Interlocking by means of a sliding bar

The front sliding bar allows between two and three 3VA molded case circuit breakers of the same size to be mutually interlocked by means of a sliding bar.

With this device, the sliding bar is moved to block the handle of the interlocked molded case circuit breaker. For this reason, a molded case circuit breaker is always locked in the safe OFF position, while the released circuit breaker can still be operated.

Handle interlock using a Bowden cable

With the front Bowden cable interlock, it is possible to implement a mutual interlock between two or three molded case circuit breakers of different sizes. The front Bowden cable interlock operates according to the blocking principle. In order to implement this system, modules for the Bowden cable interlock must be mounted on the molded case circuit breakers to be included in the interlock arrangement. Each of these modules is equipped with a slide which blocks or releases operation of the handle.

Interlocking with cylinder locks

Using the cylinder lock (type Ronis), it is not only possible to lock a molded case circuit breaker, but also to create an interlock between an optional number of molded case circuit breakers of different sizes. To implement an interlocking application using cylinder locks, the adapter kit with the cylinder lock (type Ronis) must be fitted in the right-hand accessories compartment of each molded case circuit breaker to be included in the interlock arrangement and all breakers must be locked in the OFF position. In order to ensure reliable functioning of the interlock, only one key may be used for the entire interlock application! All other keys must be kept or locked away in a safe place. This one key must be used as the release instrument for only one molded case circuit breaker at a time! To release or operate a molded case circuit breaker, the cylinder lock must be turned to the "Unlocked" position with this one particular key. Only then can the handle of the circuit breaker be moved to the ON position. When the cylinder lock is in the "Unlocked" position, the key cannot be removed and must be left in the lock.

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Locking, blocking and interlocking

To implement an interlocking application involving multiple molded case circuit breakers, the following two components must be ordered for each circuit breaker:

- Cylinder lock (type Ronis) with identical key number
- Interlock adapter kit for mounting the cylinder lock in the accessories compartment



Rear interlock

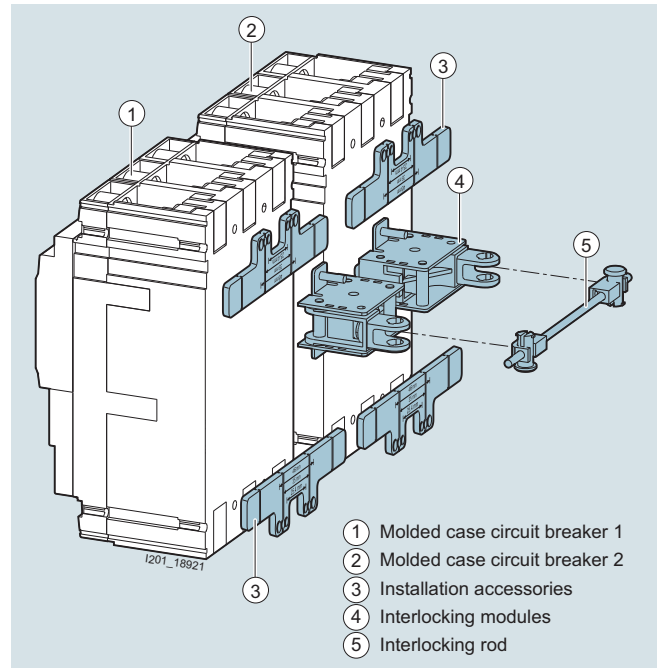
The rear interlock system allows implementation of an interlock without restricting the number of accessories which can be installed at the front of the 3VA molded case circuit breaker. Using the rear interlock, it is possible to create an interlock between two molded case circuit breakers of different sizes based on the blocking principle. When one molded case circuit breaker closes, the other circuit breaker is prevented from closing by a plunger which engages in the breaker mechanism directly from the rear panel of the molded case circuit breaker.

This system requires the installation of two interlocking modules which are mounted behind the molded case circuit breakers and behind the mounting frame of the cubicle. The two interlocking modules are interconnected by means of the interlocking rod.

A mounting frame comprising a plate and two profile rails is available as an accessory to assist installation.

