

CIRCUIT-BREAKER SZ S0, FOR MOTOR PROTECTION, CLASS 10, A-REL. 2.8...4A, N-REL. 52A SCREW CONNECTION, STANDARD SW. CAPACITY



Figure similar

product brand name	SIRIUS
Product designation	3RV2 circuit breaker
General technical data:	
Size of the circuit-breaker	S0
Size of contactor can be combined company-specific	S00
Product expansion	
• Auxiliary switch	Yes
Active power loss total typical	6 W
Insulation voltage with degree of pollution 3 Rated value	690 V
Surge voltage resistance Rated value	6 kV
Protection class IP	
• on the front	IP20
• of the terminal	IP20
Shock resistance	
• acc. to IEC 60068-2-27	25g / 11 ms
Mechanical service life (switching cycles)	
• of the main contacts typical	100 000
• of the auxiliary contacts typical	100 000

Electrical endurance (switching cycles)	
• typical	100 000
Type of protection	Increased safety
Certificate of suitability relating to ATEX	on request
Protection against electrical shock	finger-safe
Equipment marking acc. to DIN EN 81346-2	Q

Ambient conditions:

Installation altitude at height above sea level maximum	2 000 m
Ambient temperature	
• during operation	-20 ... +60 °C
• during storage	-50 ... +80 °C
• during transport	-50 ... +80 °C
Temperature compensation	-20 ... +60 °C
Relative humidity during operation	10 ... 95 %

Main circuit:

Number of poles for main current circuit	3
Adjustable response value current of the current-dependent overload release	2.8 ... 4 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	4 A
Operating current	
• at AC-3	
— at 400 V Rated value	4 A
Operating power	
• at AC-3	
— at 230 V Rated value	750 W
— at 400 V Rated value	1 500 W
— at 500 V Rated value	2 200 W
— at 690 V Rated value	3 000 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	

- for auxiliary contacts

0

Protective and monitoring functions:

Trip class	CLASS 10
Design of the overload release	thermal
Operational short-circuit current breaking capacity (Ics) at AC	
• 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	4 kA
Maximum short-circuit current breaking capacity (Icu)	
• 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	6 kA
Breaking capacity short-circuit current (Icn)	
• 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	10 kA
Response value current of the instantaneous short-circuit release	52 A

UL/CSA ratings:

Full-load current (FLA) for three-phase AC motor	
• at 480 V Rated value	4 A
• at 600 V Rated value	4 A
yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V Rated value	0.125 hp
— at 230 V Rated value	0.333 hp
• for three-phase AC motor	
— at 200/208 V Rated value	0.75 hp
— at 220/230 V Rated value	0.75 hp
— at 460/480 V Rated value	2 hp
— at 575/600 V Rated value	3 hp

Short-circuit protection

Design of the short-circuit trip	magnetic
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Installation/ mounting/ dimensions:

mounting position	any
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Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail 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 circuit	No
Type of electrical connection	
• for main current circuit	screw-type terminals
Arrangement of electrical connectors for main current circuit	Top and bottom
Type of connectable conductor cross-section	
• for main contacts — single or multi-stranded 2x (1 ... 2,5 mm²), 2x (2,5 ... 10 mm²) — finely stranded with core end processing 2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm² • for AWG conductors for main contacts 2x (16 ... 12), 2x (14 ... 8)	
Tightening torque	
• for main contacts with screw-type terminals	2 ... 2.5 N·m
Design of screwdriver shaft	Diameter 5 to 6 mm
Design of the thread of the connection screw	
• for main contacts	M4

Safety related data:

B10 value with high demand rate acc. to SN 31920	50 000
Proportion of dangerous failures • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920	40 % 40 %
Failure rate [FIT] • with low demand rate acc. to SN 31920	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
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For use in hazardous locations	Declaration of Conformity	Test Certificates	Shipping Approval
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Shipping Approval



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Further information

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

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

Industry Mall (Online ordering system)

