



Circuit breaker size S00 for starter combination Rated current 0.25 A N-release 3.3 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>Product equipment of circuit breaker for motor protection complete unit with protection device</b> | Yes                      |
| <b>size of the circuit-breaker</b>  | S00                      |
| <b>size of contactor can be combined company-specific</b>   | S00, S0                  |
| product function disconnecter functionality   | Yes                      |
| product extension auxiliary switch  | Yes                      |
| <b>power loss [W] for rated value of the current</b>  |                          |
| • at AC in hot operating state  | 5.5 W                    |
| • at AC in hot operating state per pole   | 1.8 W                    |
| <b>type of calculation of power loss current-dependent</b>  | quadratic                |
| insulation voltage with degree of pollution 3 at AC rated value                                       | 690 V                    |
| <b>surge voltage resistance rated value</b>   | 6 kV                     |
| <b>maximum permissible voltage for protective separation</b>  |                          |
| • in networks with ungrounded star point between main and auxiliary circuit                           | 400 V                    |
| • in networks with grounded star point between main and auxiliary circuit                             | 400 V                    |
| <b>protection class IP</b>  |                          |
| • on the front according to IEC 60529   | IP20                     |
| • on the front  | IP20                     |
| • of the terminal   | IP20                     |
| <b>shock resistance according to IEC 60068-2-27</b>   | 25g / 11 ms              |
| <b>mechanical service life (operating cycles)</b>   |                          |
| • of the main contacts typical  | 100 000                  |
| • of auxiliary contacts typical   | 100 000                  |
| electrical endurance (operating cycles) typical   | 100 000                  |
| <b>reference code according to IEC 81346-2</b>  | Q                        |
| <b>continuous current rated value</b>   | 0.25 A                   |
| <b>Substance Prohibitance (day/month/year)</b>  | 10/01/2009               |
| <b>SVHC substance name</b>  | Lead CAS-No. 7439-92-1   |
| <b>Net Weight</b>   | 0.276 kg                 |
| <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>type of voltage for main current circuit</b>   | AC                       |
| <b>operating voltage</b>  |                          |
| • rated value   | 690 V                    |
| • rated value   | 20 ... 690 V             |

|  |  |
|--|--|
| <ul style="list-style-type: none"> <li>● at AC-3 rated value maximum</li> </ul>  | 690 V  |
| <ul style="list-style-type: none"> <li>● at AC-3e rated value maximum</li> </ul>   | 690 V  |
| <b>operating frequency rated value</b>   | 50 ... 60 Hz   |
| <b>operational current rated value</b>   | 0.25 A   |
| <b>operational current</b>   |  |
| <ul style="list-style-type: none"> <li>● at AC-3 at 400 V rated value</li> </ul>   | 0.25 A   |
| <ul style="list-style-type: none"> <li>● at AC-3e at 400 V rated value</li> </ul>  | 0.25 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> </ul>  | 0 kW<br>0.1 kW<br>0.1 kW<br>0.1 kW                                       |
| <ul style="list-style-type: none"> <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<br>0.1 kW<br>0.1 kW<br>0.1 kW                                       |
| <b>operating frequency</b>   |  |
| <ul style="list-style-type: none"> <li>● at AC-3 maximum</li> </ul>  | 15 1/h   |
| <ul style="list-style-type: none"> <li>● at AC-3e maximum</li> </ul>   | 15 1/h   |
| <b>Auxiliary circuit</b>   |  |
| <b>type of voltage for auxiliary and control circuit</b>   | AC/DC  |
| <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> </ul>   | No   |
| <ul style="list-style-type: none"> <li>● phase failure detection</li> </ul>  | No   |
| <b>protection function thermal overload protection (ANSI 49)</b>   | No   |
| <b>maximum short-circuit current breaking capacity (Icu)</b>   |  |
| <ul style="list-style-type: none"> <li>● at AC at 240 V rated value</li> </ul>   | 100 kA   |
| <ul style="list-style-type: none"> <li>● at AC at 400 V rated value</li> </ul>   | 100 kA   |
| <ul style="list-style-type: none"> <li>● at AC at 500 V rated value</li> </ul>   | 100 kA   |
| <ul style="list-style-type: none"> <li>● at AC at 690 V rated value</li> </ul>   | 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> </ul>   | 100 kA   |
| <ul style="list-style-type: none"> <li>● at 400 V rated value</li> </ul>   | 100 kA   |
| <ul style="list-style-type: none"> <li>● at 500 V rated value</li> </ul>   | 100 kA   |
| <ul style="list-style-type: none"> <li>● at 690 V rated value</li> </ul>   | 100 kA   |
| response value current of instantaneous short-circuit trip unit  | 3.3 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> </ul>   | 0.25 A   |
| <ul style="list-style-type: none"> <li>● at 600 V rated value</li> </ul>   | 0.25 A   |
| <b>UL File Number (CCN)</b>  | E47705 (NLRV, NLRV7)   |
| <b>Short-circuit protection</b>  |  |
| <b>product function short circuit protection</b>   | Yes  |
| <b>design of the short-circuit trip</b>  | magnetic   |
| <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>Mounting method of circuit breaker for Transformer protection, Generator protection and system protection optional standard bar mounting</b>  | Yes  |
| <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 <ul style="list-style-type: none"> <li>— forwards 0 mm</li> <li>— backwards 0 mm</li> <li>— upwards 50 mm</li> <li>— downwards 50 mm</li> <li>— at the side 0 mm</li> </ul> </li> <li>● for grounded parts <ul style="list-style-type: none"> <li>— forwards 0 mm</li> <li>— backwards 0 mm</li> <li>— upwards 50 mm</li> <li>— at the side 30 mm</li> <li>— downwards 50 mm</li> </ul> </li> <li>● for live parts <ul style="list-style-type: none"> <li>— forwards 0 mm</li> <li>— backwards 0 mm</li> <li>— upwards 50 mm</li> <li>— downwards 50 mm</li> <li>— at the side 30 mm</li> </ul> </li> <li>● for grounded parts at 400 V <ul style="list-style-type: none"> <li>— downwards 30 mm</li> <li>— upwards 30 mm</li> <li>— at the side 9 mm</li> </ul> </li> <li>● for live parts at 400 V <ul style="list-style-type: none"> <li>— downwards 30 mm</li> <li>— upwards 30 mm</li> <li>— at the side 9 mm</li> </ul> </li> <li>● for grounded parts at 500 V <ul style="list-style-type: none"> <li>— downwards 30 mm</li> <li>— upwards 30 mm</li> <li>— at the side 9 mm</li> </ul> </li> <li>● for live parts at 500 V <ul style="list-style-type: none"> <li>— downwards 30 mm</li> <li>— upwards 30 mm</li> <li>— at the side 9 mm</li> </ul> </li> <li>● for grounded parts at 690 V <ul style="list-style-type: none"> <li>— downwards 50 mm</li> <li>— upwards 50 mm</li> <li>— backwards 0 mm</li> <li>— at the side 30 mm</li> <li>— forwards 0 mm</li> </ul> </li> <li>● for live parts at 690 V <ul style="list-style-type: none"> <li>— downwards 50 mm</li> <li>— upwards 50 mm</li> <li>— backwards 0 mm</li> <li>— at the side 30 mm</li> <li>— forwards 0 mm</li> </ul> </li> </ul> |  |

