



Circuit breaker size S00 for motor protection, CLASS 10 with overload relay function A-release 0.14...0.2 A N-release 2.6 A screw terminal Standard switching capacity

product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For motor protection with overload relay function
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
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	0.14 ... 0.2 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	0.2 A
operational current	
• at AC-3 at 400 V rated value	0.2 A
• at AC-3e at 400 V rated value	0.2 A
operating power	

<ul style="list-style-type: none"> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 230 V rated value</li> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> </ul> </li> <li>• at AC-3e <ul style="list-style-type: none"> <li>— at 230 V rated value</li> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> </ul> </li> </ul>	0 kW 0.06 kW 0.1 kW 0.1 kW
<b>operating frequency</b> <ul style="list-style-type: none"> <li>• at AC-3 maximum</li> <li>• at AC-3e maximum</li> </ul>	15 1/h 15 1/h
<b>Auxiliary circuit</b>	
<b>design of the auxiliary switch</b>	laterally
<b>number of NC contacts for auxiliary contacts</b>	0
<b>number of NO contacts for auxiliary contacts</b>	0
number of CO contacts for auxiliary contacts	0
<b>operational current of auxiliary contacts at AC-15</b>	
<ul style="list-style-type: none"> <li>• at 24 V</li> <li>• at 230 V</li> </ul>	1.5 A 1.5 A
<b>operational current of auxiliary contacts at DC-13</b>	
<ul style="list-style-type: none"> <li>• at 24 V</li> </ul>	1 A
<b>Protective and monitoring functions</b>	
<b>product function</b>	
<ul style="list-style-type: none"> <li>• ground fault detection</li> <li>• phase failure detection</li> </ul>	No Yes
<b>trip class</b>	CLASS 10
<b>design of the overload release</b>	thermal
<b>maximum short-circuit current breaking capacity (Icu)</b>	
<ul style="list-style-type: none"> <li>• at AC at 240 V rated value</li> <li>• at AC at 400 V rated value</li> <li>• at AC at 500 V rated value</li> <li>• at AC at 690 V rated value</li> </ul>	100 kA 100 kA 100 kA 100 kA
<b>operating short-circuit current breaking capacity (Ics) at AC</b>	
<ul style="list-style-type: none"> <li>• at 240 V rated value</li> <li>• at 400 V rated value</li> <li>• at 500 V rated value</li> <li>• at 690 V rated value</li> </ul>	100 kA 100 kA 100 kA 100 kA
response value current of instantaneous short-circuit trip unit	2.6 A
<b>UL/CSA ratings</b>	
<b>full-load current (FLA) for 3-phase AC motor</b>	
<ul style="list-style-type: none"> <li>• at 480 V rated value</li> <li>• at 600 V rated value</li> </ul>	0.2 A 0.2 A
<b>contact rating of auxiliary contacts according to UL</b>	C600 / R300
<b>Short-circuit protection</b>	
<b>product function short circuit protection</b>	Yes
<b>design of the short-circuit trip</b>	magnetic
<b>design of the fuse link</b>	
<ul style="list-style-type: none"> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gL/gG: 6 A, quick: 10 A
<b>Installation/ mounting/ dimensions</b>	
<b>mounting position</b>	any
<b>fastening method</b>	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
<b>height</b>	97 mm
<b>width</b>	65 mm
<b>depth</b>	97 mm
<b>required spacing</b>	
<ul style="list-style-type: none"> <li>• with side-by-side mounting at the side</li> <li>• for grounded parts at 400 V</li> </ul>	0 mm

— 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

- for main current circuit
- for auxiliary and control circuit

screw-type terminals  
screw-type 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
- at AWG cables for main contacts

2x (0,75 ... 2,5 mm<sup>2</sup>), 2x 4 mm<sup>2</sup>  
2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)  
2x (18 ... 14), 2x 12

#### type of connectable conductor cross-sections

- for auxiliary contacts
  - solid or stranded
  - finely stranded with core end processing
- at AWG cables for auxiliary contacts

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)  
2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)  
2x (20 ... 16), 2x (18 ... 14)

### tightening torque

- for main contacts with screw-type terminals
- for auxiliary contacts with screw-type terminals

