



Circuit breaker size S00 for motor protection, CLASS 10 A-release 0.7...1 A
N-release 13 A Spring-type terminal Standard switching capacity with
transverse auxiliary switches 1 NO+1 NC

product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For motor protection
product type designation	3RV2

General technical data

size of the circuit-breaker	S00
size of contactor can be combined company-specific	S00, S0
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
• at AC in hot operating state	7.25 W
• at AC in hot operating state per pole	2.4 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
shock resistance according to IEC 60068-2-27	25g / 11 ms
mechanical service life (operating cycles)	
• of the main contacts typical	100 000
• of auxiliary contacts typical	100 000
electrical endurance (operating cycles) typical	100 000
type of protection according to ATEX directive 2014/34/EU	Ex II (2) GD
certificate of suitability according to ATEX directive 2014/34/EU	DMT 02 ATEX F 001
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009

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

number of poles for main current circuit	3
adjustable current response value current of the current-dependent overload release	0.7 ... 1 A
operating voltage	
• rated value	20 ... 690 V
• at AC-3 rated value maximum	690 V
• at AC-3e rated value maximum	690 V
operating frequency rated value	50 ... 60 Hz
operational current rated value	1 A

operational current	
• at AC-3 at 400 V rated value	1 A
• at AC-3e at 400 V rated value	1 A
operating power	
• at AC-3	
— at 230 V rated value	0.2 kW
— at 400 V rated value	0.25 kW
— at 500 V rated value	0.4 kW
— at 690 V rated value	0.6 kW
• at AC-3e	
— at 230 V rated value	0.2 kW
— at 400 V rated value	0.25 kW
— at 500 V rated value	0.4 kW
— at 690 V rated value	0.6 kW
operating frequency	
• at AC-3 maximum	15 1/h
• at AC-3e maximum	15 1/h
Auxiliary circuit	
design of the auxiliary switch	transverse
number of NC contacts for auxiliary contacts	1
number of NO contacts for auxiliary contacts	1
number of CO contacts for auxiliary contacts	0
operational current of auxiliary contacts at AC-15	
• at 24 V	2 A
• at 120 V	0.5 A
• at 125 V	0.5 A
• at 230 V	0.5 A
operational current of auxiliary contacts at DC-13	
• at 24 V	1 A
• at 60 V	0.15 A
Protective and monitoring functions	
product function	
• ground fault detection	No
• phase failure detection	Yes
trip class	CLASS 10
design of the overload release	thermal
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	100 kA
operating 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	100 kA
response value current of instantaneous short-circuit trip unit	13 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	1 A
• at 600 V rated value	1 A
yielded mechanical performance [hp]	
• for 3-phase AC motor	
— at 575/600 V rated value	0.5 hp
contact rating of auxiliary contacts according to UL	C300 / R300
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
design of the fuse link	
• for short-circuit protection of the auxiliary switch required	Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current I _k < 400 A)

design of the fuse link for IT network for short-circuit protection of the main circuit

- at 500 V
- at 690 V

gL/gG 10 A
gL/gG 10 A

Installation/ mounting/ dimensions**mounting position**

any

fastening method

screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715

height

106 mm

width

45 mm

depth

97 mm

required spacing

- with side-by-side mounting at the side
- for grounded parts at 400 V
 - downwards
 - upwards
 - at the side
- for live parts at 400 V
 - downwards
 - upwards
 - at the side
- for grounded parts at 500 V
 - downwards
 - upwards
 - at the side
- for live parts at 500 V
 - downwards
 - upwards
 - at the side
- for grounded parts at 690 V
 - downwards
 - upwards
 - backwards
 - at the side
 - forwards
- for live parts at 690 V
 - downwards
 - upwards
 - backwards
 - at the side
 - forwards

0 mm
30 mm
30 mm
9 mm
30 mm
30 mm
9 mm
30 mm
30 mm
9 mm
50 mm
50 mm
0 mm
30 mm
0 mm
50 mm
50 mm
0 mm
30 mm
0 mm

Connections/ Terminals**type of electrical connection**

- for main current circuit
- for auxiliary and control circuit

spring-loaded terminals
spring-loaded terminals
Top and bottom

arrangement of electrical connectors for main current circuit**type of connectable conductor cross-sections**

- for main contacts
 - solid or stranded
 - finely stranded with core end processing
 - finely stranded without core end processing
- at AWG cables for main contacts

2x (0,5 ... 4 mm²)
2x (0,5 ... 2,5 mm²)
2x (0,5 ... 2,5 mm²)
2x (20 ... 12)

type of connectable conductor cross-sections

- for auxiliary contacts
 - solid or stranded
 - finely stranded with core end processing
 - finely stranded without core end processing
- at AWG cables for auxiliary contacts

2x (0,5 ... 2,5 mm²)
2x (0,5 ... 1,5 mm²)
2x (0,5 ... 1,5 mm²)
2x (20 ... 14)

design of screwdriver shaft

Diameter 3 mm

size of the screwdriver tip

3,0 x 0,5 mm

Safety related data**B10 value**

- with high demand rate according to SN 31920

5 000

proportion of dangerous failures

- with low demand rate according to SN 31920
- with high demand rate according to SN 31920

50 %

50 %

failure rate [FIT]

- with low demand rate according to SN 31920

50 FIT

T1 value for proof test interval or service life according to IEC 61508

10 a

protection class IP on the front according to IEC 60529

IP20

touch protection on the front according to IEC 60529

display version for switching status

finger-safe, for vertical contact from the front

Handle

Certificates/ approvals**General Product Approval****For use in hazardous locations**[Confirmation](#)**Declaration of Conformity****Test Certificates****Marine / Shipping**

EG-Konf.

