



Circuit breaker size S00 for starter combination Rated current 2.5 A N-release 33 A  
Spring-type terminal Standard switching capacity

|                                                                 |                          |
|-----------------------------------------------------------------|--------------------------|
| product brand name                                              | SIRIUS                   |
| product designation                                             | Circuit breaker          |
| design of the product                                           | For starter combinations |
| product type designation                                        | 3RV2                     |
| <b>General technical data</b>                                   |                          |
| 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                  |
| reference code according to IEC 81346-2                         | Q                        |
| Substance Prohibitance (Date)                                   | 10/01/2009               |
| SVHC substance name                                             | Lead - 7439-92-1         |
| <b>Ambient conditions</b>                                       |                          |
| 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 %              |
| <b>Main circuit</b>                                             |                          |
| number of poles for main current circuit                        | 3                        |
| 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                                 | 2.5 A                    |
| operational current                                             |                          |
| • at AC-3 at 400 V rated value                                  | 2.5 A                    |
| • at AC-3e at 400 V rated value                                 | 2.5 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> | 0.4 kW<br>0.8 kW<br>1.1 kW<br>1.5 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<br>15 1/h                                                         |
| <b>Auxiliary circuit</b>                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                          |
| <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>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<br>No                                                                 |
| <b>maximum short-circuit current breaking capacity (I<sub>cu</sub>)</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<br>100 kA<br>100 kA<br>10 kA                                      |
| <b>operating short-circuit current breaking capacity (I<sub>cs</sub>) 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<br>100 kA<br>100 kA<br>10 kA                                      |
| response value current of instantaneous short-circuit trip unit                                                                                                                                                                                                                                                                                                                                                                     | 33 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>                                                                                                                                                                                                                                                                        | 2.5 A<br>2.5 A                                                           |
| <b>yielded mechanical performance [hp]</b> <ul style="list-style-type: none"> <li>• for single-phase AC motor <ul style="list-style-type: none"> <li>— at 230 V rated value</li> </ul> </li> <li>• for 3-phase AC motor <ul style="list-style-type: none"> <li>— at 200/208 V rated value</li> <li>— at 220/230 V rated value</li> <li>— at 460/480 V rated value</li> <li>— at 575/600 V rated value</li> </ul> </li> </ul>        | 0.17 hp<br>0.5 hp<br>0.5 hp<br>1 hp<br>1.5 hp                            |
| <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 for IT network for short-circuit protection of the main circuit</b> <ul style="list-style-type: none"> <li>• at 400 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>                                                                                                                                                                                                                                 | gL/gG 25 A<br>gL/gG 25 A<br>gL/gG 20 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>                                                                                                                                                                                                                                                                                                                                                                                                                       | 106 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> <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                                             |
| <b>Connections/ Terminals</b>                                        |                                                  |
| <b>type of electrical connection</b>                                 |                                                  |
| • for main current circuit                                           | spring-loaded terminals                          |
| <b>arrangement of electrical connectors for main current circuit</b> | Top and bottom                                   |
| <b>type of connectable conductor cross-sections</b>                  |                                                  |
| • for main contacts                                                  |                                                  |
| — solid or stranded                                                  | 2x (0,5 ... 4 mm²)                               |
| — finely stranded with core end processing                           | 2x (0.5 ... 2.5 mm²)                             |
| — finely stranded without core end processing                        | 2x (0.5 ... 2.5 mm²)                             |
| • for AWG cables for main contacts                                   | 2x (20 ... 12)                                   |
| <b>design of screwdriver shaft</b>                                   | Diameter 3 mm                                    |
| <b>size of the screwdriver tip</b>                                   | 3,0 x 0,5 mm                                     |
| <b>Safety related data</b>                                           |                                                  |
| <b>proportion of dangerous failures</b>                              |                                                  |
| • with low demand rate according to SN 31920                         | 50 %                                             |
| • with high demand rate according to SN 31920                        | 50 %                                             |
| <b>B10 value with high demand rate according to SN 31920</b>         | 5 000                                            |
| <b>failure rate [FIT] with low demand rate according to SN 31920</b> | 50 FIT                                           |
| <b>IEC 61508</b>                                                     |                                                  |
| <b>T1 value</b>                                                      |                                                  |
| • for proof test interval or service life according to IEC 61508     | 10 a                                             |
| <b>Electrical Safety</b>                                             |                                                  |
| <b>protection class IP on the front according to IEC 60529</b>       | IP20                                             |
| <b>touch protection on the front according to IEC 60529</b>          | finger-safe, for vertical contact from the front |
| display version for switching status                                 | Handle                                           |
| <b>Approvals Certificates</b>                                        |                                                  |
| <b>General Product Approval</b>                                      |                                                  |



[Confirmation](#)



#### Test Certificates

#### Marine / Shipping

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



#### Marine / Shipping

#### other

#### Railway



[Miscellaneous](#)

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[Special Test Certificate](#)

#### Railway

#### Environment

[Confirmation](#)



[Environmental Confirmations](#)

#### 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=3RV2311-1CC20>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2311-1CC20>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-1CC20>

