



Circuit breaker size S00 for motor protection, Class 10 A release 3.5...5 A
N release 65 A Spring-type terminal Standard switching capacity Multi-unit
packaging Pack = 8 units

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 (switching cycles)	
• of the main contacts typical	100 000
• of auxiliary contacts typical	100 000
electrical endurance (switching 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	3.5 ... 5 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	5 A

operational current

- at AC-3 at 400 V rated value
- at AC-3e at 400 V rated value

5 A
5 A

operating power

- at AC-3
 - at 230 V rated value
 - at 400 V rated value
 - at 500 V rated value
 - at 690 V rated value
- at AC-3e
 - at 230 V rated value
 - at 400 V rated value
 - at 500 V rated value
 - at 690 V rated value

1.1 kW
1.5 kW
2.2 kW
4 kW

1.1 kW
1.5 kW
2.2 kW
4 kW

operating frequency

- at AC-3 maximum
- at AC-3e maximum

15 1/h
15 1/h

Auxiliary circuit

number of NC contacts for auxiliary contacts
number of NO contacts for auxiliary contacts
number of CO contacts for auxiliary contacts

0
0
0

Protective and monitoring functions**product function**

- ground fault detection
- phase failure detection

No
Yes
CLASS 10
thermal

trip class**design of the overload release****breaking capacity maximum short-circuit current (Icu)**

- at AC at 240 V rated value
- at AC at 400 V rated value
- at AC at 500 V rated value
- at AC at 690 V rated value

100 kA
100 kA
100 kA
6 kA

breaking capacity operating short-circuit current (Ics) at AC

- 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
4 kA

response value current of instantaneous short-circuit trip unit

65 A

UL/CSA ratings**full-load current (FLA) for 3-phase AC motor**

- at 480 V rated value
- at 600 V rated value

5 A
5 A

yielded mechanical performance [hp]

- for single-phase AC motor
 - at 110/120 V rated value
 - at 230 V rated value
- for 3-phase AC motor
 - at 200/208 V rated value
 - at 220/230 V rated value
 - at 460/480 V rated value
 - at 575/600 V rated value

0.17 hp
0.5 hp

1 hp
1 hp
3 hp
3 hp

Short-circuit protection**product function short circuit protection****design of the short-circuit trip****design of the fuse link for IT network for short-circuit protection of the main circuit**

- at 400 V
- at 500 V
- at 690 V

Yes
magnetic

gL/gG 32 A
gL/gG 32 A
gL/gG 25 A

Installation/ mounting/ dimensions**mounting position**

any

fastening method	screw and snap-on mounting onto 35 mm standard mounting 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	0 mm
• for grounded parts at 400 V — downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 400 V — downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for grounded parts at 500 V — downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 500 V — downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for grounded parts at 690 V — downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
• for live parts at 690 V — downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
Connections/ Terminals	
type of electrical connection	spring-loaded terminals
• for main current circuit	Top and bottom
arrangement of electrical connectors for main current circuit	
type of connectable conductor cross-sections	
• for main contacts — solid or stranded	2x (0,5 ... 4 mm ²)
— finely stranded with core end processing	2x (0,5 ... 2,5 mm ²)
— finely stranded without core end processing	2x (0,5 ... 2,5 mm ²)
• at AWG cables for main contacts	2x (20 ... 12)
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	50 %
• with high demand rate according to SN 31920	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 y
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
display version for switching status	Handle
Certificates/ approvals	
Further information	

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=3RV2011-1FA20-Z W97>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-1FA20-Z W97>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1FA20-Z W97>