| <b>Connections/ Terminals</b>  |  |
|--|--|
| <b>product component removable terminal for auxiliary and control circuit</b>  | No   |
| <b>type of electrical connection</b>   |  |
| <ul style="list-style-type: none"> <li>● for main current 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> <li>— finely stranded with core end processing</li> </ul> </li> <li>● for AWG cables for main contacts</li> </ul> | 2x (0,75 ... 2,5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup><br>2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )<br>2x (18 ... 14), 2x 12 |

|   |                             |
|---|-----------------------------|
| <b>connectable conductor cross-section for main contacts</b>                                    |                             |
| <ul style="list-style-type: none"> <li>• solid or stranded</li> </ul>                           | 0.75 ... 4 mm <sup>2</sup>  |
| <ul style="list-style-type: none"> <li>• finely stranded with core end processing</li> </ul>    | 0.5 ... 2.5 mm <sup>2</sup> |
| <b>AWG number as coded connectable conductor cross section for main contacts</b>                | 18 ... 12                   |
| <b>tightening torque</b>  |                             |
| <ul style="list-style-type: none"> <li>• for main contacts with screw-type terminals</li> </ul> | 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>   |                             |
| <ul style="list-style-type: none"> <li>• for main contacts</li> </ul>                           | M3                          |

### Safety related data

|   |        |
|---|--------|
| product function suitable for safety function   | Yes    |
| <b>suitability for use</b>  |        |
| <ul style="list-style-type: none"> <li>• safety-related switching on</li> </ul>                 | No     |
| <ul style="list-style-type: none"> <li>• safety-related switching OFF</li> </ul>                | Yes    |
| <b>service life maximum</b>   | 10 a   |
| <b>test wear-related service life necessary</b>   | Yes    |
| <b>proportion of dangerous failures</b>   |        |
| <ul style="list-style-type: none"> <li>• with low demand rate according to SN 31920</li> </ul>  | 40 %   |
| <ul style="list-style-type: none"> <li>• with high demand rate according to SN 31920</li> </ul> | 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 |

### ISO 13849

|  |     |
|--|-----|
| <b>device type according to ISO 13849-1</b>                | 3   |
| <b>overdimensioning according to ISO 13849-2 necessary</b> | Yes |

### IEC 61508

|  |        |
|--|--------|
| <b>safety device type according to IEC 61508-2</b>   | Type A |
| <b>T1 value</b>  |        |
| <ul style="list-style-type: none"> <li>• for proof test interval or service life according to IEC 61508</li> </ul> | 10 a   |

### Electrical Safety

|  |  |
|--|--|
| <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

|                                      |        |
|--------------------------------------|--------|
| display version for switching status | Handle |
|--------------------------------------|--------|

### Approvals Certificates

|                    |                                 |
|--------------------|---------------------------------|
| <b>Environment</b> | <b>General Product Approval</b> |
|--------------------|---------------------------------|

[Environmental Conformations](#)



|                                 |                          |
|---------------------------------|--------------------------|
| <b>General Product Approval</b> | <b>Test Certificates</b> |
|---------------------------------|--------------------------|



[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

### Maritime application



|              |                |
|--------------|----------------|
| <b>other</b> | <b>Railway</b> |
|--------------|----------------|

[Miscellaneous](#)

[Confirmation](#)

[Miscellaneous](#)



[Confirmation](#)

[Special Test Certificate](#)

#### Further information

**Information on the packaging**

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

**Information for data generation and storage**

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

**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=3RV2311-0CC10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-0CC10>

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

[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV2311-0CC10&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2311-0CC10&lang=en)

**Cax online generator**

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2311-0CC10>

**Characteristic curves**

[https://curves.simaris.siemens.com/curves/<mmp\\_prod\\_noCOMP="HAUPT"></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)

last modified:

5/5/2026