



CIRCUIT-BREAKER SZ S00, FOR PLANT PROTECTION, WITH APPROBATION CIRCUIT-BREAKER UL 489. CSA C22.2 NO.5-02. A-RELEASE 10 A, N-RELEASE 130 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	7 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 %
Main circuit:	
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	2 200 W
— at 400 V Rated value	4 000 W
— at 500 V Rated value	5 500 W
— at 690 V Rated value	7 500 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 circuit breaker	thermal
Operational short-circuit current breaking capacity (Ics) at AC	
• at 240 V Rated value	100 kA
• at 400 V Rated value	100 kA
• at 500 V Rated value	42 kA
• at 690 V Rated value	4 kA
Maximum short-circuit current breaking capacity (Icu)	
• at AC at 240 V Rated value	100 kA
• with AC at 400 V Rated value	100 kA
• at AC at 500 V Rated value	42 kA
• at AC at 690 V Rated value	6 kA
• at 480 AC Y/277 V acc. to UL 489 Rated value	65 000 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
• with 3 current paths in series at DC at 450 V Rated value	10 kA

Response value current of the instantaneous short-circuit release	130 A
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 	<ul style="list-style-type: none"> gL/gG 50 A gL/gG 40 A 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	
<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 	1 ... 10 mm ² , max. 2x 10 mm ² 1 ... 16 mm ² , max. 6 + 16 mm ² 2x 14
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	S00
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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				

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

Shipping Approval	other		
 RINA	 RMRS	Umweltbestätigung	Bestätigungen
 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

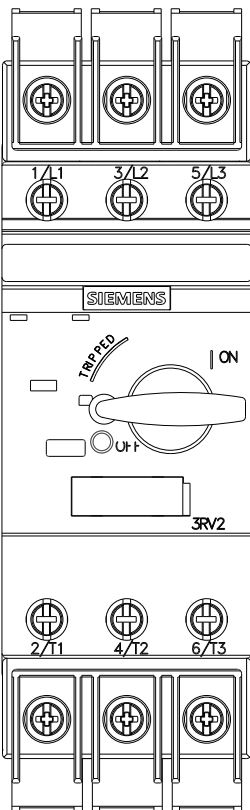
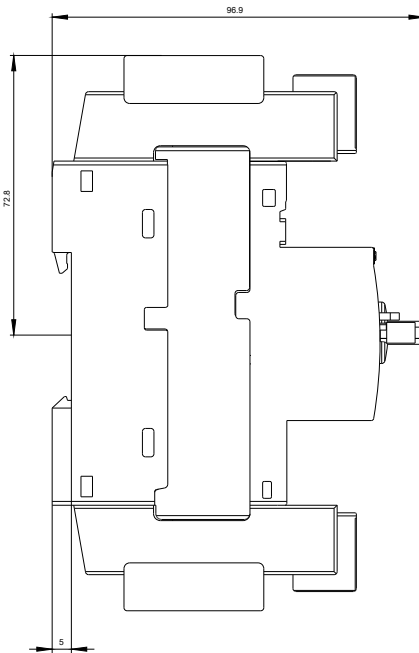
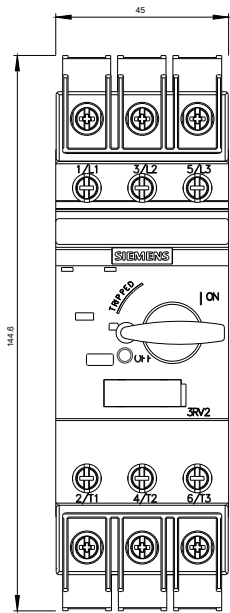
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV27111JD10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV27111JD10>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV27111JD10&lang=en





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