0.8 ... 1.2 N·m  
0.8 ... 1.2 N·m  
Diameter 5 to 6 mm  
Pozidriv size 2

### design of screwdriver shaft

### size of the screwdriver tip

### design of the thread of the connection screw

- for main contacts
- of the auxiliary and control contacts

M3  
M3

## 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

finger-safe, for vertical contact from the front

## Certificates/ approvals

## General Product Approval

Declaration of  
Conformity[Confirmation](#)[KC](#)Declaration of  
Conformity

## Test Certificates

## Marine / Shipping

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

## Marine / Shipping

## other

[Confirmation](#)

## Railway

[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=3RV2111-0BA10>

## Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2111-0BA10>

## Service&amp;Support (Manuals, Certificates, Characteristics, FAQs,...)

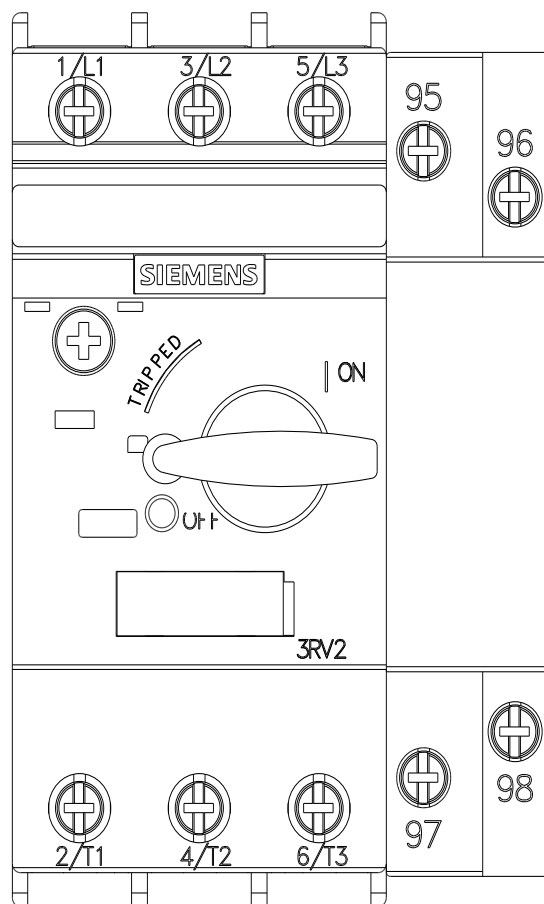
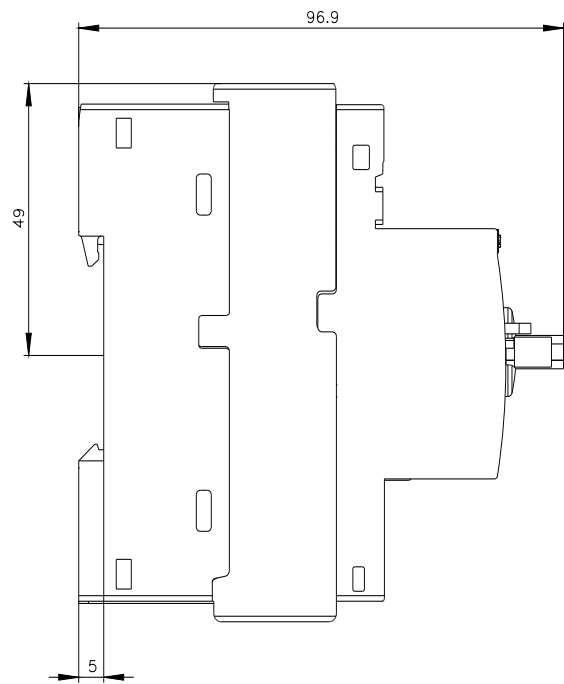
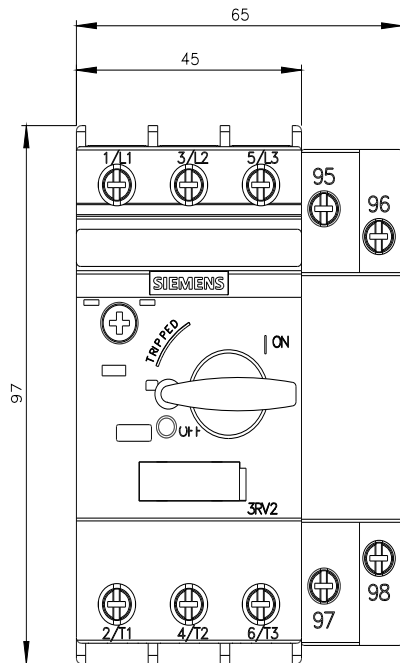
<https://support.industry.siemens.com/cs/ww/en/ps/3RV2111-0BA10>

