



CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-REL. 0.7...1A, N-RELEASE 13A, RING CABLE LUG CONNECTION STANDARD SW. CAPACITY

product brand name		SIRIUS
Product designation		3RV2 circuit breaker
General technical data:		
Active power loss total typical	W	6
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
Size of contactor can be combined company-specific		S0
Protection class IP		
• on the front		IP00
• of the terminal		IP20
Type of protection		Increased safety
Equipment marking		
• acc. to DIN EN 81346-2		Q
Main circuit:		
Number of poles for main current circuit		3

Adjustable response value current of the current-dependent overload release	A	0.7 ... 1
Operating voltage		
• Rated value	V	690
• at AC-3 Rated value maximum	V	690
Operating frequency Rated value	Hz	50 ... 60
Operating current Rated value	A	1
Operating current		
• at AC-3		
— at 400 V Rated value	A	1
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:

Trip class		CLASS 10
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
Breaking capacity short-circuit current (Icn)		
• with 1 current path for DC at 150 V Rated value	kA	10

<ul style="list-style-type: none"> with 2 current paths in series for DC at 300 V Rated value 	kA	10
<ul style="list-style-type: none"> 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

UL/CSA ratings:

Full-load current (FLA) for three-phase AC motor		
<ul style="list-style-type: none"> at 480 V Rated value 	A	1
<ul style="list-style-type: none"> at 600 V Rated value 	A	1
yielded mechanical performance [hp]		
<ul style="list-style-type: none"> for three-phase AC motor at 575/600 V Rated value 	metric hp	0.5

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 		gL/gG 10 A
<ul style="list-style-type: none"> at 690 V 		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	97
Width	mm	45
Depth	mm	96
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 	mm	0 0 50 50 0 0 0 50 30 50 0

— Backwards	mm	0
— upwards	mm	50
— downwards	mm	50
— at the side	mm	30

Connections/ Terminals:

Type of electrical connection		
<ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit 		ring cable connection ring cable connection
Arrangement of electrical connectors for main current circuit		Top and bottom
Product function		No
<ul style="list-style-type: none"> • removable terminal for auxiliary and control circuit 		
Tightening torque		
<ul style="list-style-type: none"> • for ring cable lug <ul style="list-style-type: none"> — for main contacts — for auxiliary contacts 	N·m N·m	1.2 ... 0.8 1.2 ... 0.8
Outer diameter of the usable ring cable lug maximum	mm	7.5
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 • of the auxiliary and control contacts 		M3 M3

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
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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 °C °C	-20 ... +60 -50 ... +80 -50 ... +80

Relative humidity during operation

%

10 ... 95

Display:

Display version

- for switching status

Handle

Certificates/ approvals:

General Product Approval

Declaration of
Conformity

Test Certificates



CCC



CSA



EG-Konf.

[Type Test
Certificates/Test
Report](#)

[Special Test
Certificate](#)

Shipping Approval



ABS



BUREAU
VERITAS



DNV



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

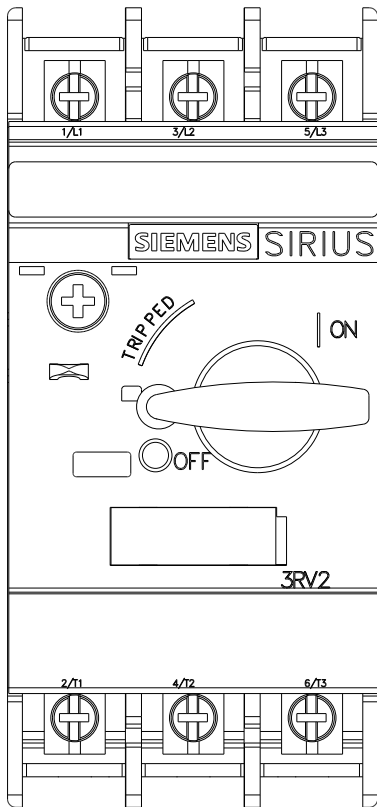
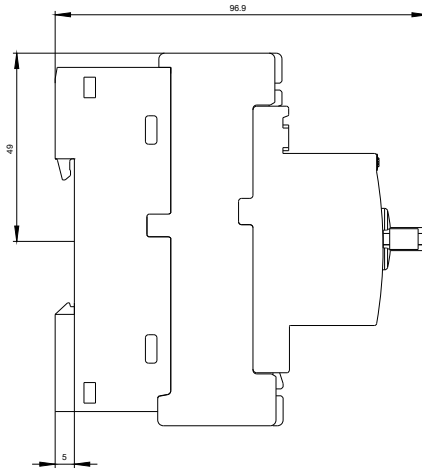
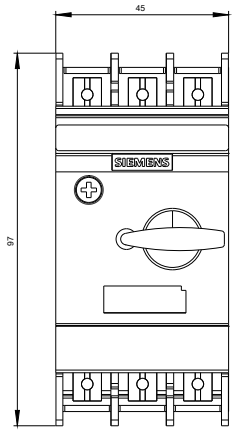
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV20110JA40>

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

<http://support.automation.siemens.com/WW/view/en/3RV20110JA40/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=3RV20110JA40&lang=en





last modified:

11.03.2015