



Special type Circuit breaker size S00 for motor protection, CLASS 10 A-release 4.5...6.3 A N-release 82 A screw terminal Standard switching capacity Ambient temperature -50 °C 500 switching cycles

|  |                      |
|--|----------------------|
| <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                 |
| <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   | 500                  |
| • of auxiliary contacts typical  | 500                  |
| electrical endurance (switching cycles) typical  | 500                  |
| <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   | -50 ... +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>adjustable current response value current of the current-dependent overload release</b> | 4.5 ... 6.3 A        |
| <b>operating voltage</b>   |                      |
| • rated value  | 20 ... 690 V         |
| • at AC-3 rated value maximum  | 690 V                |
| <b>operating frequency rated value</b>   | 50 ... 60 Hz         |
| <b>operational current rated value</b>   | 6.3 A                |
| <b>operational current</b>   |                      |
| • at AC-3 at 400 V rated value   | 6.3 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>  | 1.5 kW<br>2.2 kW<br>3 kW<br>4 kW   |
| <b>operating frequency</b>   |  |
| <ul style="list-style-type: none"> <li>● at AC-3 maximum</li> </ul>  | 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>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>  |  |
| <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>6 kA   |
| <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>   | 100 kA<br>100 kA<br>100 kA<br>4 kA   |
| response value current of instantaneous short-circuit trip unit  | 82 A   |
| <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>   | gG 50 A<br>gG 40 A<br>gG 35 A  |
| <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> <li>— upwards</li> <li>— at the side</li> </ul> </li> <li>● for live parts at 400 V <ul style="list-style-type: none"> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> </ul> </li> <li>● for grounded parts at 500 V <ul style="list-style-type: none"> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> </ul> </li> <li>● for live parts at 500 V <ul style="list-style-type: none"> <li>— downwards</li> </ul> </li> </ul> | 30 mm<br>30 mm<br>9 mm<br>30 mm<br>30 mm<br>9 mm<br>30 mm<br>30 mm<br>9 mm<br>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> ) |
| <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

|   |  |
|---|--|
| 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 | Declaration of Conformity | Test Certificates |
|--------------------------|---------------------------|-------------------|
|--------------------------|---------------------------|-------------------|

[Confirmation](#)

[KC](#)



EG-Konf.



[Special Test Certificate](#)

### Test Certificates

#### Marine / Shipping

[Type Test Certificates/Test Report](#)



ABS



BUREAU VERITAS



DNV



LRS



PRS

#### Marine / Shipping

#### other

#### Railway



RINA



RMRS

[Confirmation](#)



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=3RV2011-1GA10-0BA0>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-1GA10-0BA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1GA10-0BA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV2011-1GA10-0BA0&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-1GA10-0BA0&lang=en)

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1GA10-0BA0/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-1GA10-0BA0&objecttype=14&gridview=view1>

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