



Circuit breaker size S00 for motor protection, CLASS 10 A-release 0.22...0.32 A N-release 4.2 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	5.5 W
• at AC in hot operating state per pole	1.8 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	0.22 ... 0.32 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	0.32 A

operational current

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

0.32 A
0.32 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

0 kW
0.09 kW
0.1 kW
0.1 kW

0 kW
0.09 kW
0.1 kW
0.1 kW

operating frequency

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

15 1/h
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
- at 120 V
- at 125 V
- at 230 V

2 A
0.5 A
0.5 A
0.5 A

operational current of auxiliary contacts at DC-13

- at 24 V
- at 60 V

1 A
0.15 A

Protective and monitoring functions**product function**

- ground fault detection
- phase failure detection

No
Yes

trip class

CLASS 10

design of the overload release

thermal

maximum short-circuit current breaking capacity (I_{cu})

- 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
100 kA

operating short-circuit current breaking capacity (I_{cs}) 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
100 kA

response value current of instantaneous short-circuit trip unit

4.2 A

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

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

0.32 A
0.32 A

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)

Installation/ mounting/ dimensions**mounting position**

any

fastening method

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

height	60715
width	106 mm
depth	45 mm
required spacing	97 mm
<ul style="list-style-type: none"> • with side-by-side mounting at the side 	0 mm
<ul style="list-style-type: none"> • for grounded parts at 400 V <ul style="list-style-type: none"> — downwards 	30 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — upwards 	30 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — at the side 	9 mm
<ul style="list-style-type: none"> • for live parts at 400 V <ul style="list-style-type: none"> — downwards 	30 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — upwards 	30 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — at the side 	9 mm
<ul style="list-style-type: none"> • for grounded parts at 500 V <ul style="list-style-type: none"> — downwards 	30 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — upwards 	30 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — at the side 	9 mm
<ul style="list-style-type: none"> • for live parts at 500 V <ul style="list-style-type: none"> — downwards 	30 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — upwards 	30 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — at the side 	9 mm
<ul style="list-style-type: none"> • for grounded parts at 690 V <ul style="list-style-type: none"> — downwards 	50 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — upwards 	50 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — backwards 	0 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — at the side 	30 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — forwards 	0 mm
<ul style="list-style-type: none"> • for live parts at 690 V <ul style="list-style-type: none"> — downwards 	50 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — upwards 	50 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — backwards 	0 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — at the side 	30 mm
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — forwards 	0 mm

Connections/ Terminals

type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit 	spring-loaded terminals
<ul style="list-style-type: none"> • for auxiliary and control circuit 	spring-loaded terminals
arrangement of electrical connectors for main current circuit	Top and bottom
type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — solid or stranded 	2x (0,5 ... 4 mm ²)
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — finely stranded with core end processing 	2x (0.5 ... 2.5 mm ²)
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — finely stranded without core end processing 	2x (0.5 ... 2.5 mm ²)
<ul style="list-style-type: none"> • at AWG cables for main contacts 	2x (20 ... 12)
type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — solid or stranded 	2x (0.5 ... 2.5 mm ²)
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — finely stranded with core end processing 	2x (0.5 ... 1.5 mm ²)
<ul style="list-style-type: none"> <ul style="list-style-type: none"> — finely stranded without core end processing 	2x (0.5 ... 1.5 mm ²)
<ul style="list-style-type: none"> • at AWG cables for auxiliary contacts 	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	
<ul style="list-style-type: none"> • with high demand rate according to SN 31920 	5 000
proportion of dangerous failures	
<ul style="list-style-type: none"> • with low demand rate according to SN 31920 	50 %
<ul style="list-style-type: none"> • with high demand rate according to SN 31920 	50 %
failure rate [FIT]	
<ul style="list-style-type: none"> • 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
 touch protection on the front according to IEC 60529
 display version for switching status

IP20

finger-safe, for vertical contact from the front
 Handle

Certificates/ approvals

General Product Approval

For use in hazard-
ous locations

[Confirmation](#)



[KC](#)



For use in hazard-
ous locations

Declaration of Conformity

Test Certificates

Marine / Shipping



[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Marine / Shipping



other

Railway

[Confirmation](#)



[Vibration and Shock](#)

[Confirmation](#)

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=3RV2011-0DA25>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-0DA25>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0DA25>

