

CIRCUIT-BREAKER SZ S0, FOR PLANT PROTECTION, WITH APPROBATION CIRCUIT-BREAKER UL 489. CSA C22.2 NO.5-02. A-RELEASE 22 A, N-RELEASE 286 A, SCREW CONNECTION, STANDARD SW. CAPACITY



product brand name	SIRIUS
Product designation	3RV2 circuit breaker
General technical data:	
Size of the circuit-breaker	S0
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
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
Certificate of suitability relating to ATEX	on request
Protection against electrical shock	finger-safe when touched vertically from front acc. to IEC 60529
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	22 ... 22 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	11 000 W
— at 500 V Rated value	11 000 W
— at 690 V Rated value	18 500 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	
• for auxiliary contacts	0

Protective and monitoring functions:

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 • at 500 V Rated value • at 690 V Rated value	25 kA 5 kA 2 kA
Maximum short-circuit current breaking capacity (Icu)	
• 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 • at 480 AC Y/277 V acc. to UL 489 Rated value	100 kA 55 kA 10 kA 4 kA 50 000 A
Breaking capacity short-circuit current (Icn)	
• 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	10 kA 10 kA 10 kA
Response value current of the instantaneous short-circuit release	286 A

UL/CSA ratings:

yielded mechanical performance [hp]	
• for single-phase AC motor — at 110/120 V Rated value — at 230 V Rated value • for three-phase AC motor — 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 7.5 hp 15 hp

Short-circuit protection

Design of the short-circuit trip	magnetic
Design of the fuse link for IT network for short-circuit protection of the main circuit	
• 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 60715
Height	144 mm
Width	45 mm
Depth	97 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	1 ... 10 mm ² , max. 2x 10 mm ²
— finely stranded with core end processing	1 ... 16 mm ² , max. 6 + 16 mm ²
• for AWG conductors for main contacts	2x 10
Tightening torque	
• for main contacts with screw-type terminals	2.5 ... 3 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	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	Declaration of Conformity
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Test Certificates	Shipping Approval
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[spezielle
Prüfbescheinigung](#)
[n](#)

[Typprüfbescheinigung/
Werkszeugnis](#)



Shipping Approval	other	Railway
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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

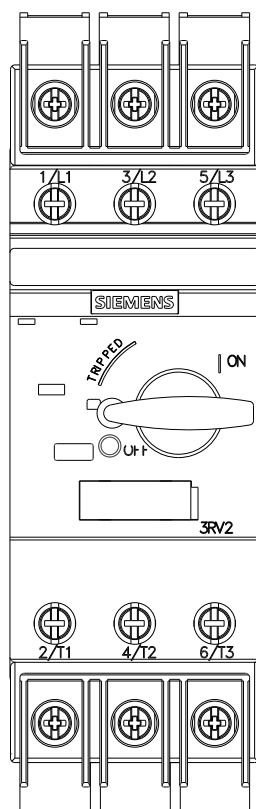
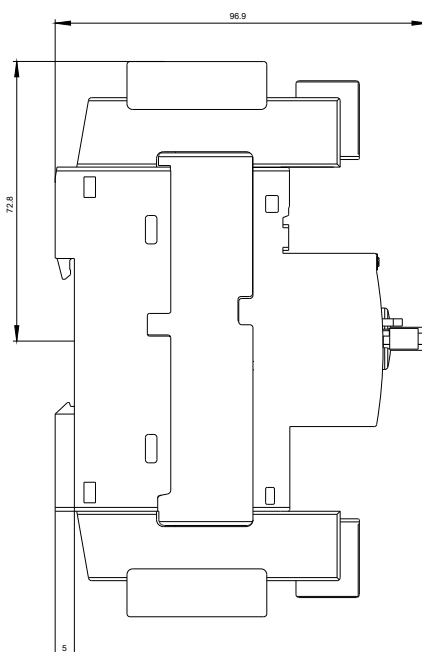
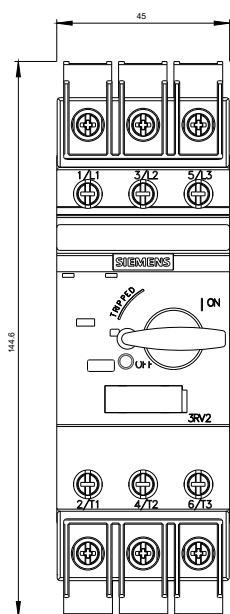
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV27214CD10>

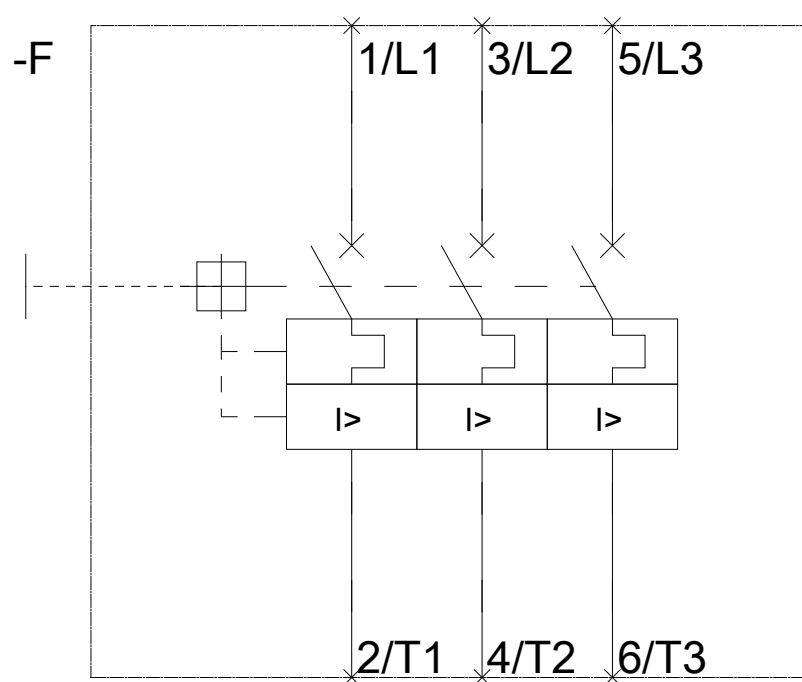
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RV27214CD10>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV27214CD10&lang=en





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