

CIRCUIT-BREAKER SZ S00, FOR TRANSFORMER PROT. A-
RELEASE 3.5...5A, N-RELEASE 104A, SPRING-L. CONNECTION,
STANDARD SW. CAPACITY



product brand name	SIRIUS
Product designation	3RV2 circuit breaker
General technical data:	
Size of the circuit-breaker	S00
Size of contactor can be combined company-specific	S00
Product expansion	
• Auxiliary switch	Yes
Active power loss total typical	6 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	IP20
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
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	3.5 ... 5 A
Operating voltage	
• Rated value	690 V
• at AC-3 Rated value maximum	690 V
Operating frequency Rated value	50 ... 60 Hz
Operating current Rated value	5 A
Operating current	
• at AC-3	
— at 400 V Rated value	5 A
Operating power	
• at AC-3	
— at 230 V Rated value	1 100 W
— at 400 V Rated value	2 200 W
— at 500 V Rated value	2 200 W
— at 690 V Rated value	4 000 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:

Trip class	CLASS 10
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	100 kA
• at 500 V Rated value	100 kA
• at 690 V Rated value	4 kA
Maximum short-circuit current breaking capacity (Icu)	
• at AC at 240 V Rated value	100 kA
• at AC at 400 V Rated value	100 kA
• at AC at 500 V Rated value	100 kA
• at AC at 690 V Rated value	6 kA
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	104 A

UL/CSA ratings:

Full-load current (FLA) for three-phase AC motor	
• at 480 V Rated value	5 A
• at 600 V Rated value	5 A
yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V Rated value	0.167 hp
— at 230 V Rated value	0.5 hp
• for three-phase AC motor	
— at 200/208 V Rated value	1 hp
— at 220/230 V Rated value	1 hp
— at 460/480 V Rated value	3 hp
— at 575/600 V Rated value	3 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	gL/gG 32 A
• at 500 V	gL/gG 32 A
• at 690 V	gL/gG 25 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	106 mm
Width	45 mm
Depth	96 mm
Required spacing	
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards 0 mm — Backwards 0 mm — upwards 50 mm — downwards 50 mm — at the side 0 mm • for grounded parts <ul style="list-style-type: none"> — forwards 0 mm — Backwards 0 mm — upwards 50 mm — at the side 30 mm — downwards 50 mm • for live parts <ul style="list-style-type: none"> — forwards 0 mm — Backwards 0 mm — upwards 50 mm — downwards 50 mm — at the side 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 	spring-loaded 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 2x (0,5 ... 4 mm²) — finely stranded with core end processing 2x (0.5 ... 2.5 mm²) — finely stranded without core end processing 2x (0.5 ... 2.5 mm²) • for AWG conductors for main contacts 2x (20 ... 12) 	
Design of screwdriver shaft	Diameter 5 to 6 mm

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]	
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> for switching status 	Handle

Certificates/ approvals:

General Product Approval	Declaration of Conformity
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CCC



CSA



UL

[KTL](#)



EG-Konf.

Test Certificates	Shipping Approval
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ABS



BUREAU VERITAS



DNV

Shipping Approval	other
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GL



LRS



PRS



RINA



RMRS

[Umweltbestätigung](#)

other	Railway
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[Bestätigungen](#)



VDE

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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

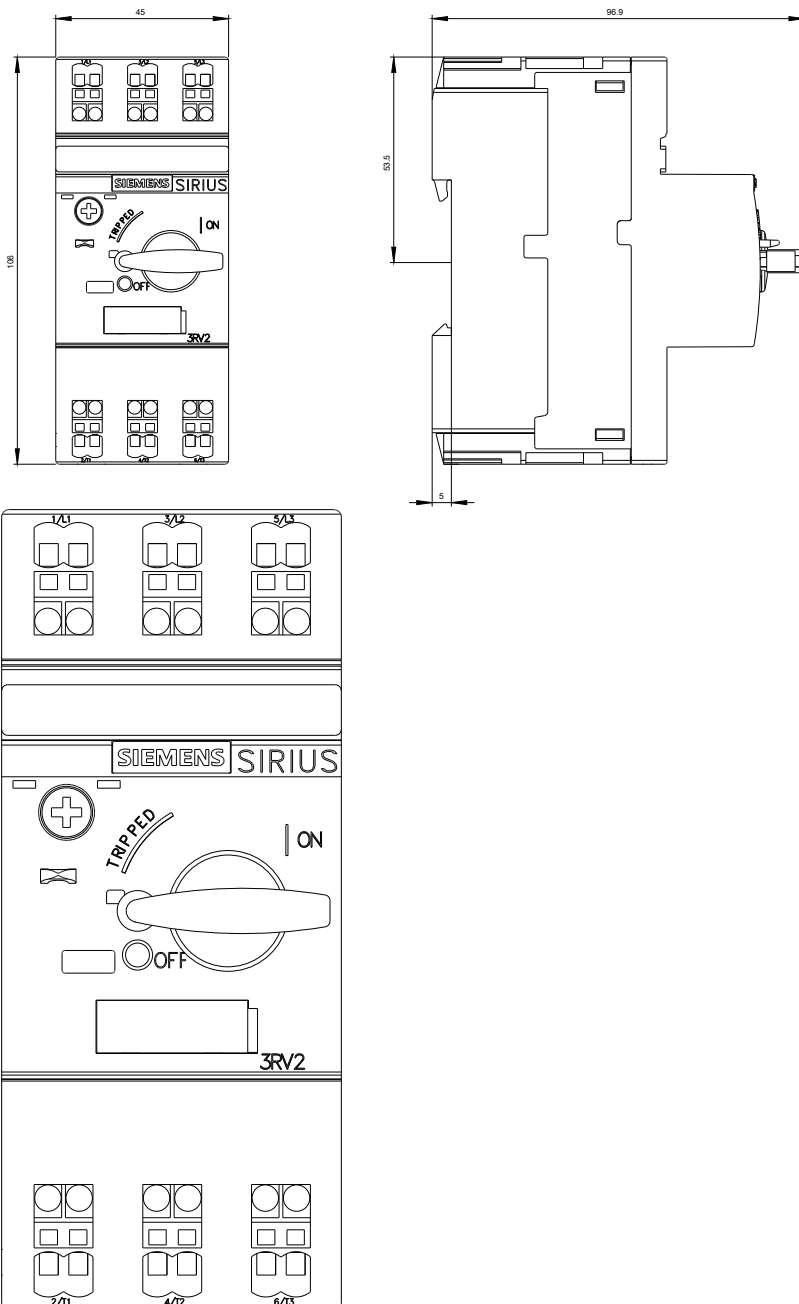
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RV24111FA20>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV24111FA20>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RV24111FA20&lang=en





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