



Circuit breaker size S00 for system protection with approval circuit breaker UL 489, CSA C22.2 No.5-02 A-release 0.8 A N-release 10 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 system protection according to UL 489/CSA C22.2 No. 5 |
| <b>product type designation</b>                                 | 3RV2  |
| <b>General technical data</b>                                   |   |
| <b>size of the circuit-breaker</b>                              | S00   |
| 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   |
| 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 Prohibition (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>                          | 0.8 A   |
| <b>operational current</b>                                      |   |
| • at AC-3 at 400 V rated value                                  | 0.8 A   |
| • at AC-3e at 400 V rated value                                 | 0.8 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>        | 0.1 kW<br>0.2 kW<br>0.3 kW<br>0.4 kW<br><br>0.1 kW<br>0.2 kW<br>0.3 kW<br>0.4 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>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> <li>● at 480 AC Y/277 V according to UL 489 rated value</li> </ul>  | 100 kA<br>100 kA<br>100 kA<br>100 kA<br>65 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>100 kA   |
| response value current of instantaneous short-circuit trip unit  | 10 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 690 V</li> </ul>   | gL/gG 6 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>  | 144 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> </ul> </li> </ul> | 30 mm<br>30 mm<br>30 mm<br><br>30 mm<br>30 mm<br>30 mm<br><br>30 mm                    |

|                               |       |
|-------------------------------|-------|
| — upwards                     | 30 mm |
| — at the side                 | 30 mm |
| • for live parts at 500 V     |       |
| — downwards                   | 30 mm |
| — upwards                     | 30 mm |
| — at the side                 | 30 mm |
| • for grounded parts at 690 V |       |
| — downwards                   | 70 mm |
| — upwards                     | 70 mm |
| — backwards                   | 0 mm  |
| — at the side                 | 30 mm |
| — forwards                    | 0 mm  |
| • for live parts at 690 V     |       |
| — downwards                   | 70 mm |
| — upwards                     | 70 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  | 1 ... 10 mm <sup>2</sup> , max. 2x 10 mm <sup>2</sup>  |
| — finely stranded with core end processing                           | 1 ... 16 mm <sup>2</sup> , max. 6 + 16 mm <sup>2</sup> |
| • at AWG cables for main contacts                                    | 2x (14 ... 10)   |
| <b>tightening torque</b>   |  |
| • for main contacts with screw-type terminals                        | 2.5 ... 3 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  | M4   |

#### 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



[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Marine / Shipping

other

Railway



[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=3RV2711-0HD10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2711-0HD10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2711-0HD10>

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

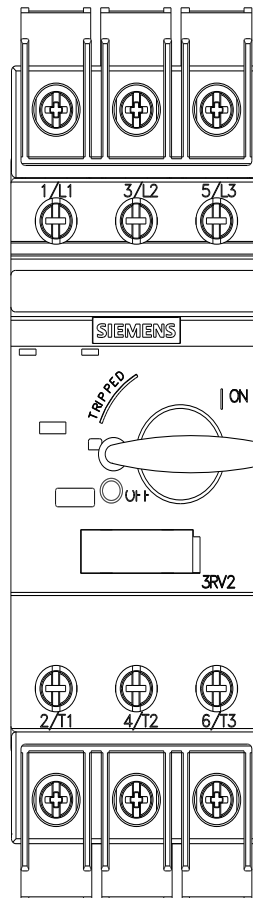
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV2711-0HD10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2711-0HD10&lang=en)

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2711-0HD10/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2711-0HD10&objecttype=14&gridview=view1>



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