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

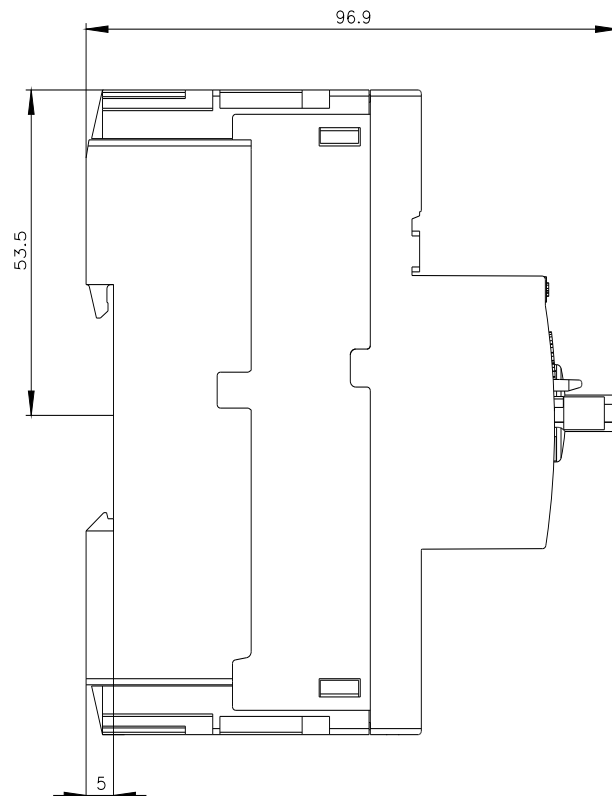
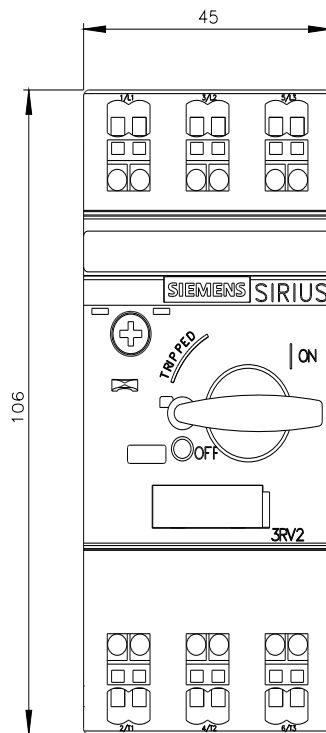
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-1FA20-Z W97&lang=en

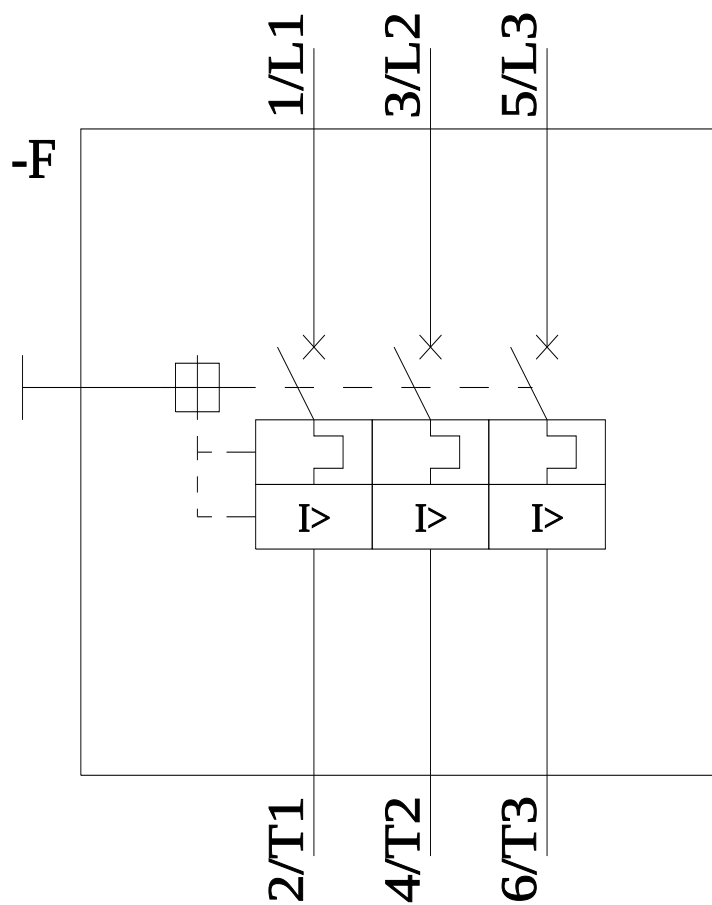
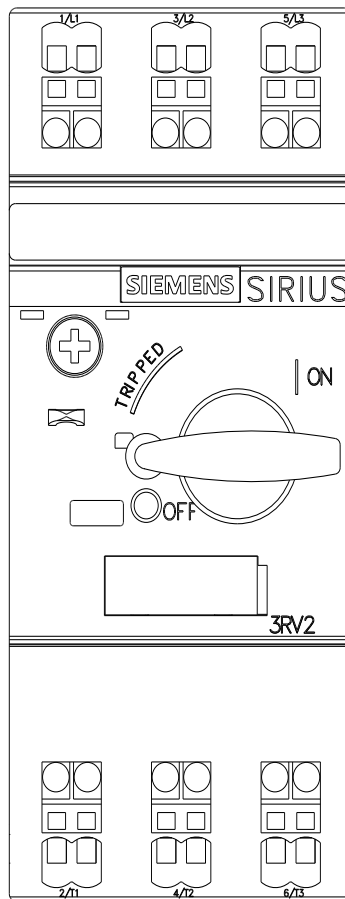
Characteristic: Tripping characteristics, I^2t , Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1FA20-Z W97/char>

Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-1FA20-Z W97&objecttype=14&gridview=view1>





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