



Circuit breaker size S00 for motor protection, CLASS 10 A-release 2.8...4 A  
N release 52 A screw terminal Standard switching capacity with transverse  
auxiliary switches 1 NO+1 NC

|                                 |                      |
|---------------------------------|----------------------|
| <b>product brand name</b>       | SIRIUS               |
| <b>product designation</b>      | Circuit breaker      |
| <b>design of the product</b>    | For motor protection |
| <b>product type designation</b> | 3RV2                 |

### General technical data

|                                                                   |                   |
|-------------------------------------------------------------------|-------------------|
| <b>size of the circuit-breaker</b>                                | S00               |
| <b>size of contactor can be combined company-specific</b>         | S00, S0           |
| product extension auxiliary switch                                | Yes               |
| <b>power loss [W] for rated value of the current</b>              |                   |
| • 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             |
| <b>surge voltage resistance rated value</b>                       | 6 kV              |
| <b>shock resistance according to IEC 60068-2-27</b>               | 25g / 11 ms       |
| <b>mechanical service life (switching cycles)</b>                 |                   |
| • of the main contacts typical                                    | 100 000           |
| • of auxiliary contacts typical                                   | 100 000           |
| electrical endurance (switching cycles) typical                   | 100 000           |
| <b>type of protection according to ATEX directive 2014/34/EU</b>  | Ex II (2) GD      |
| certificate of suitability according to ATEX directive 2014/34/EU | DMT 02 ATEX F 001 |
| <b>reference code according to IEC 81346-2</b>                    | Q                 |
| <b>Substance Prohibitance (Date)</b>                              | 10/01/2009        |

### Ambient conditions

|                                                         |                |
|---------------------------------------------------------|----------------|
| installation altitude at height above sea level maximum | 2 000 m        |
| <b>ambient temperature</b>                              |                |
| • during operation                                      | -20 ... +60 °C |
| • during storage                                        | -50 ... +80 °C |
| • during transport                                      | -50 ... +80 °C |
| relative humidity during operation                      | 10 ... 95 %    |

### Main circuit

|                                                                                            |              |
|--------------------------------------------------------------------------------------------|--------------|
| <b>number of poles for main current circuit</b>                                            | 3            |
| <b>adjustable current response value current of the current-dependent overload release</b> | 2.8 ... 4 A  |
| <b>operating voltage</b>                                                                   |              |
| • rated value                                                                              | 20 ... 690 V |
| • at AC-3 rated value maximum                                                              | 690 V        |
| • at AC-3e rated value maximum                                                             | 690 V        |
| <b>operating frequency rated value</b>                                                     | 50 ... 60 Hz |
| <b>operational current rated value</b>                                                     | 4 A          |

|                                                                                 |             |
|---------------------------------------------------------------------------------|-------------|
| <b>operational current</b>                                                      |             |
| • at AC-3 at 400 V rated value                                                  | 4 A         |
| • at AC-3e at 400 V rated value                                                 | 4 A         |
| <b>operating power</b>                                                          |             |
| • at AC-3                                                                       |             |
| — at 230 V rated value                                                          | 0.8 kW      |
| — at 400 V rated value                                                          | 1.5 kW      |
| — at 500 V rated value                                                          | 2.2 kW      |
| — at 690 V rated value                                                          | 3 kW        |
| • at AC-3e                                                                      |             |
| — at 230 V rated value                                                          | 0.8 kW      |
| — at 400 V rated value                                                          | 1.5 kW      |
| — at 500 V rated value                                                          | 2.2 kW      |
| — at 690 V rated value                                                          | 3 kW        |
| <b>operating frequency</b>                                                      |             |
| • at AC-3 maximum                                                               | 15 1/h      |
| • at AC-3e maximum                                                              | 15 1/h      |
| <b>Auxiliary circuit</b>                                                        |             |
| <b>design of the auxiliary switch</b>                                           | transverse  |
| <b>number of NC contacts for auxiliary contacts</b>                             | 1           |
| <b>number of NO contacts for auxiliary contacts</b>                             | 1           |
| number of CO contacts for auxiliary contacts                                    | 0           |
| <b>operational current of auxiliary contacts at AC-15</b>                       |             |
| • at 24 V                                                                       | 2 A         |
| • at 120 V                                                                      | 0.5 A       |
| • at 125 V                                                                      | 0.5 A       |
| • at 230 V                                                                      | 0.5 A       |
| <b>operational current of auxiliary contacts at DC-13</b>                       |             |
| • at 24 V                                                                       | 1 A         |
| • at 60 V                                                                       | 0.15 A      |
| <b>Protective and monitoring functions</b>                                      |             |
| <b>product function</b>                                                         |             |
| • ground fault detection                                                        | No          |
| • phase failure detection                                                       | Yes         |
| <b>trip class</b>                                                               | CLASS 10    |
| <b>design of the overload release</b>                                           | thermal     |
| <b>breaking capacity maximum short-circuit current (I<sub>cu</sub>)</b>         |             |
| • 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                                                    | 6 kA        |
| <b>breaking capacity operating short-circuit current (I<sub>cs</sub>) at AC</b> |             |
| • 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                                                          | 4 kA        |
| response value current of instantaneous short-circuit trip unit                 | 52 A        |
| <b>UL/CSA ratings</b>                                                           |             |
| <b>full-load current (FLA) for 3-phase AC motor</b>                             |             |
| • at 480 V rated value                                                          | 4 A         |
| • at 600 V rated value                                                          | 4 A         |
| <b>yielded mechanical performance [hp]</b>                                      |             |
| • for single-phase AC motor                                                     |             |
| — at 110/120 V rated value                                                      | 0.13 hp     |
| — at 230 V rated value                                                          | 0.33 hp     |
| • for 3-phase AC motor                                                          |             |
| — at 200/208 V rated value                                                      | 0.8 hp      |
| — at 220/230 V rated value                                                      | 0.75 hp     |
| — at 460/480 V rated value                                                      | 2 hp        |
| — at 575/600 V rated value                                                      | 3 hp        |
| <b>contact rating of auxiliary contacts according to UL</b>                     | C300 / R300 |

