## **SIEMENS**

Data sheet 3RV2011-1AA10

CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-REL.1.1...1.6A, N-RELEASE 21A, SCREW CONNECTION, STANDARD SW. CAPACITY



product brandname	SIRIUS
Product designation	Circuit breaker
Design of the product	For motor protection
Product type designation	3RV2

General technical data		
Size of the circuit-breaker	S00	
Size of contactor can be combined company-specific	S00, S0	
Product extension		
Auxiliary switch	Yes	
Power loss [W] total typical	6 W	
Insulation voltage with degree of pollution 3 rated value	690 V	
Surge voltage resistance rated value	6 kV	
maximum permissible voltage for safe isolation		
<ul> <li>in networks with grounded star point between main and auxiliary circuit</li> </ul>	400 V	
<ul> <li>in networks with grounded star point between main and auxiliary circuit</li> </ul>	400 V	
Protection class IP		

• on the front	IP20
• of the terminal	IP20
Mechanical service life (switching cycles)	
<ul> <li>of the main contacts typical</li> </ul>	100 000
<ul> <li>of auxiliary contacts typical</li> </ul>	100 000
Electrical endurance (switching cycles)	
• typical	100 000
Type of protection	Increased safety
Protection against electrical shock	finger-safe
Equipment marking acc. to DIN EN 81346-2	Q
Ambient conditions	
Ambient temperature	
during operation	-20 +60 °C
during storage	-50 +80 °C
during transport	-50 +80 °C
Temperature compensation	-20 +60 °C
Main circuit	
Number of poles for main current circuit	3
Adjustable pick-up value current of the current-	1.1 1.6 A
dependent overload release	
Operating voltage	
• rated value	690 V
at AC-3 rated value maximum	690 V
Operating frequency rated value	50 60 Hz
Operating current rated value	1.6 A
Operating current	
• at AC-3	
— at 400 V rated value	1.6 A
Operating power	
• at AC-3	
— at 230 V rated value	250 W
— at 400 V rated value	550 W
— at 500 V rated value	750 W
— at 690 V rated value	1 100 W
Operating frequency	
• at AC-3 maximum	15 1/h
Auxiliary circuit	
Number of NC contacts	
• for auxiliary contacts	0
Number of NO contacts	0
for auxiliary contacts	0

## Number of CO contacts 0 • for auxiliary contacts Protective and monitoring functions Product function No • Ground fault detection • Phase failure detection Yes Trip class CLASS 10 Design of the overload release thermal Operational short-circuit current breaking capacity (Ics) at AC 100 kA • at 240 V rated value 100 kA • at 400 V rated value 100 kA • at 500 V rated value 100 kA • at 690 V rated value Maximum short-circuit current breaking capacity (Icu) 100 kA • at AC at 240 V rated value 100 kA • at AC at 400 V rated value 100 kA • at AC at 500 V rated value 100 kA • at AC at 690 V rated value Breaking capacity short-circuit current (Icn) 10 kA • at 1 current path at DC at 150 V rated value 10 kA • with 2 current paths in series at DC at 300 V rated value 10 kA • with 3 current paths in series at DC at 450 V rated value UL/CSA ratings Full-load current (FLA) for three-phase AC motor 1.6 A • at 480 V rated value 1.6 A • at 600 V rated value Yielded mechanical performance [hp] • for single-phase AC motor - at 230 V rated value 0.1 hp • for three-phase AC motor 0.75 hp - at 460/480 V rated value 0.75 hp - at 575/600 V rated value

Short-circuit protection		
Product function Short circuit protection	Yes	
Design of the short-circuit trip	magnetic	
Design of the fuse link for IT network for short-circuit		
protection of the main circuit		
● at 500 V	gL/gG 20 A	

nstallation/ mounting/ dimensions			
Mounting position	any		
unting type screw and snap-on mounting onto 35 mm standard mo			
	according to DIN EN 60715		
Height	97 mm		
Width	45 mm		
Depth	96 mm		
Required spacing			
with side-by-side mounting			
— forwards	0 mm		
— Backwards	0 mm		
— upwards	50 mm		
— downwards	50 mm		
— at the side	0 mm		
• for grounded parts			
— forwards	0 mm		
— Backwards	0 mm		
— upwards	50 mm		
— at the side	30 mm		
— downwards	50 mm		
• for live parts			
— forwards	0 mm		
— Backwards	0 mm		
— upwards	50 mm		
— downwards	50 mm		
— at the side	30 mm		
**************************************			
connections/Terminals  Product function			
removable terminal for auxiliary and control	No		
circuit			
Type of electrical connection			
• for main current circuit	screw-type terminals		
Arrangement of electrical connectors for main current			
circuit			
Type of connectable conductor cross-sections			
• for main contacts			
— single or multi-stranded	2x (0,75 2,5 mm²), 2x 4 mm²		
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)		
	2x (18 14), 2x 12		
<ul> <li>at AWG conductors for main contacts</li> </ul>	2x (18 14), 2x 12		