Rear interlock for plug-in or draw-out units

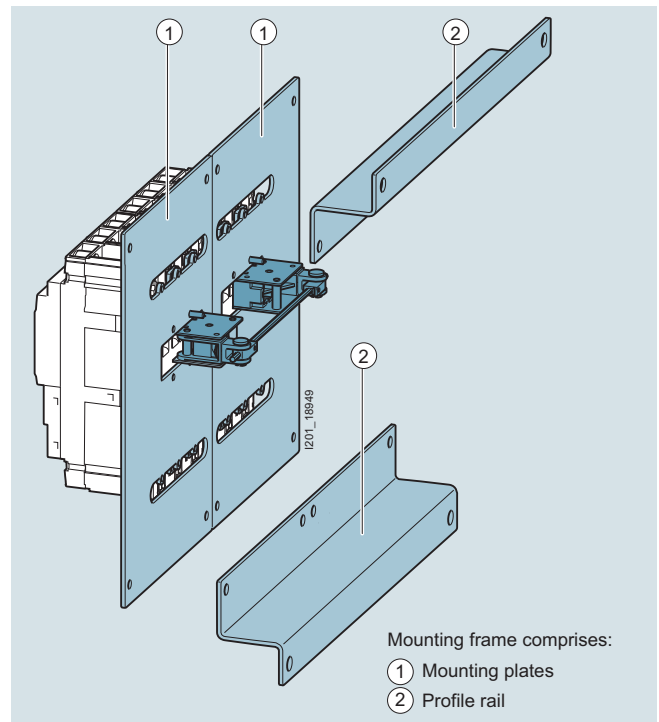
In order to install a rear interlock for plug-in or draw-out versions of the molded case circuit breakers, the plunger needs to be lengthened. The rear interlock for plug-in or draw-out versions is offered as a complete kit.



Rear interlock without mounting frame

Benefits

- Broad range of applications thanks to flexibility of interlocking technology
- Locking technology ensures safe locking of molded case circuit breakers, e.g. for maintenance purposes
- No restriction to use of internal accessories or to scope of accessories installed at the front of the molded case circuit breaker (when a rear interlock is deployed)
- Molded case circuit breakers of different sizes can be mutually interlocked.



Rear interlock with mounting frame

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Locking, blocking and interlocking

Selection and ordering data



Version	For molded case circuit breakers/ Article No. stem					SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25						
Accessories for locking, blocking and interlocking											
 3VA9167-OLF10	Adapter kit for mounting the cylinder lock (type Ronis) in the accessories compartment of the molded case circuit breaker Comprising 2 cylinder lock casings (one for locking and one for interlocking) and the appropriate mounting module										
	Notes	✓	--	--	--	--	3VA9157-OLF10		1	1 unit	1CB
	• To implement an interlock or a lock: select suitable cylinder lock(s)	--	✓	--	--	--	3VA9257-OLF10		1	1 unit	1CB
	• For an interlock: select the same cylinder lock number	--	--	✓	--	--	3VA9167-OLF10		1	1 unit	1CB
		--	--	--	✓	--	3VA9367-OLF10		1	1 unit	1CB
	--	--	--	--	✓ NEW	3VA9587-OLF10		1	1 unit	1CB	
 3VA9980-OVL10	Cylinder lock (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										
	Versions										
	• Key 1 (lock number 1)	✓	✓	✓	✓	--	3VA9980-OVL10		1	1 unit	1CB
	• Key 3 (lock number 3)	✓	✓	✓	✓	--	3VA9980-OVL30		1	1 unit	1CB
• Key 4 (lock number 4)	✓	✓	✓	✓	--	3VA9980-OVL40		1	1 unit	1CB	
 3VA9168-OVF30	Sliding bar Complete kit for interlocking 2 circuit breakers										
	Note	✓	--	--	--	--	3VA9158-OVF30		1	1 unit	1CB
	The article number must be ordered 2 x to implement an interlock between 3 breakers of the same size.	--	✓	--	--	--	3VA9258-OVF30		1	1 unit	1CB
		--	--	✓	--	--	3VA9168-OVF30		1	1 unit	1CB
	--	--	--	✓	--	3VA9368-OVF30		1	1 unit	1CB	
 3VA9167-OVF10	Module for handle interlock using a Bowden cable										
	Notes	✓	--	--	--	--	3VA9157-OVF10		1	1 unit	1CB
	• A separate handle interlock module is required for each 3VA.	--	✓	--	--	--	3VA9257-OVF10		1	1 unit	1CB
	• A Bowden cable must be ordered separately.	--	--	✓	--	--	3VA9167-OVF10		1	1 unit	1CB
		--	--	--	✓	--	3VA9367-OVF10		1	1 unit	1CB
	--	--	--	--	✓ NEW	3VA9587-OVF10		1	1 unit	1CB	
 3VA9980-OVC10	Bowden cable										
	Versions										
	• Length 0.6 m						3VA9980-OVC10		1	1 unit	1CB
• Length 1.0 m						3VA9980-OVC20		1	1 unit	1CB	
• Length 1.5 m						3VA9980-OVC30		1	1 unit	1CB	
 3VA9088-OVM10	Rear interlock with rod Complete kit for fixed mounting										
	Note	✓	✓	✓	✓	--	3VA9088-OVM10		1	1 unit	1CB
	Mounting frames are not included in scope of supply.										
 3VA9088-OVM30	Rear interlock with rod Complete kit for plug-in/draw-out unit										
	Note	✓	✓	✓	✓	--	3VA9088-OVM30		1	1 unit	1CB
	If plug-in or draw-out technology is used together with the rear interlock with rod, the mounting plates and profile rails cannot be used.										


Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Locking, blocking and interlocking

2

Version	For molded case circuit breakers/ Article No. stem					SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25						
Mounting frame for rear interlock with rod For fixed mounting only The following are required for the complete mounting frame kit:											
Versions											
 3VA9088-0VK10	<ul style="list-style-type: none"> Profile rails Contents: 2 units 	✓	✓	✓	✓	--	3VA9088-0VK10		1	1 unit	1CB
	<ul style="list-style-type: none"> Mounting plate One per breaker, depending on size 	✓	--	--	--	--		3VA9158-0VK20		1	1 unit
 3VA9268-0VK20	Notes 2 mounting plates must be ordered. They are screwed onto the profile rail that can be ordered above. Different breakers can be mutually interlocked.	--	✓	--	--	--	3VA9258-0VK20		1	1 unit	1CB
		--	--	✓	--	--	3VA9268-0VK20		1	1 unit	1CB
		--	--	--	✓	--	3VA9468-0VK20		1	1 unit	1CB

Version	For molded case circuit breakers/ Article No. stem					SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25						
Accessories for locking											
Locking devices for toggle levers											
 3VA9388-0LB10		✓	✓	--	--	--	3VA9088-0LB10		1	1 unit	1CB
		--	--	✓	✓	--	3VA9388-0LB10		1	1 unit	1CB
		--	--	--	--	✓ NEW	3VA9588-0LB10		1	1 unit	1CB

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Other

Selection and ordering data

Version	For molded case circuit breakers/ Article No. stem					SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25						
Cover frame for door cut-out											
Cover frame for door cut-out for molded case circuit breaker											
Versions											
• 3-pole, door cut-out without trip unit	✓	--	--	--	--		3VA9053-OSB10		1	1 unit	1CB
	--	✓	--	--	--		3VA9253-OSB10		1	1 unit	1CB
	--	--	✓	--	--		3VA9163-OSB10		1	1 unit	1CB
	--	--	--	✓	--		3VA9383-OSB10		1	1 unit	1CB
	--	--	--	--	✓		3VA9503-OSB10		1	1 unit	1CB
• 3-pole, door cut-out with trip unit	✓	--	--	--	--		3VA9053-OSB20		1	1 unit	1CB
	--	✓	--	--	--		3VA9253-OSB20		1	1 unit	1CB
	--	--	✓	--	--		3VA9163-OSB20		1	1 unit	1CB
	--	--	--	✓	--		3VA9363-OSB20		1	1 unit	1CB
	--	--	--	--	✓		3VA9503-OSB20		1	1 unit	1CB
• 4-pole, door cut-out without trip unit	✓	--	--	--	--		3VA9054-OSB10		1	1 unit	1CB
	--	✓	--	--	--		3VA9254-OSB10		1	1 unit	1CB
	--	--	✓	--	--		3VA9164-OSB10		1	1 unit	1CB
	--	--	--	✓	--		3VA9384-OSB10		1	1 unit	1CB
	--	--	--	--	✓		3VA9504-OSB10		1	1 unit	1CB
• 4-pole, door cut-out with trip unit	✓	--	--	--	--		3VA9054-OSB20		1	1 unit	1CB
	--	✓	--	--	--		3VA9254-OSB20		1	1 unit	1CB
	--	--	✓	--	--		3VA9164-OSB20		1	1 unit	1CB
	--	--	--	✓	--		3VA9364-OSB20		1	1 unit	1CB
	--	--	--	--	✓		3VA9504-OSB20		1	1 unit	1CB
Cover frame for MO320 motor operators	✓	--	--	--	--		3VA9053-OSB20		1	1 unit	1CB
	--	✓	✓	--	--		3VA9257-OSB30		1	1 unit	1CB
	--	--	--	✓	--		3VA9387-OSB30		1	1 unit	1CB
Cover frame for motor operator with SEO520 stored energy operator	--	--	✓	--	--		3VA9167-OSB30		1	1 unit	1CB
Cover frame for RCD320, RCD520 and RCD820 residual current devices											
Versions											
• 3-pole	✓	--	--	--	--		3VA9053-OSB10		1	1 unit	1CB
	--	✓	✓	--	--		3VA9253-OSB10		1	1 unit	1CB
	--	--	--	✓	--		3VA9303-OSB40		1	1 unit	1CB
• 4-pole	✓	--	--	--	--		3VA9054-OSB10		1	1 unit	1CB
	--	✓	✓	--	--		3VA9254-OSB10		1	1 unit	1CB
	--	--	--	✓	--		3VA9304-OSB40		1	1 unit	1CB
Cover frame for front mounted rotary operator	✓	--	--	--	--		3VA9053-OSB10		1	1 unit	1CB
	--	✓	--	--	--		3VA9253-OSB10		1	1 unit	1CB
	--	--	✓	--	--		3VA9163-OSB10		1	1 unit	1CB
	--	--	--	✓	--		3VA9383-OSB10		1	1 unit	1CB
	--	--	--	--	✓		3VA9503-OSB50		1	1 unit	1CB
Cover frame for door feedthrough	--	✓	✓	--	--		3VA9253-OSB20		1	1 unit	1CB
	--	--	--	✓	--		3VA9353-OSB20		1	1 unit	1CB
Labeling plate for cover frame	--	--	--	✓	--		3VA9087-OSX10		1	10 units	1CB