| Short-circuit protection                                                                                                                       |                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <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: 10 A, miniature circuit breaker C 6 A (short-circuit current $I_{lk} < 400 \text{ A}$ ) |
| <b>design of the fuse link for IT network for short-circuit protection of the main circuit</b>                                                 |                                                                                                     |
| <ul style="list-style-type: none"> <li>at 400 V</li> </ul>                                                                                     | gL/gG 32 A                                                                                          |
| <ul style="list-style-type: none"> <li>at 500 V</li> </ul>                                                                                     | gL/gG 32 A                                                                                          |
| <ul style="list-style-type: none"> <li>at 690 V</li> </ul>                                                                                     | gL/gG 25 A                                                                                          |
| Installation/ mounting/ dimensions                                                                                                             |                                                                                                     |
| <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>                                                                                                                                   | 45 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> </ul>                                                       | 0 mm                                                                                                |
| <ul style="list-style-type: none"> <li>for grounded parts at 400 V <ul style="list-style-type: none"> <li>downwards</li> </ul> </li> </ul>     | 30 mm                                                                                               |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>upwards</li> </ul> </li> </ul>                                  | 30 mm                                                                                               |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>at the side</li> </ul> </li> </ul>                              | 9 mm                                                                                                |
| <ul style="list-style-type: none"> <li>for live parts at 400 V <ul style="list-style-type: none"> <li>downwards</li> </ul> </li> </ul>         | 30 mm                                                                                               |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>upwards</li> </ul> </li> </ul>                                  | 30 mm                                                                                               |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>at the side</li> </ul> </li> </ul>                              | 9 mm                                                                                                |
| <ul style="list-style-type: none"> <li>for grounded parts at 500 V <ul style="list-style-type: none"> <li>downwards</li> </ul> </li> </ul>     | 30 mm                                                                                               |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>upwards</li> </ul> </li> </ul>                                  | 30 mm                                                                                               |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>at the side</li> </ul> </li> </ul>                              | 9 mm                                                                                                |
| <ul style="list-style-type: none"> <li>for live parts at 500 V <ul style="list-style-type: none"> <li>downwards</li> </ul> </li> </ul>         | 30 mm                                                                                               |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>upwards</li> </ul> </li> </ul>                                  | 30 mm                                                                                               |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>at the side</li> </ul> </li> </ul>                              | 9 mm                                                                                                |
| <ul style="list-style-type: none"> <li>for grounded parts at 690 V <ul style="list-style-type: none"> <li>downwards</li> </ul> </li> </ul>     | 50 mm                                                                                               |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>upwards</li> </ul> </li> </ul>                                  | 50 mm                                                                                               |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>backwards</li> </ul> </li> </ul>                                | 0 mm                                                                                                |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>at the side</li> </ul> </li> </ul>                              | 30 mm                                                                                               |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>forwards</li> </ul> </li> </ul>                                 | 0 mm                                                                                                |
| <ul style="list-style-type: none"> <li>for live parts at 690 V <ul style="list-style-type: none"> <li>downwards</li> </ul> </li> </ul>         | 50 mm                                                                                               |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>upwards</li> </ul> </li> </ul>                                  | 50 mm                                                                                               |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>backwards</li> </ul> </li> </ul>                                | 0 mm                                                                                                |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>at the side</li> </ul> </li> </ul>                              | 30 mm                                                                                               |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>forwards</li> </ul> </li> </ul>                                 | 0 mm                                                                                                |
| Connections/ Terminals                                                                                                                         |                                                                                                     |
| <b>type of electrical connection</b>                                                                                                           |                                                                                                     |
| <ul style="list-style-type: none"> <li>for main current circuit</li> </ul>                                                                     | screw-type terminals                                                                                |
| <ul style="list-style-type: none"> <li>for auxiliary and control circuit</li> </ul>                                                            | screw-type terminals                                                                                |
| <b>arrangement of electrical connectors for main current circuit</b>                                                                           | Top and bottom                                                                                      |
| <b>type of connectable conductor cross-sections</b>                                                                                            |                                                                                                     |
| <ul style="list-style-type: none"> <li>for main contacts <ul style="list-style-type: none"> <li>solid or stranded</li> </ul> </li> </ul>       | 2x (0,75 ... 2,5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup>                                            |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>finely stranded with core end processing</li> </ul> </li> </ul> | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )                               |
| <ul style="list-style-type: none"> <li>at AWG cables for main contacts</li> </ul>                                                              | 2x (18 ... 14), 2x 12                                                                               |
| <b>type of connectable conductor cross-sections</b>                                                                                            |                                                                                                     |
| <ul style="list-style-type: none"> <li>for auxiliary contacts <ul style="list-style-type: none"> <li>solid or stranded</li> </ul> </li> </ul>  | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )                               |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>finely stranded with core end processing</li> </ul> </li> </ul> | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )                               |
| <ul style="list-style-type: none"> <li>at AWG cables for auxiliary contacts</li> </ul>                                                         | 2x (20 ... 16), 2x (18 ... 14)                                                                      |