[Type Test Certificates/Test Report](#)[Special Test Certificate](#)

ABS

BUREAU
VERITAS**Marine / Shipping****other**

DNV



LRS



PRS



RINA

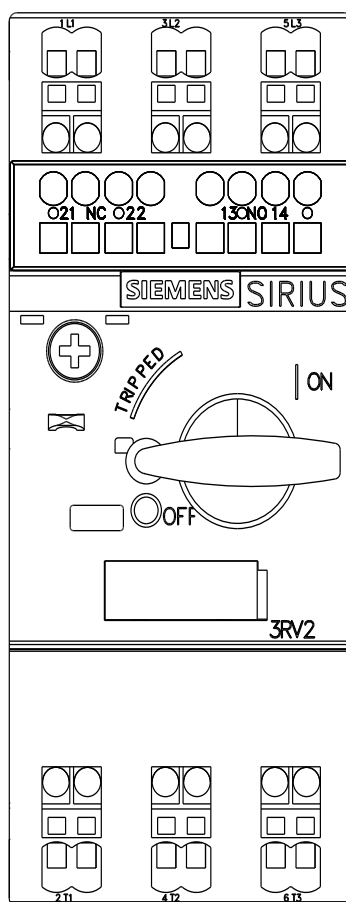
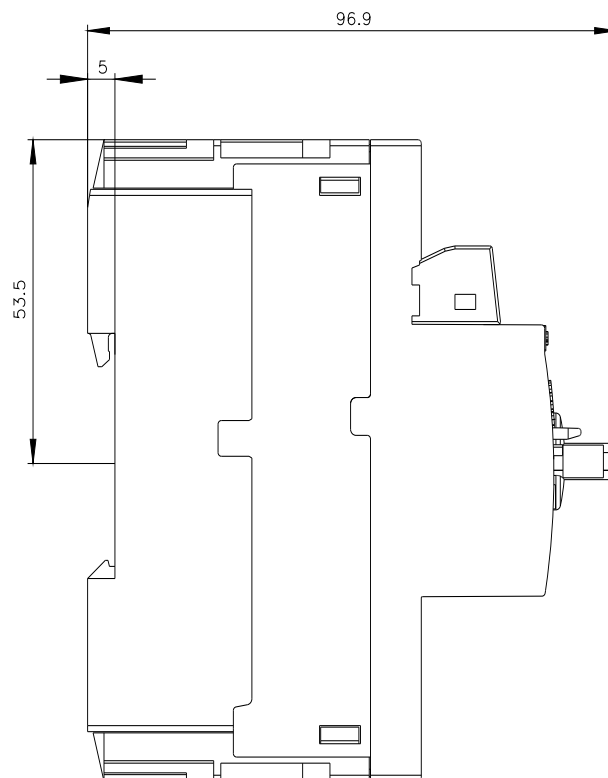
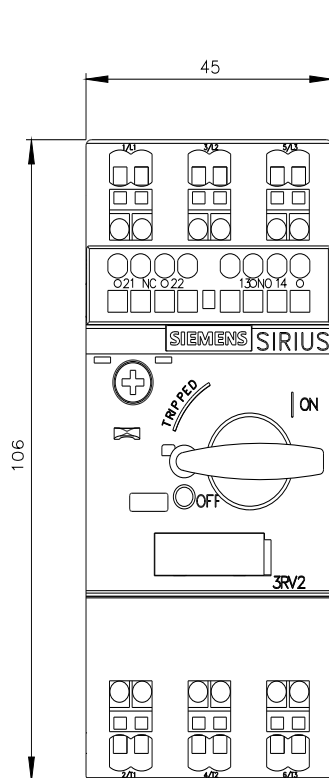


RMRS

[Confirmation](#)**other****Railway**

VDE

[Confirmation](#)[Vibration and Shock](#)**Further information****Information on the packaging**<https://support.industry.siemens.com/cs/ww/en/view/109813875>**Information- and Downloadcenter (Catalogs, Brochures,...)**<https://www.siemens.com/ic10>**Industry Mall (Online ordering system)**<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2011-0JA25>**Cax online generator**<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-0JA25>**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**<https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0JA25>**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-0JA25&lang=en**Characteristic: Tripping characteristics, I_t, Let-through current**<https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0JA25/char>**Further characteristics (e.g. electrical endurance, switching frequency)**<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-0JA25&objecttype=14&gridview=view1>





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