

CIRCUIT-BREAKER SZ S00, FOR PLANT PROTECTION, WITH APPROBATION CIRCUIT-BREAKER UL 489. CSA C22.2 NO.5-02. A-RELEASE 15 A, N-RELEASE 208 A, SCREW CONNECTION, STANDARD SW. CAPACITY



product brand name	SIRIUS
Product designation	3RV2 circuit breaker
General technical data:	
Size of the circuit-breaker	S00
Product expansion	
• Auxiliary switch	Yes
Power loss [W] total typical	7 W
Insulation voltage with degree of pollution 3 rated value	690 V
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
• in networks with grounded star point between main and auxiliary circuit	400 V
• in networks with grounded star point between main and auxiliary circuit	400 V
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 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
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	4 000 W
— at 400 V rated value	5 500 W
— at 500 V rated value	7 500 W
— at 690 V rated value	11 000 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 release	thermal
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Operational short-circuit current breaking capacity (Ics) at AC	
• at 240 V rated value	100 kA
• at 400 V rated value	30 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
• at 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	65 000 A
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	208 A

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 240 V	gL/gG 80 A
• at 400 V	gL/gG 63 A
• at 500 V	gL/gG 50 A
• at 690 V	gL/gG 40 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-sections	
- for main contacts - single or multi-stranded 1 ... 10 mm², max. 2x 10 mm² - finely stranded with core end processing 1 ... 16 mm², max. 6 + 16 mm² - at AWG conductors for main contacts 2x 14	
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 - 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				Declaration of Conformity	Test Certificates
 CCC	 CSA	 UL	 EAC	 EG-Konf.	Typprüfbescheinigung/Werkszeugnis

Test Certificates	Shipping Approval				
spezielle Prüfbescheinigungen	 ABS	 BUREAU VERITAS	 GL	 LRS	 PRS

Shipping Approval	other	Railway	
 RINA	 RMRS	Umweltbestätigung	Bestätigungen
		 VDE	Schwingen/Schocke

Further information

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

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

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV27114AD10>

Cax online generator

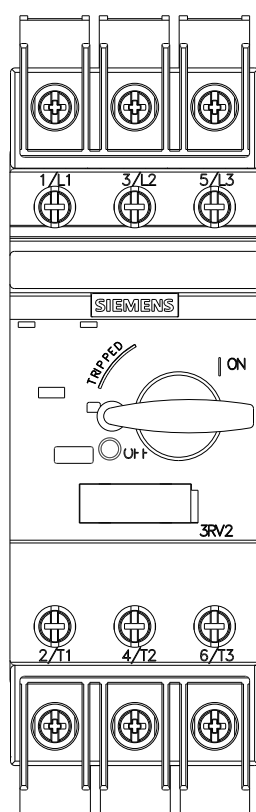
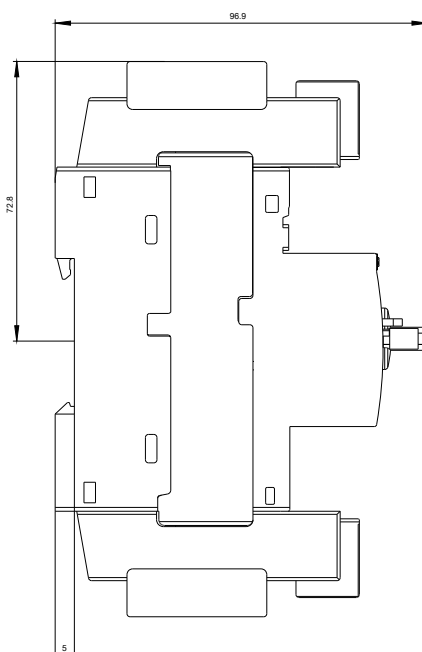
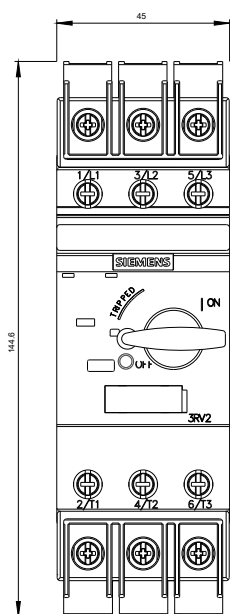
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV27114AD10>

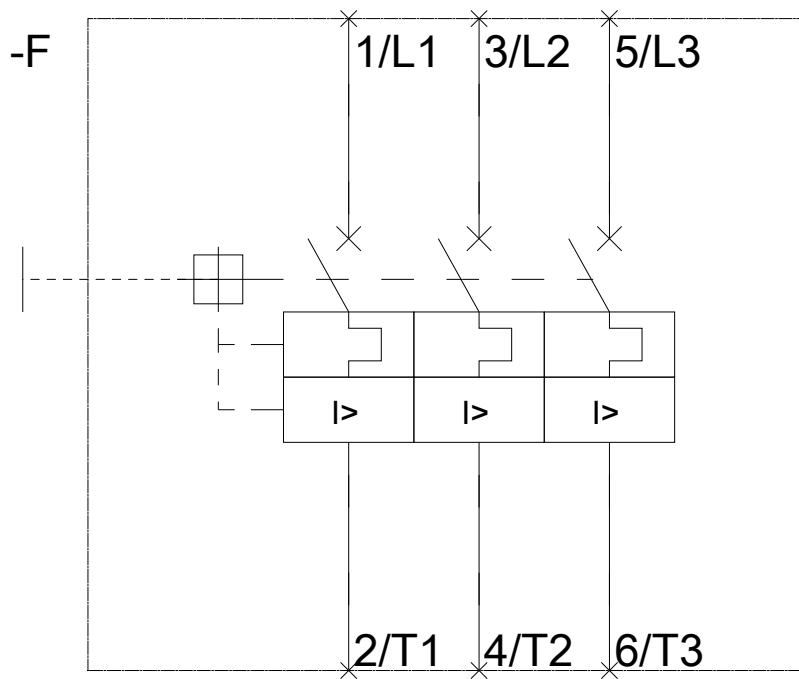
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RV27114AD10>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV27114AD10&lang=en





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