**tightening torque**

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

**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

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

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 y

**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**

[Confirmation](#)



[KC](#)

**For use in hazardous locations****Declaration of Conformity****Test Certificates**

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

**Marine / Shipping****Marine / Shipping****other****Railway**

[Confirmation](#)



[Confirmation](#)

[Vibration and Shock](#)

**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=3RV2011-1EA15>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-1EA15>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1EA15>

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

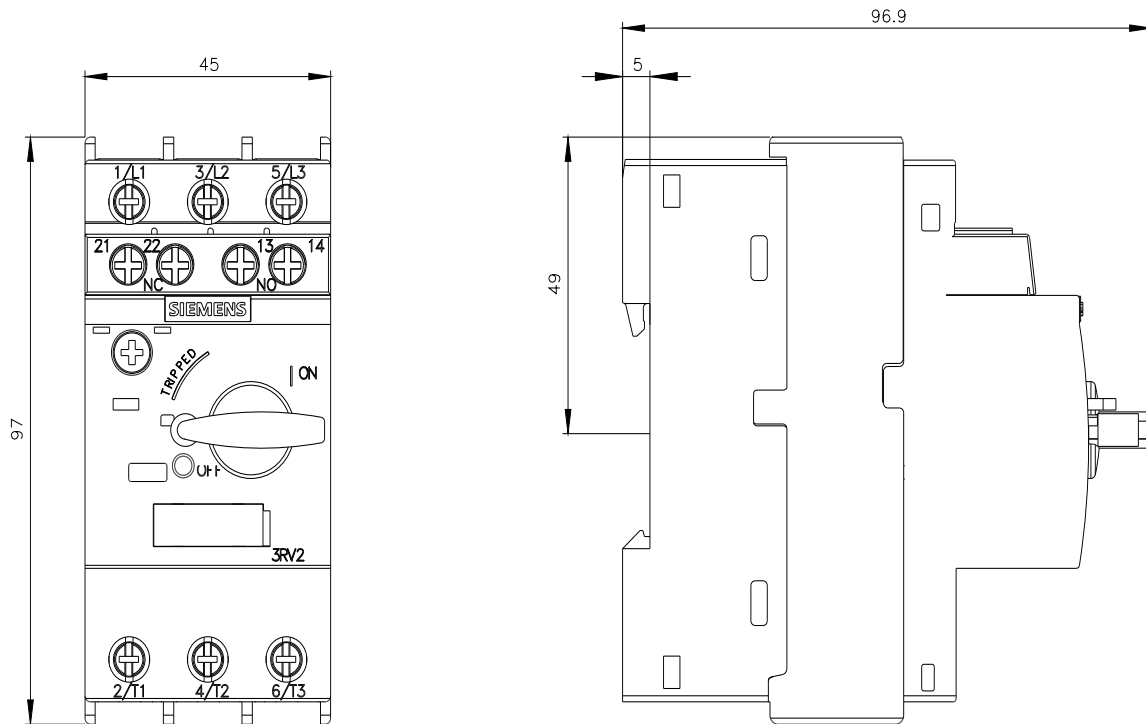
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV2011-1EA15&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-1EA15&lang=en)

