

CIRCUIT-BREAKER SZ S0, FOR MOTOR PROTECTION, CLASS 10, A-REL.2.2...3.2A, N-REL. 42A 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	2.2 ... 3.2 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	3.2 A
Operating current	
• at AC-3	
— at 400 V Rated value	3.2 A
Operating power	
• at AC-3	
— at 230 V Rated value	550 W
— at 400 V Rated value	1 100 W
— at 500 V Rated value	1 500 W
— at 690 V Rated value	2 200 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>10 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>10 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	42 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>3.2 A</p> <p>3.2 A</p>
yielded mechanical performance [hp]	
<ul style="list-style-type: none"> • for single-phase AC motor <ul style="list-style-type: none"> — at 110/120 V Rated value — at 230 V Rated value • for three-phase AC motor <ul style="list-style-type: none"> — at 200/208 V Rated value — at 220/230 V Rated value — at 460/480 V Rated value — at 575/600 V Rated value 	<p>0.1 hp</p> <p>0.25 hp</p> <p>0.5 hp</p> <p>0.75 hp</p> <p>1.5 hp</p> <p>2 hp</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 — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side 	<ul style="list-style-type: none"> 0 mm 0 mm 50 mm 50 mm 0 mm 0 mm 0 mm 50 mm 30 mm 50 mm 0 mm 0 mm 50 mm 50 mm 30 mm

Connections/ Terminals:	
Product function	
<ul style="list-style-type: none"> • removable terminal for auxiliary and control circuit 	No
Type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit 	screw-type terminals
Arrangement of electrical connectors for main current circuit	Top and bottom
Type of connectable conductor cross-section	
<ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — single or multi-stranded — finely stranded with core end processing • for AWG conductors for main contacts 	<ul style="list-style-type: none"> 2x (1 ... 2,5 mm²), 2x (2,5 ... 10 mm²) 2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm² 2x (16 ... 12), 2x (14 ... 8)
Tightening torque	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • 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	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
---------------------------------	---------------------------------------



[KTL](#)



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



[spezielle Prüfbescheinigung](#)
[n](#)

[Werksbescheinigung](#)

[Typprüfbescheinigung/Werkszeugnis](#)



Shipping Approval



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



[Umweltbestätigung](#)

[Bestätigungen](#)



[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

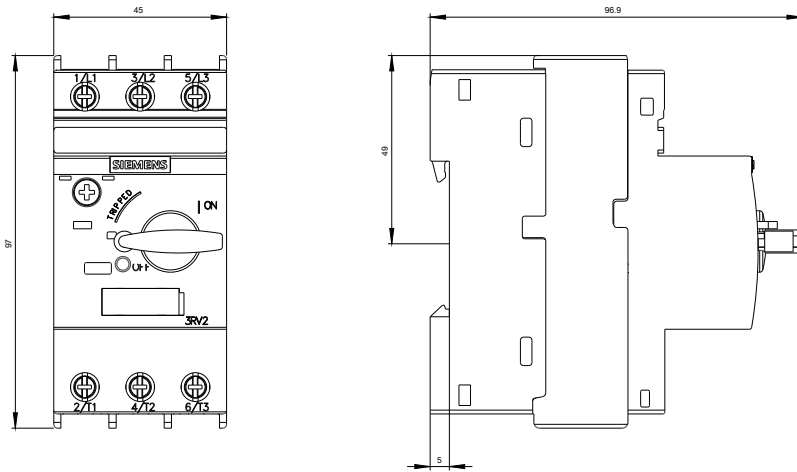
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RV20211DA10>

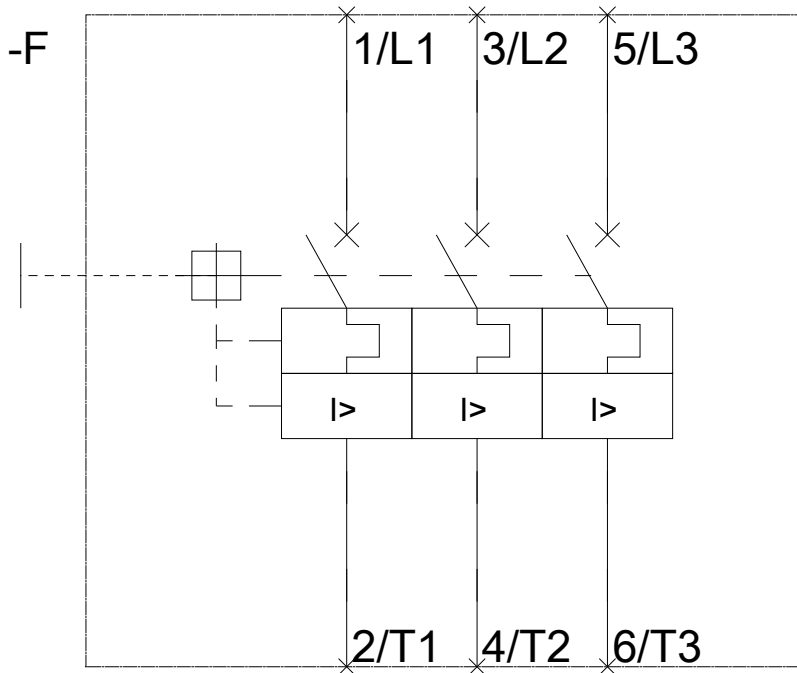
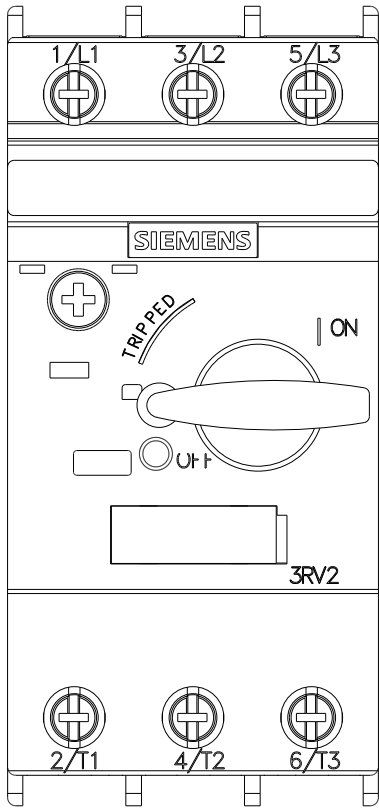
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RV20211DA10>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RV20211DA10&lang=en





last modified:

29.09.2015