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

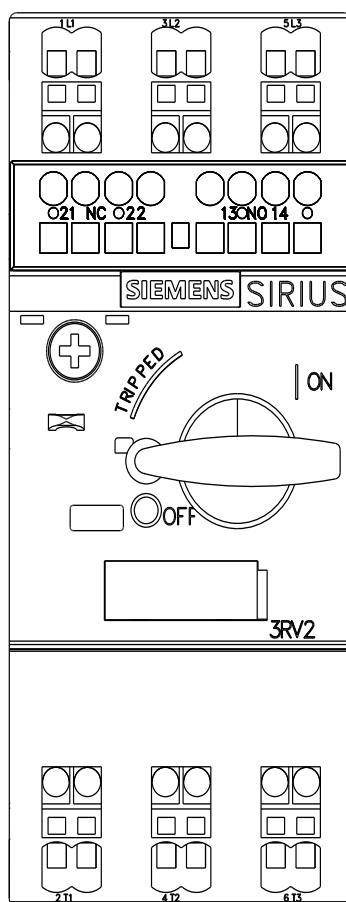
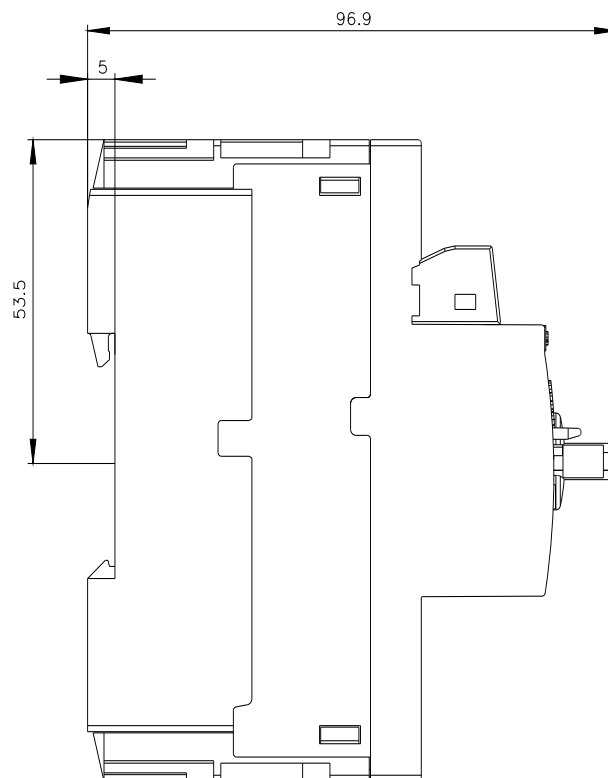
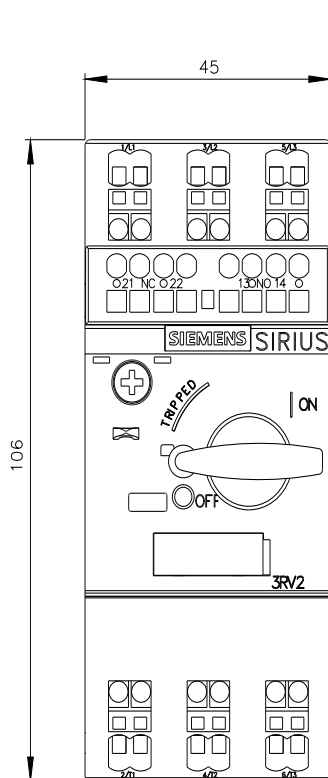
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-0DA25&lang=en

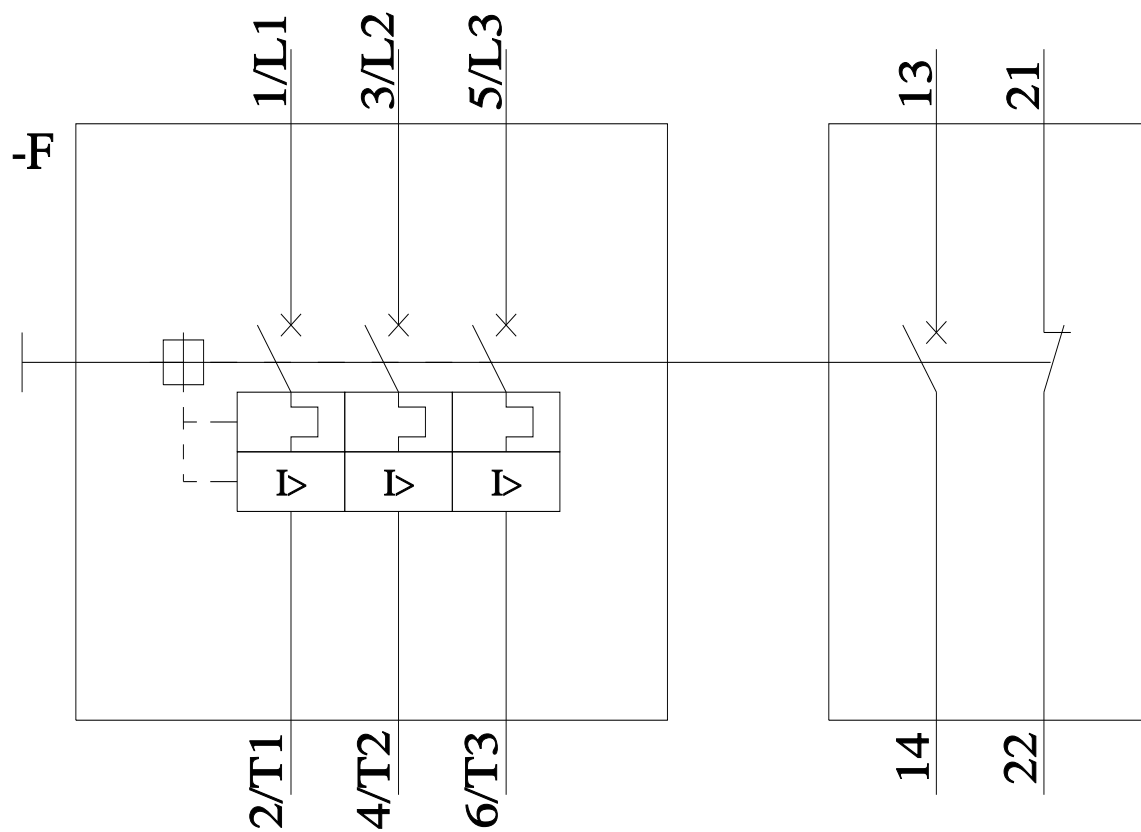
Characteristic: Tripping characteristics, I_t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0DA25/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-0DA25&objecttype=14&gridview=view1>





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