## **SIEMENS**

Data sheet 3RV2011-1CA10

CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-REL.1.8...2.5A, N-RELEASE 33A, 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)	
• of the main contacts typical	100 000
of auxiliary contacts typical	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	
<ul><li>during operation</li></ul>	-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- dependent overload release	1.8 2.5 A
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	2.5 A
Operating current	
• at AC-3	
— at 400 V rated value	2.5 A
Operating power	
● at AC-3	
— at 230 V rated value	370 W
— at 400 V rated value	750 W
— at 500 V rated value	1 100 W
— at 690 V rated value	1 500 W
Operating frequency	
• at AC-3 maximum	15 1/h
Auxiliary circuit	
Number of NC contacts	
• for auxiliary contacts	0
Number of NO contacts	
• 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 10 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 10 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 2.5 A • at 480 V rated value 2.5 A • at 600 V rated value Yielded mechanical performance [hp] • for single-phase AC motor - at 230 V rated value 0.167 hp • for three-phase AC motor - at 200/208 V rated value 0.5 hp 0.5 hp - at 220/230 V rated value 1 hp - at 460/480 V rated value 1.5 hp - at 575/600 V rated value Short-circuit protection

**Product function Short circuit protection** 

Design of the short-circuit trip

Yes

magnetic

Design of the fuse link for IT network for short-circuit	
protection of the main circuit	
● at 400 V	gL/gG 25 A
● at 500 V	gL/gG 25 A
● at 690 V	gL/gG 20 A

nstallation/ mounting/ dimensions  Mounting position	any
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail
wounting type	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

No
screw-type terminals
Top and bottom
2x (0,75 2,5 mm²), 2x 4 mm²

<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
<ul> <li>at AWG conductors for main contacts</li> </ul>	2x (18 14), 2x 12	
Tightening torque		
<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	
• with high demand rate acc. to SN 31920	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]	
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	50 FIT
T1 value for proof test interval or service life acc. to IEC 61508	10 y
Display version	
• for switching status	Handle

Certificates/approvals

## **General Product Approval**

For use in hazardous locations













For use in hazardous locations	Declaration of Conformity	Test Certificates	Shipping Approval
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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=3RV2011-1CA10

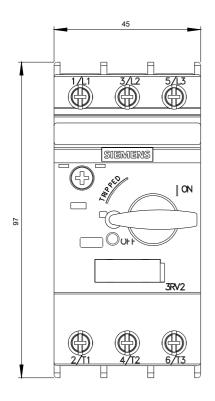
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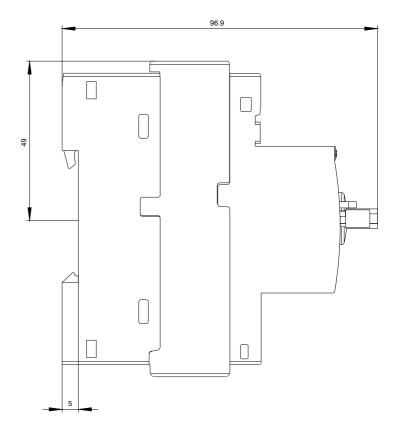
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-1CA10

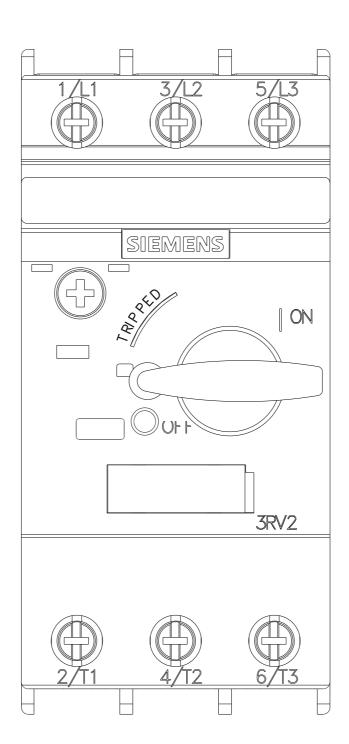
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

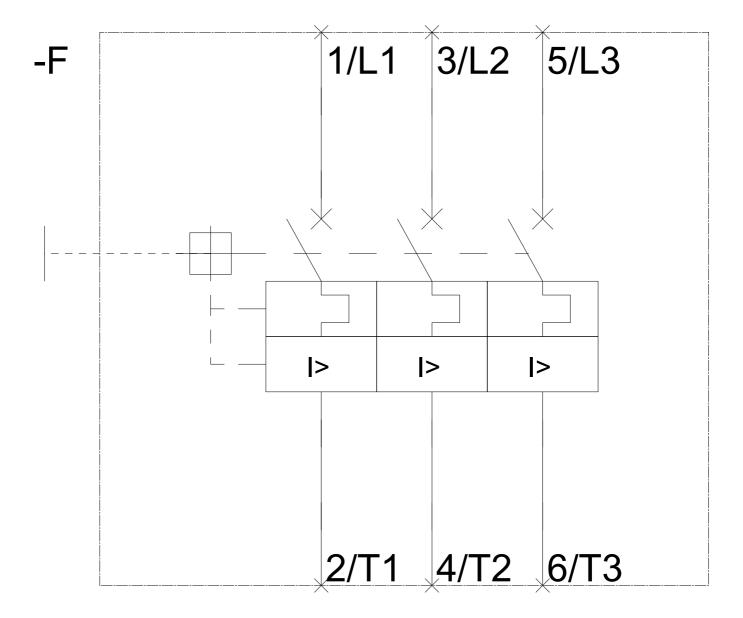
https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1CA10

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2011-1CA10&lang=en









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