



Circuit breaker size S00 for starter combination Rated current 1.25 A N-release 16 A screw terminal Standard switching capacity

|                                                                 |                          |
|-----------------------------------------------------------------|--------------------------|
| <b>product brand name</b>                                       | SIRIUS                   |
| <b>product designation</b>                                      | Circuit breaker          |
| <b>design of the product</b>                                    | For starter combinations |
| <b>product type designation</b>                                 | 3RV2                     |
| <b>General technical data</b>                                   |                          |
| <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                     |
| shock resistance according to IEC 60068-2-27                    | 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>reference code according to IEC 81346-2</b>                  | Q                        |
| <b>Substance Prohibitive (Date)</b>                             | 10/01/2009               |
| <b>Ambient conditions</b>                                       |                          |
| 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 %              |
| <b>Main circuit</b>                                             |                          |
| <b>number of poles for main current circuit</b>                 | 3                        |
| <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>                          | 1.25 A                   |
| <b>operational current</b>                                      |                          |
| • at AC-3 at 400 V rated value                                  | 1.25 A                   |
| • at AC-3e at 400 V rated value                                 | 1.25 A                   |

|                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>operating power</b>                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                          |
| <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> | <ul style="list-style-type: none"> <li>0.2 kW</li> <li>0.4 kW</li> <li>0.4 kW</li> <li>0.8 kW</li> <li>0.2 kW</li> <li>0.4 kW</li> <li>0.4 kW</li> <li>0.8 kW</li> </ul> |
| <b>operating frequency</b>                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                          |
| <ul style="list-style-type: none"> <li>● at AC-3 maximum</li> <li>● at AC-3e maximum</li> </ul>                                                                                                                                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>15 1/h</li> <li>15 1/h</li> </ul>                                                                                                 |
| <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>                                                                                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>No</li> <li>No</li> </ul>                                                                                                         |
| <b>breaking capacity maximum short-circuit current (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>                                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>100 kA</li> <li>100 kA</li> <li>100 kA</li> <li>100 kA</li> </ul>                                                                 |
| <b>breaking capacity operating short-circuit current (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>                                                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>100 kA</li> <li>100 kA</li> <li>100 kA</li> <li>100 kA</li> </ul>                                                                 |
| response value current of instantaneous short-circuit trip unit                                                                                                                                                                                                                                                                                                                                                                     | 16 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>                                                                                                                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>1.25 A</li> <li>1.25 A</li> </ul>                                                                                                 |
| <b>yielded mechanical performance [hp]</b>                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                          |
| <ul style="list-style-type: none"> <li>● for 3-phase AC motor <ul style="list-style-type: none"> <li>— at 460/480 V rated value</li> <li>— at 575/600 V rated value</li> </ul> </li> </ul>                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>1 hp</li> <li>0.5 hp</li> </ul>                                                                                                   |
| <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 500 V</li> <li>● at 690 V</li> </ul>                                                                                                                                                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>gL/gG 16 A</li> <li>gL/gG 16 A</li> </ul>                                                                                         |
| <b>Installation/ mounting/ dimensions</b>                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                          |
| <b>mounting position</b>                                                                                                                                                                                                                                                                                                                                                                                                            | any                                                                                                                                                                      |
| <b>fastening method</b>                                                                                                                                                                                                                                                                                                                                                                                                             | screw and snap-on mounting onto 35 mm standard mounting 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>● for grounded parts at 400 V <ul style="list-style-type: none"> <li>— downwards</li> </ul> </li> </ul>                                                                                                                                                                                                                                                                                      | 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

|                                                                      |                                                                       |
|----------------------------------------------------------------------|-----------------------------------------------------------------------|
| <b>type of electrical connection</b>                                 |                                                                       |
| • for main current circuit                                           | screw-type 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 (0,75 ... 2,5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup>              |
| — finely stranded with core end processing                           | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ) |
| • at AWG cables for main contacts                                    | 2x (18 ... 14), 2x 12                                                 |
| <b>tightening torque</b>                                             |                                                                       |
| • for main contacts with screw-type terminals                        | 0.8 ... 1.2 N·m                                                       |
| <b>design of screwdriver shaft</b>                                   | Diameter 5 to 6 mm                                                    |
| <b>size of the screwdriver tip</b>                                   | Pozidriv size 2                                                       |
| <b>design of the thread of the connection screw</b>                  |                                                                       |
| • for main contacts                                                  | M3                                                                    |

#### Safety related data

|                                                                         |                                                  |
|-------------------------------------------------------------------------|--------------------------------------------------|
| <b>B10 value</b>                                                        |                                                  |
| • with high demand rate according to SN 31920                           | 5 000                                            |
| <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>failure rate [FIT]</b>                                               |                                                  |
| • 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                                             |
| <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                                           |

#### Certificates/ approvals

##### General Product Approval



[Confirmation](#)



[KC](#)



Declaration of Conformity

Test Certificates

Marine / Shipping



EG-Konf.

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



ABS



BUREAU VERITAS

Marine / Shipping

other



DNV



LRS



PRS



RINA



RMRS

[Confirmation](#)

other

Railway



VDE

[Vibration and Shock](#)

[Confirmation](#)

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=3RV2311-0KC10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2311-0KC10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-0KC10>

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

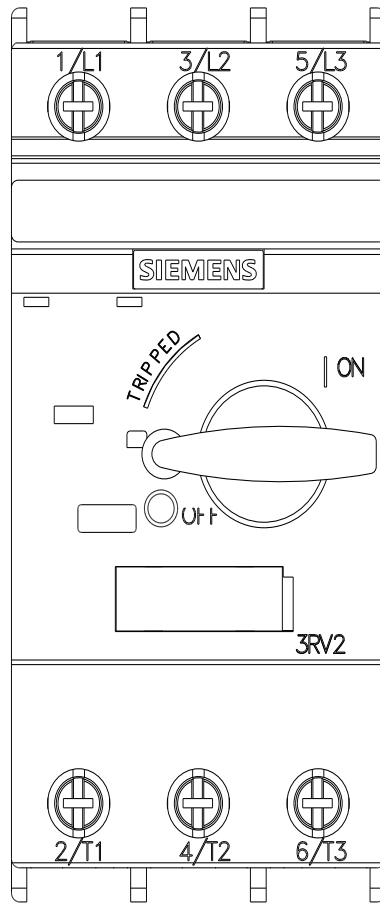
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV2311-0KC10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2311-0KC10&lang=en)

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-0KC10/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2311-0KC10&objecttype=14&gridview=view1>



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