<ul> <li>for main contacts with screw-type terminals</li> </ul>	0.8 1.2 N·m
Design of screwdriver shaft	Diameter 5 to 6 mm
Safety related data	
B10 value	
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	5 000
Proportion of dangerous failures	
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	50 %
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	50 %
Failure rate [FIT]	

50 FIT

Handle

10 y

Certificates/approvals

• for switching status

IEC 61508 Display version

• with low demand rate acc. to SN 31920

T1 value for proof test interval or service life acc. to

## **General Product Approval**

For use in hazardous locations













For use in hazardous	Declaration of Conformity	Test Certificates	Shipping Approval
locations			



IECEx



Type Test Certificates/Test Report

**Special Test** Certificate





**Shipping Approval** 











Confirmation

other

Environmental Confirmations

other Railway



Miscellaneous

Vibration and Shock

## Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

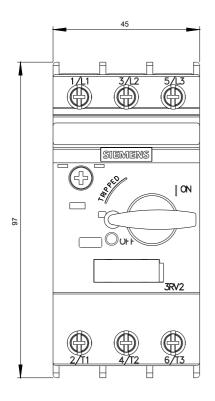
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2011-1AA10

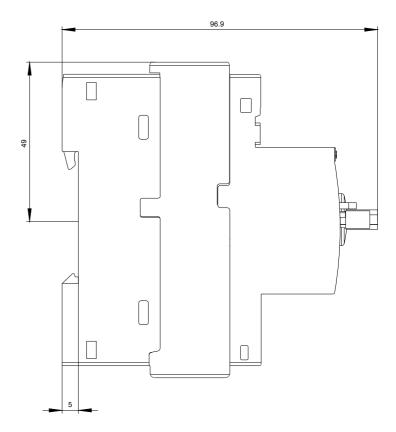
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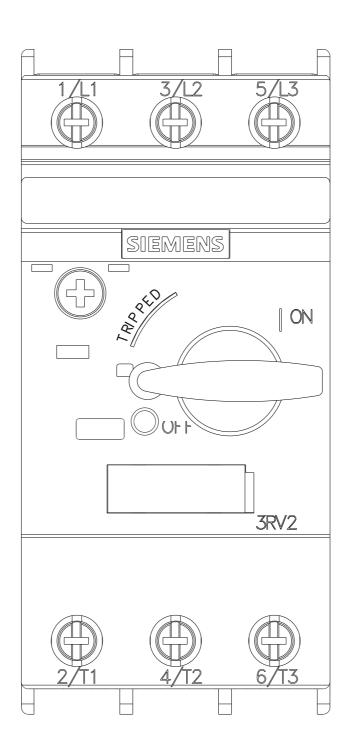
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-1AA10

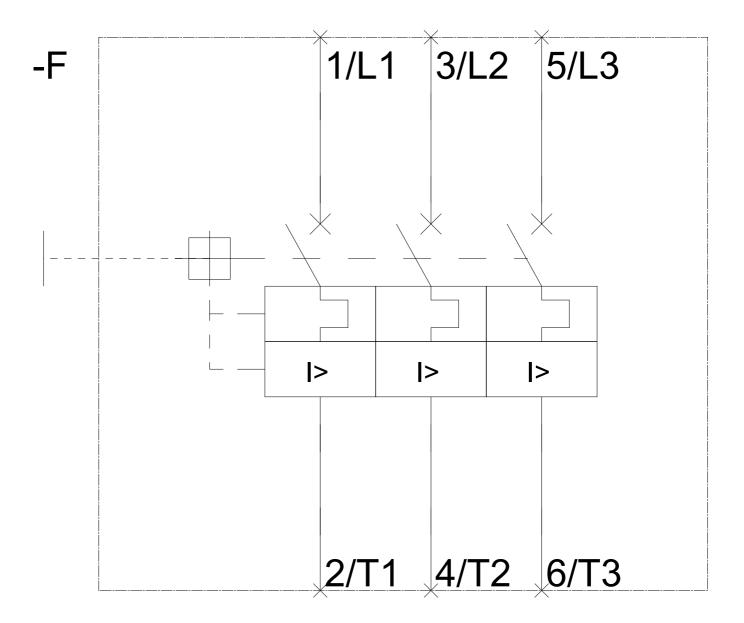
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1AA10

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2011-1AA10&lang=en









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