



CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-REL.1.1...1.6A, N-RELEASE 21A, SPRING-L. CONNECTION STANDARD SW. CAPACITY

product brand name	SIRIUS
Product designation	3RV2 circuit breaker

General technical data:

Active power loss total typical	6 W
Insulation voltage	690 V
• with degree of pollution 3 Rated value	
Surge voltage resistance Rated value	6 kV
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
Size of contactor can be combined company-specific	S0
Protection class IP	
• on the front	IP20
• 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	1.1 ... 1.6 A
Operating voltage	

<ul style="list-style-type: none"> • Rated value 	690 V
<ul style="list-style-type: none"> • at AC-3 Rated value maximum 	690 V
Operating frequency Rated value	50 ... 60 Hz
Operating current Rated value	1.6 A
Operating current	
<ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> — at 400 V Rated value 	1.6 A
Operating frequency	
<ul style="list-style-type: none"> • at AC-3 maximum 	15 1/h

Auxiliary circuit:

Number of NC contacts	
<ul style="list-style-type: none"> • for auxiliary contacts 	0
Number of NO contacts	
<ul style="list-style-type: none"> • for auxiliary contacts 	0
Number of CO contacts	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • at 240 V Rated value • at 400 V Rated value • at 500 V Rated value • at 690 V Rated value 	100 kA 100 kA 100 kA 100 kA
Maximum short-circuit current breaking capacity (Icu)	
<ul style="list-style-type: none"> • with AC at 240 V Rated value • with AC at 400 V Rated value • with AC at 500 V Rated value • with AC at 690 V Rated value 	100 kA 100 kA 100 kA 100 kA
Breaking capacity short-circuit current (Icn)	
<ul style="list-style-type: none"> • with 1 current path for DC at 150 V Rated value • with 2 current paths in series for DC at 300 V Rated value • with 3 current paths in series for DC at 450 V Rated value 	10 kA 10 kA 10 kA
Response value current of the instantaneous short-circuit release	21 A

UL/CSA ratings:

Full-load current (FLA) for three-phase AC motor	
<ul style="list-style-type: none"> • at 480 V Rated value 	1.6 A

- at 600 V Rated value

1.6 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 500 V 	gL/gG 20 A
<ul style="list-style-type: none"> • at 690 V 	gL/gG 16 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 — 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 	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 — finely stranded with core end processing — finely stranded without core end processing • for AWG conductors for main contacts 	<p>2x (0,5 ... 4 mm²)</p> <p>2x (0.5 ... 2.5 mm²)</p> <p>2x (0.5 ... 2.5 mm²)</p> <p>2x (20 ... 12)</p>
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 	<p>40 %</p> <p>40 %</p>
T1 value for proof test interval or service life acc. to IEC 61508	10 y
Protection against electrical shock	finger-safe

Mechanical data:

Size of the circuit-breaker	S00
------------------------------------	-----

Ambient conditions:

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

Display:

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

Certificates/ approvals:

General Product Approval	For use in hazardous locations
--------------------------	--------------------------------



[KTL](#)



Declaration of Conformity	Test Certificates	Shipping Approval
---------------------------	-------------------	-------------------



[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

[Declaration of Compliance with the order](#)



Shipping Approval



other

[Confirmation](#)

[Environmental Confirmations](#)



[other](#)

Further information

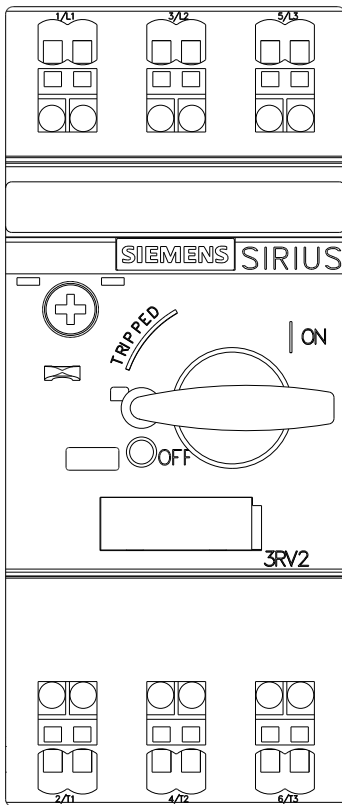
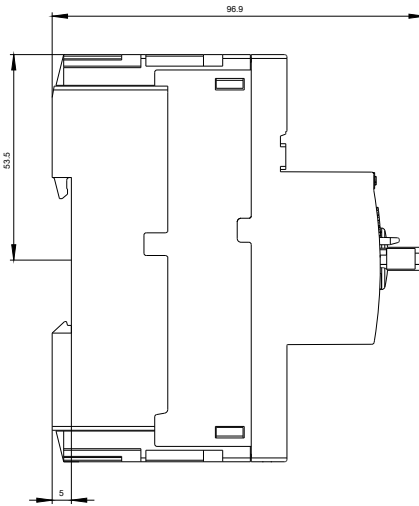
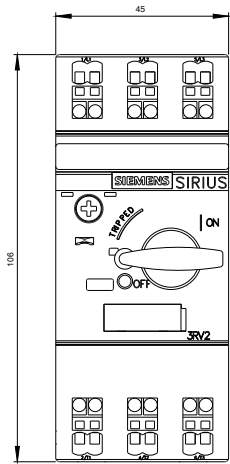
Information- and Downloadcenter (Catalogs, Brochures,...)
<http://www.siemens.com/industrial-controls/catalogs>

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=3RV20111AA20>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3RV20111AA20>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV20111AA20&lang=en





last modified:

14.05.2015