

CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-REL. 0.14...0.2A, N-RELEASE2.6A, SCREW CONNECTION, STANDARD SW. CAPACITY



product brand name	SIRIUS
Product designation	3RV2 circuit breaker
General technical data:	
Size of the circuit-breaker	S00
Size of contactor can be combined company-specific	S00
Product expansion	
• Auxiliary switch	Yes
Active power loss total typical	5 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	0.14 ... 0.2 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	0.2 A
Operating current	
• at AC-3	
— at 400 V Rated value	0.2 A
Operating power	
• at AC-3	
— at 230 V Rated value	30 W
— at 400 V Rated value	60 W
— at 500 V Rated value	60 W
— at 690 V Rated value	90 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	
<ul style="list-style-type: none"> • at 240 V Rated value • at 400 V Rated value • at 500 V Rated value • at 690 V Rated value 	<p>100 kA</p> <p>100 kA</p> <p>100 kA</p> <p>100 kA</p>
Maximum short-circuit current breaking capacity (Icu)	
<ul style="list-style-type: none"> • at AC at 240 V Rated value • at AC at 400 V Rated value • at AC at 500 V Rated value • at AC at 690 V Rated value 	<p>100 kA</p> <p>100 kA</p> <p>100 kA</p> <p>100 kA</p>
Breaking capacity short-circuit current (Icn)	
<ul style="list-style-type: none"> • at 1 current path at DC at 150 V Rated value • with 2 current paths in series at DC at 300 V Rated value • with 3 current paths in series at DC at 450 V Rated value 	<p>10 kA</p> <p>10 kA</p> <p>10 kA</p>
Response value current of the instantaneous short-circuit release	2.6 A

UL/CSA ratings:

Full-load current (FLA) for three-phase AC motor	
<ul style="list-style-type: none"> • at 480 V Rated value • at 600 V Rated value 	<p>0.2 A</p> <p>0.2 A</p>

Short-circuit protection

Design of the short-circuit trip	magnetic
---	----------

Installation/ mounting/ dimensions:

mounting position	any
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	
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — Backwards — upwards 	<p>0 mm</p> <p>0 mm</p> <p>50 mm</p>

— 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 (0,75 ... 2,5 mm ²), 2x 4 mm ²
— finely stranded with core end processing	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
• for AWG conductors for main contacts	2x (18 ... 14), 2x 12
Tightening torque	
• for main contacts with screw-type terminals	0.8 ... 1.2 N·m
Design of screwdriver shaft	Diameter 5 to 6 mm
Design of the thread of the connection screw	
• for main contacts	M3

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	40 %
• with high demand rate acc. to SN 31920	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
---------------------------------	---------------------------------------



CCC



CSA



UL

[KTL](#)



ATEX

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



IECEX



EG-Konf.

[Typprüfbescheinigung/Werkszeugnis](#)

[spezielle Prüfbescheinigungen](#)

[Werksbescheinigungen](#)



ABS

Shipping Approval



GL



LRS



PRS



RINA

Shipping Approval	other	Railway
--------------------------	--------------	----------------



RMRS

[Umweltbestätigung](#)

[Bestätigungen](#)



VDE

[Schwingen/Schocke](#)

[n](#)

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

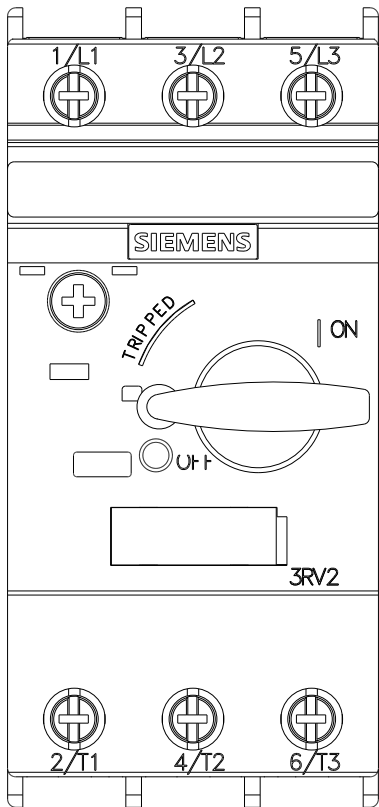
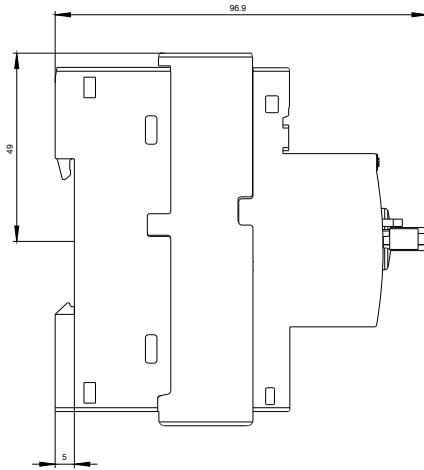
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RV20110BA10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV20110BA10>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RV20110BA10&lang=en





last modified:

29.09.2015