<http://www.siemens.com/industrymall>

Cax online generator

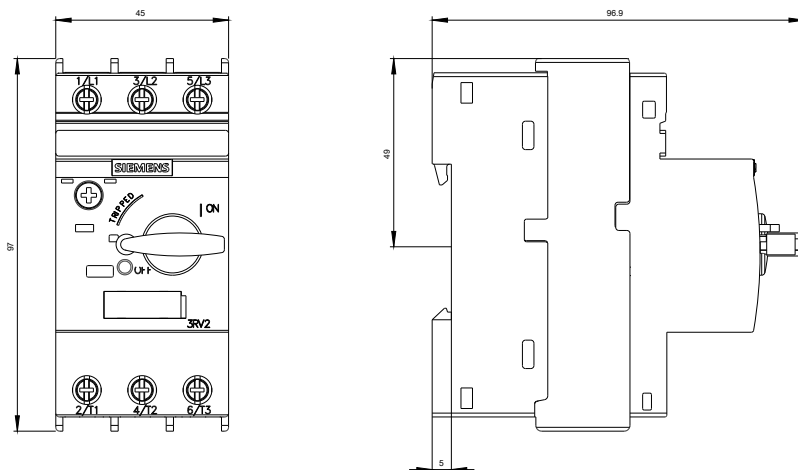
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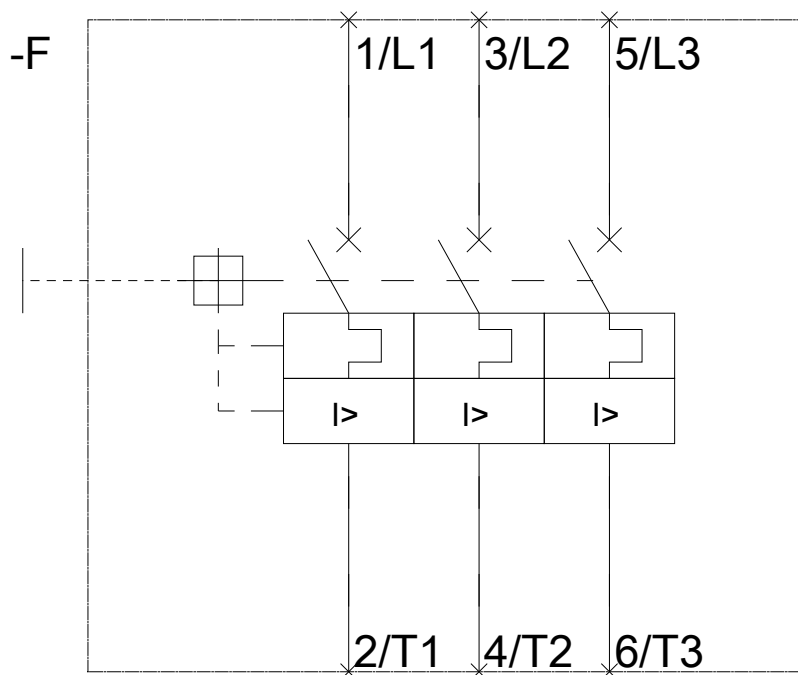
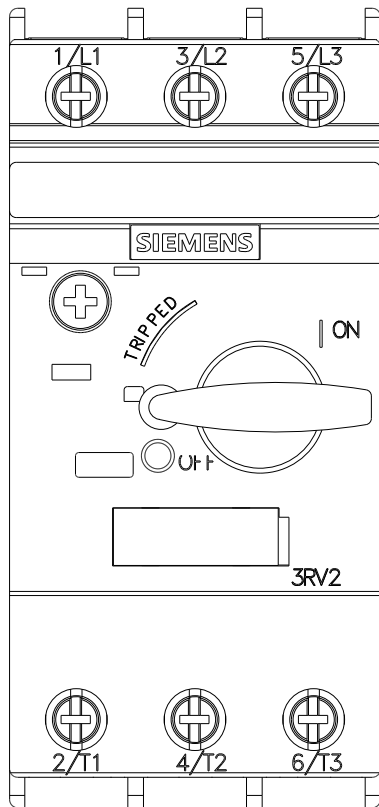
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RV20211EA10>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV20211EA10&lang=en





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