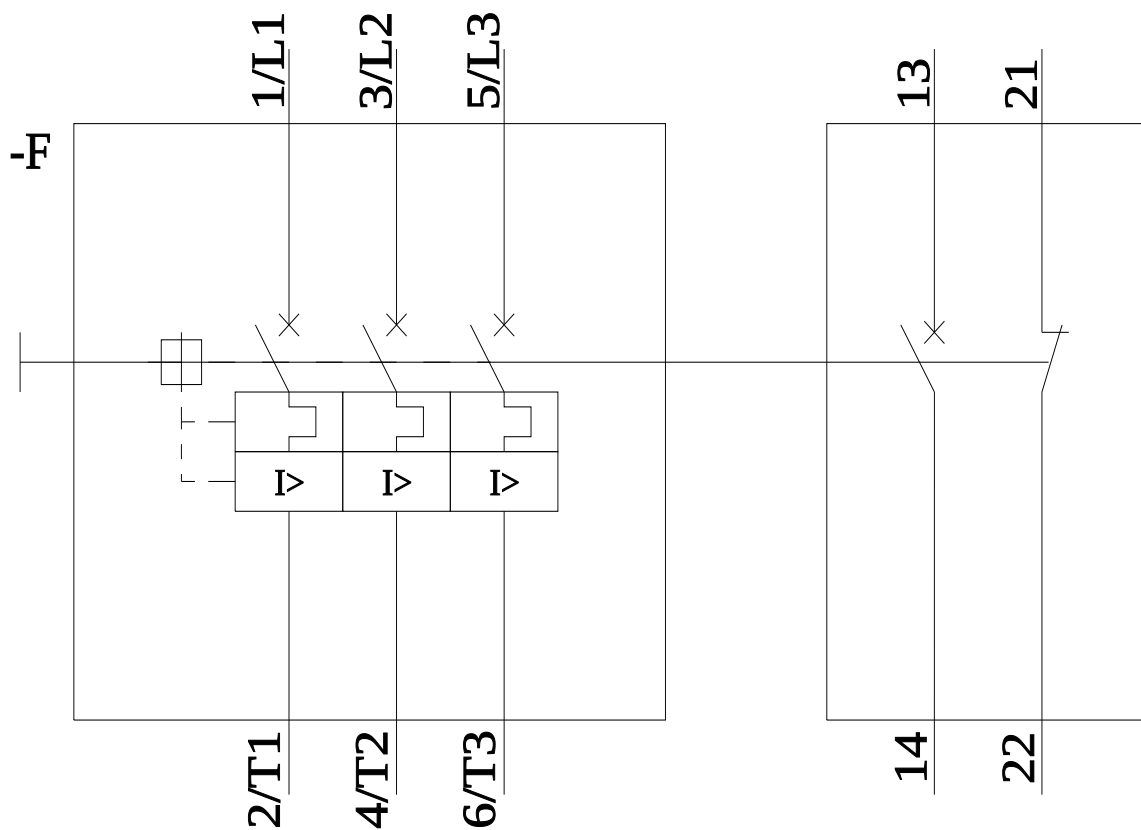
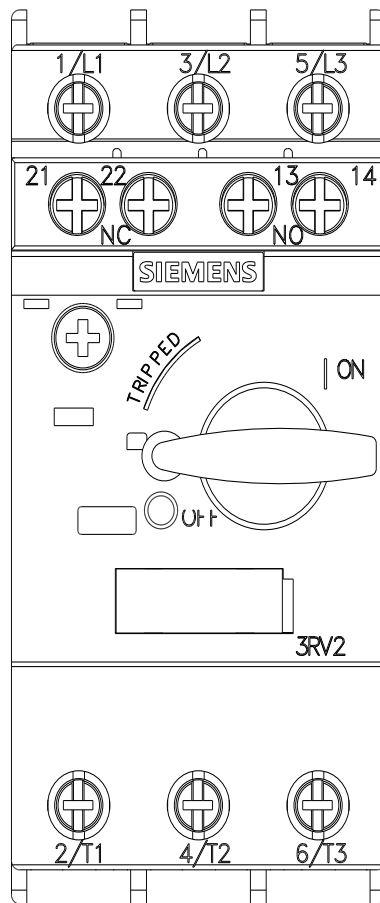
Characteristic: Tripping characteristics,  $I^2t$ , Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1EA15/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-1EA15&objecttype=14&gridview=view1>





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