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

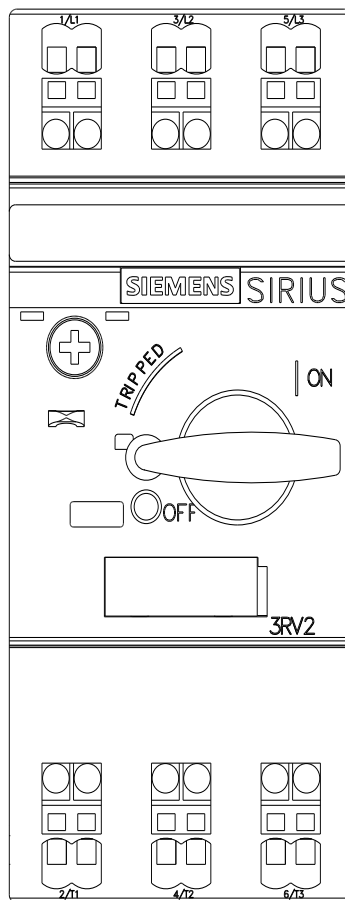
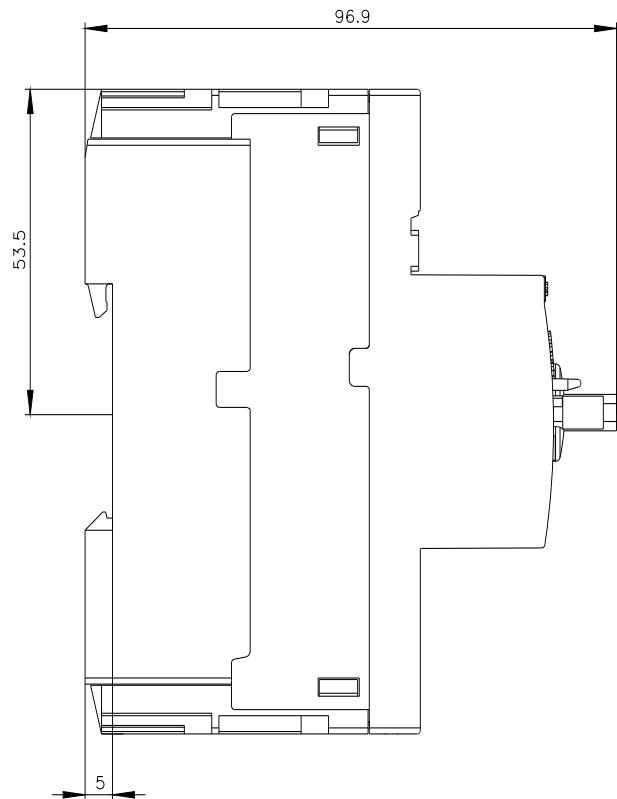
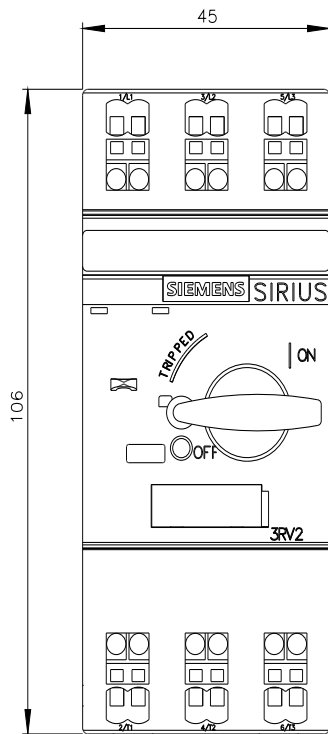
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV2311-1CC20&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2311-1CC20&lang=en)

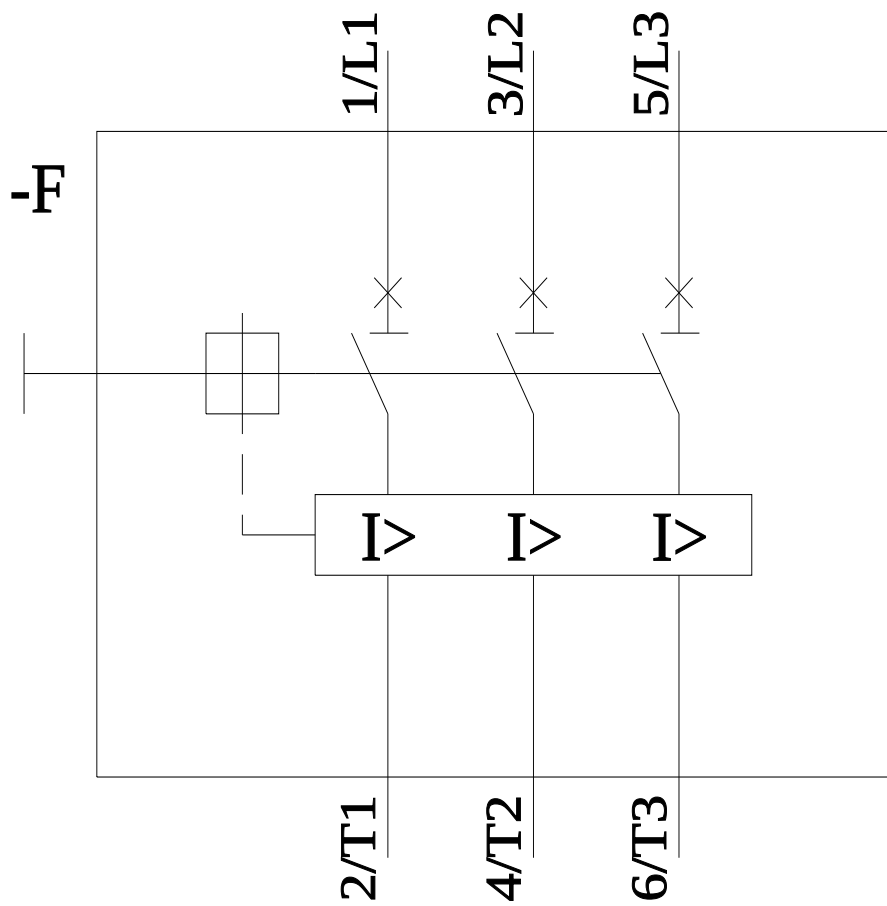
Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-1CC20/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2311-1CC20&objecttype=14&gridview=view1>





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