

CIRCUIT-BREAKER SZ S00, FOR PLANT PROTECTION, WITH APPROBATION CIRCUIT-BREAKER UL 489. CSA C22.2 NO.5-02. A-RELEASE 1 A, N-RELEASE 13 A, SCREW CONNECTION, STANDARD SW. CAPACITY

product brand name		SIRIUS
Product designation		3RV2 circuit breaker

General technical data:		
Active power loss total typical	W	5
Insulation voltage		
• with degree of pollution 3 Rated value	V	690
Shock resistance		
• acc. to IEC 60068-2-27		25g / 11 ms
Surge voltage resistance Rated value	kV	6
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	°C	-20 ... +60
Protection class IP		
• on the front		IP20
• of the terminal		IP20
Equipment marking		
• acc. to DIN EN 81346-2		Q

Main circuit:		
Number of poles for main current circuit		3
Operating voltage		
• Rated value	V	690

• at AC-3 Rated value maximum	V	690
Operating frequency Rated value	Hz	50 ... 60
Operating power		
• at AC-3		
— at 230 V Rated value	W	180
— at 400 V Rated value	W	250
— at 500 V Rated value	W	370
— at 690 V Rated value	W	550
Operating frequency		
• at AC-3 maximum	1/h	15

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
Product expansion Auxiliary switch		
		Yes

Protective and monitoring functions:		
Design of the overload circuit breaker		
		thermal
Operational short-circuit current breaking capacity (Ics) with AC		
• at 240 V Rated value	kA	100
• at 400 V Rated value	kA	100
• at 500 V Rated value	kA	100
• at 690 V Rated value	kA	100
Maximum short-circuit current breaking capacity (Icu)		
• with AC at 240 V Rated value	kA	100
• with AC at 400 V Rated value	kA	100
• with AC at 500 V Rated value	kA	100
• with AC at 690 V Rated value	kA	100
• at 480 AC Y/277 V acc. to UL 489 Rated value	A	65 000
Breaking capacity short-circuit current (Icn)		
• with 1 current path for DC at 150 V Rated value	kA	10
• with 2 current paths in series for DC at 300 V Rated value	kA	10
• with 3 current paths in series for DC at 450 V Rated value	kA	10
Response value current of the instantaneous short-circuit release		
	A	13

Short-circuit:

Product function Short circuit protection		Yes
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 500 V • at 690 V 		gL/gG 10 A gL/gG 10 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	mm	144
Width	mm	45
Depth	mm	97
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 	mm	0 0 50 50 0 0 0 50 30 50 0 0 50 50 30

Connections/ Terminals:		
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
Product function		
<ul style="list-style-type: none"> • removable terminal for auxiliary and control circuit 		No
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
Tightening torque <ul style="list-style-type: none"> • for main contacts with screw-type terminals 	N·m	2.5 ... 3
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
Failure rate [FIT] with low demand rate acc. to SN 31920	FIT	50
T1 value for proof test interval or service life acc. to IEC 61508	y	10
Protection against electrical shock		finger-safe




Mechanical data:		
Size of the circuit-breaker		S00




Ambient conditions:		
Installation altitude at height above sea level maximum	m	2 000
Ambient temperature		
<ul style="list-style-type: none"> • during operation • during storage • during transport 	°C	-20 ... +60
	°C	-50 ... +80
	°C	-50 ... +80
Relative humidity during operation	%	10 ... 95

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

Certificates/ approvals:

General Product Approval				Declaration of Conformity	Test Certificates
 CCC	 CSA	 UL		 EG-Konf.	Special Test Certificate

Test Certificates	Shipping Approval				
Type Test Certificates/Test Report	 ABS	 BUREAU VERITAS	 GL	 LRS	 PRS

Shipping Approval	other				
 RINA	 RMRS	Environmental Confirmations	Confirmation	 VDE	other

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

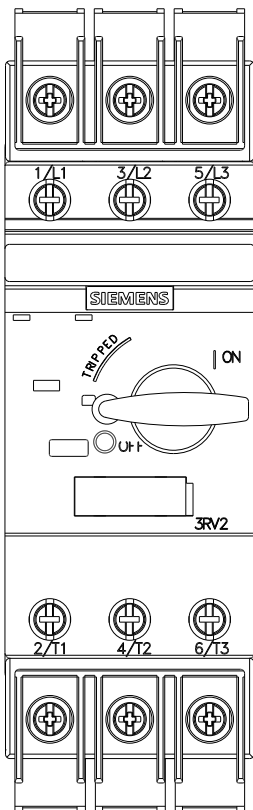
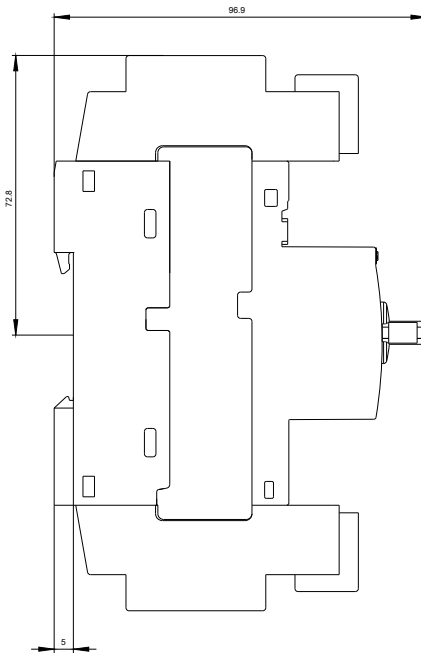
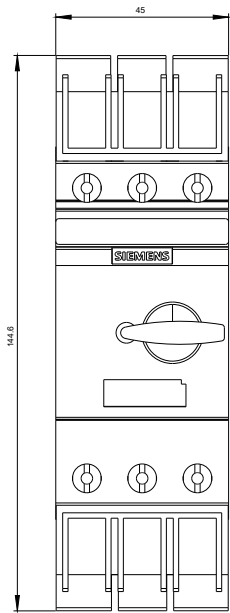
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV27110JD10>

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

<http://support.automation.siemens.com/WW/view/en/3RV27110JD10/all>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV27110JD10&lang=en





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