3VA9163-OSB10



3VA9087-OSX10

Molded Case Circuit Breakers

3VA Molded Case Circuit Breakers up to 1000 A – accessories, IEC

Other

2

Version	For molded case circuit breakers/ Article No. stem				SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24						

Adapter for DIN rails for 3VA1 molded case circuit breakers



Adapter for DIN rails for 3VA1 molded case circuit breakers

Versions

- 1-pole¹⁾
- 2-pole
- 3 and 4-pole
- 3 and 4-pole in conjunction with RCD310 or RCD510

✓	--	--	--		3VA9181-0SH10		1	1 unit	1CB
✓	--	--	--		3VA9182-0SH10		1	1 unit	1CB
✓	--	--	--		3VA9187-0SH10		1	1 unit	1CB
✓	--	--	--		3VA9187-0SH20		1	1 unit	1CB

3VA9187-0SH10

Adapter for 60 mm busbar system (8US)



Busbar adapter systems with 40 mm or 60 mm busbar center-to-center spacing with components for busbar runs, adapters and switching device holders for individual equipment possibilities, devices with an integrated adapter, as well as accessories and flat copper profiles. Observe the short-circuit strength of the busbar system. Short-circuit strength greater than 50 kA on request.

For more information, see chapter "Busbar Systems".

Mounting screw kit



Mounting screw kit

Versions

- For fixed-mounted molded case circuit breakers

✓	--	--	--		3VA9111-OSS10		1	1 unit	1CB
✓	✓	--	--		3VA9116-OSS10		1	1 unit	1CB
✓	✓	--	--		3VA9114-OSS10		1	1 unit	1CB
--	--	✓	--		3VA9126-OSS10		1	1 unit	1CB
--	--	✓	--		3VA9124-OSS10		1	1 unit	1CB
--	--	--	✓		3VA9328-OSS10		1	1 unit	1CB
✓	✓	--	--		3VA9114-OSS10		1	1 unit	1CB
--	✓	--	--		3VA9114-OSS10		1	1 unit	1CB
--	--	✓	--		3VA9124-OSS10		1	1 unit	1CB
--	--	--	✓		3VA9328-OSS10		1	1 unit	1CB

For 3VA15/3VA25 molded case circuit breakers:

- Spare part
4 screws
4 nuts
metric thread

3VA9517-OSS10 1 1 unit 1CB

¹⁾ For 3VA1 molded case circuit breakers, 160 A 1-pole up to 25 kA