



CIRCUIT-BREAKER SZ S0, FOR TRANSFORMER PROTECTION, WITH APPROBATION CIRCUIT-BREAKER UL 489. CSA C22.2 NO.5-02. A-RELEASE 20 A, N-RELEASE 325 A, SCREW CONNECTION, STANDARD SW. CAPACITY

product brand name	SIRIUS
Product designation	3RV2 circuit breaker

General technical data:

Product expansion	
• Auxiliary switch	Yes
Active power loss total typical	8 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	IP00
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
Temperature compensation	-20 ... +60 °C

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

Relative humidity during operation	10 ... 95 %
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Main circuit:

Adjustable response value current of the current-dependent overload release	20 ... 20 A
Operating voltage	
• Rated value	690 V
• at AC-3 Rated value maximum	690 V
Operating frequency Rated value	50 ... 60 Hz
Operating power	
• at AC-3	
— at 230 V Rated value	5 500 W
— at 400 V Rated value	7 500 W
— at 500 V Rated value	11 000 W
— at 690 V Rated value	15 000 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:

Design of the overload circuit breaker	thermal
Operational short-circuit current breaking capacity (Ics) at AC	
• at 240 V Rated value	100 kA
• at 400 V Rated value	25 kA
• at 500 V Rated value	5 kA
• at 690 V Rated value	2 kA
Maximum short-circuit current breaking capacity (Icu)	
• at AC at 240 V Rated value	100 kA
• with AC at 400 V Rated value	55 kA
• at AC at 500 V Rated value	10 kA
• at AC at 690 V Rated value	4 kA
• at 480 AC Y/277 V acc. to UL 489 Rated value	50 000 A
Breaking capacity short-circuit current (Icn)	
• with 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

<ul style="list-style-type: none"> with 3 current paths in series at DC at 450 V Rated value	10 kA
Response value current of the instantaneous short-circuit release	325 A

UL/CSA ratings:

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 	1.5 hp 3 hp 5 hp 5 hp 10 hp

Short-circuit:

Design of the short-circuit trip	magnetic
Design of the fuse link for IT network for short-circuit protection of the main circuit	
<ul style="list-style-type: none"> at 400 V at 500 V at 690 V 	gL/gG 63 A gL/gG 50 A gL/gG 50 A

Installation/ mounting/ dimensions:

mounting position	any
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
Height	144 mm
Width	45 mm
Depth	97 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 	0 mm 0 mm 50 mm 50 mm 0 mm 0 mm 0 mm 50 mm 30 mm 50 mm

— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— downwards	50 mm
— at the side	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 	1 ... 10 mm ² , max. 2x 10 mm ² 1 ... 16 mm ² , max. 6 + 16 mm ² 2x 12
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	
<ul style="list-style-type: none"> with low demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 	40 % 40 %
T1 value for proof test interval or service life acc. to IEC 61508	10 y

Mechanical data:






Size of the circuit-breaker	S0
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Display:

Display version	
<ul style="list-style-type: none"> for switching status 	Handle

Certificates/ approvals:

General Product Approval			Declaration of Conformity	Test Certificates
 CSA	 UL	KTL		 EG-Konf.
				spezielle Prüfbescheinigungen n

Test Certificates	Shipping Approval				
Typprüfbescheinigung/Werkszeugnis	 ABS	 BUREAU VERITAS	 GL	 LRS	 RMRS

other
Bestätigungen Umweltbestätigung  VDE

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

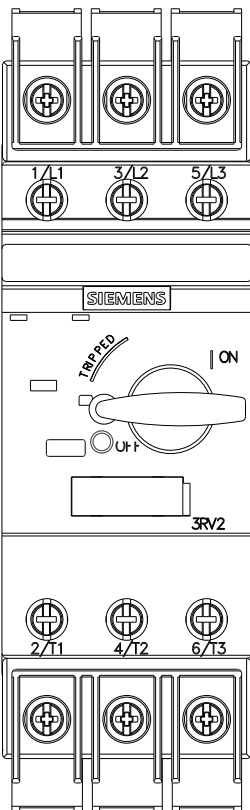
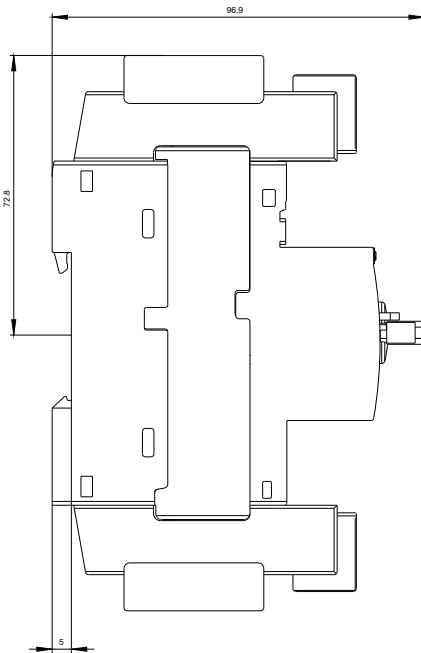
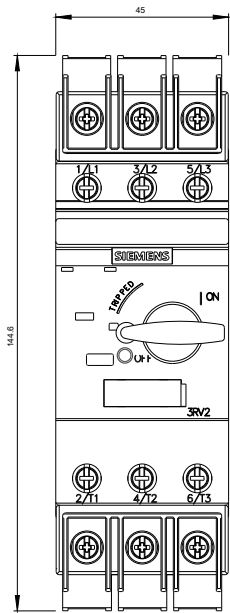
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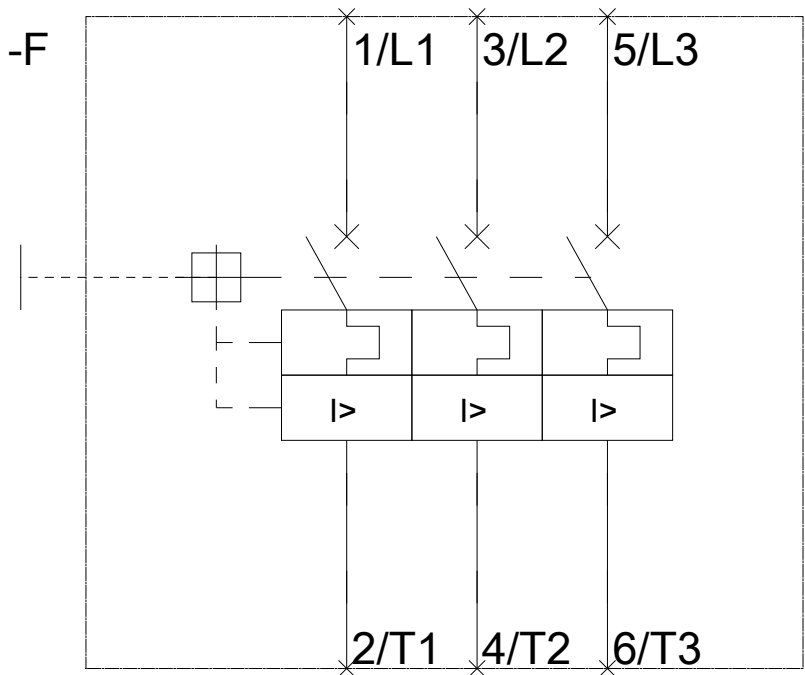
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RV28214BD10>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RV28214BD10&lang=en





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