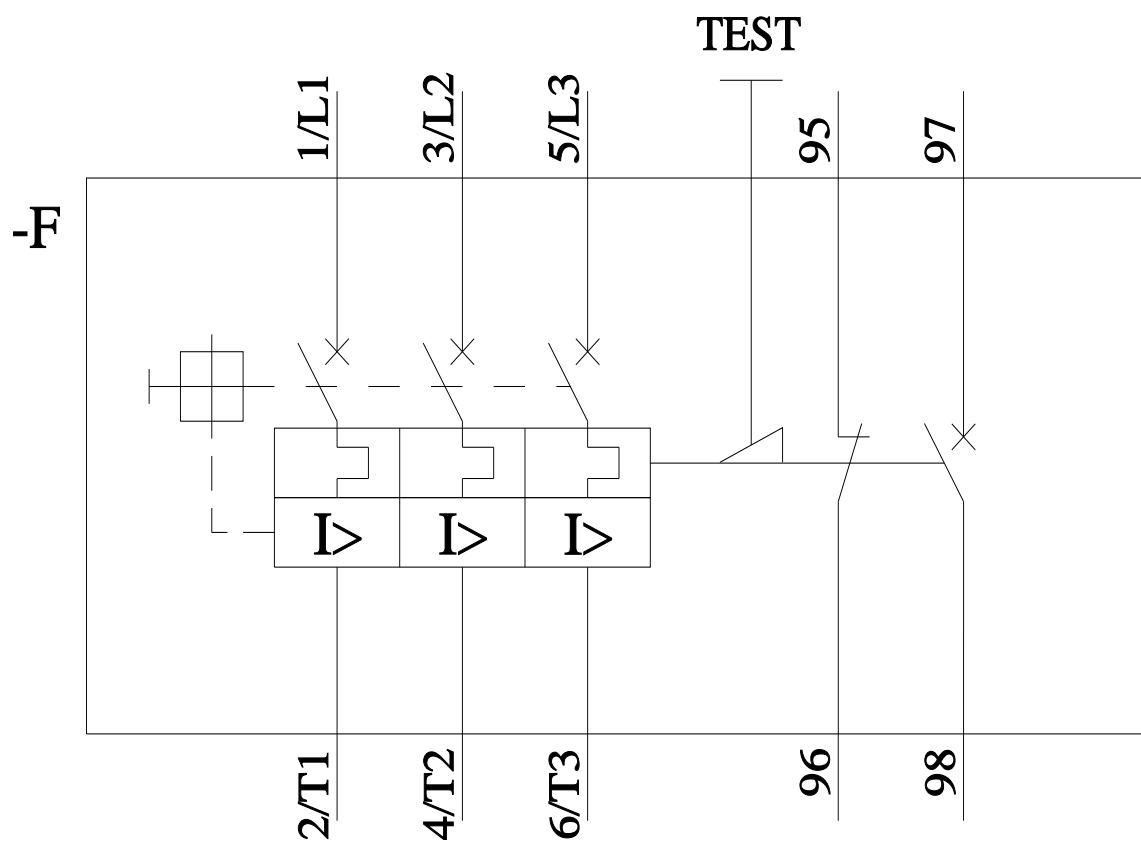
## Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV2111-0BA10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2111-0BA10&lang=en)
Characteristic: Tripping characteristics, I<sub>t</sub>, Let-through current
<https://support.industry.siemens.com/cs/ww/en/ps/3RV2111-0BA10/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2111-0BA10&objecttype=14&gridview=view1>





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