

Siemens  
EcoTech



Circuit breaker size S00 for system protection with approval circuit breaker UL 489, CSA C22.2 No.5-02 A-release 0.2 A N-release 2.6 A screw terminal Standard switching capacity



|                                                                 |                                                           |
|-----------------------------------------------------------------|-----------------------------------------------------------|
| product brand name                                              | SIRIUS                                                    |
| product designation                                             | Circuit breaker                                           |
| design of the product                                           | For system protection according to UL 489/CSA C22.2 No. 5 |
| product type designation                                        | 3RV2                                                      |
| <b>General technical data</b>                                   |                                                           |
| size of the circuit-breaker                                     | S00                                                       |
| product extension auxiliary switch                              | Yes                                                       |
| power loss [W] for rated value of the current                   |                                                           |
| • 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                                                     |
| surge voltage resistance rated value                            | 6 kV                                                      |
| shock resistance according to IEC 60068-2-27                    | 25 g / 11 ms (rectangular impulse and sine pulse)         |
| 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                                          |
| Weight                                                          | 0.425 kg                                                  |
| <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                                 | 0.2 A                                                     |
| operational current                                             |                                                           |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• at AC-3 at 400 V rated value</li> <li>• at AC-3e at 400 V rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 0.2 A<br>0.2 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 kW<br>0.1 kW<br>0.1 kW<br>0.1 kW<br>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> <li>• at AC-3e maximum</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 15 1/h<br>15 1/h                                                                       |
| <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>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> <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>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>100 kA                                                   |
| response value current of instantaneous short-circuit trip unit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2.6 A                                                                                  |
| <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>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> <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> <li>— upwards</li> <li>— at the side</li> </ul> </li> <li>• for grounded parts at 690 V</li> </ul> | 30 mm<br>30 mm<br>30 mm<br>30 mm<br>30 mm<br>30 mm<br>30 mm<br>30 mm<br>30 mm<br>30 mm |

|                                                                      |                                                        |
|----------------------------------------------------------------------|--------------------------------------------------------|
| — 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                                                   |
| <b>Connections/ Terminals</b>                                        |                                                        |
| <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> |
| • for 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                                                     |
| <b>Safety related data</b>                                           |                                                        |
| product function suitable for safety function                        | Yes                                                    |
| <b>suitability for use</b>                                           |                                                        |
| • safety-related switching on                                        | No                                                     |
| • safety-related switching OFF                                       | Yes                                                    |
| <b>service life maximum</b>                                          | 10 a                                                   |
| <b>test wear-related service life necessary</b>                      | Yes                                                    |
| <b>proportion of dangerous failures</b>                              |                                                        |
| • with low demand rate according to SN 31920                         | 40 %                                                   |
| • 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>ISO 13849</b>                                                     |                                                        |
| <b>device type according to ISO 13849-1</b>                          | 3                                                      |
| <b>overdimensioning according to ISO 13849-2 necessary</b>           | Yes                                                    |
| <b>IEC 61508</b>                                                     |                                                        |
| <b>safety device type according to IEC 61508-2</b>                   | Type A                                                 |
| <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       |
| <b>Display</b>                                                       |                                                        |
| display version for switching status                                 | Handle                                                 |
| <b>Approvals Certificates</b>                                        |                                                        |
| <b>General Product Approval</b>                                      |                                                        |



[Confirmation](#)



[KC](#)

|                          |                   |                   |       |
|--------------------------|-------------------|-------------------|-------|
| General Product Approval | Test Certificates | Marine / Shipping | other |
|--------------------------|-------------------|-------------------|-------|



[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



[Miscellaneous](#)

|       |         |             |
|-------|---------|-------------|
| other | Railway | Environment |
|-------|---------|-------------|

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[Special Test Certificate](#)



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[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=3RV2711-0BD10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2711-0BD10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2711-0BD10>

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

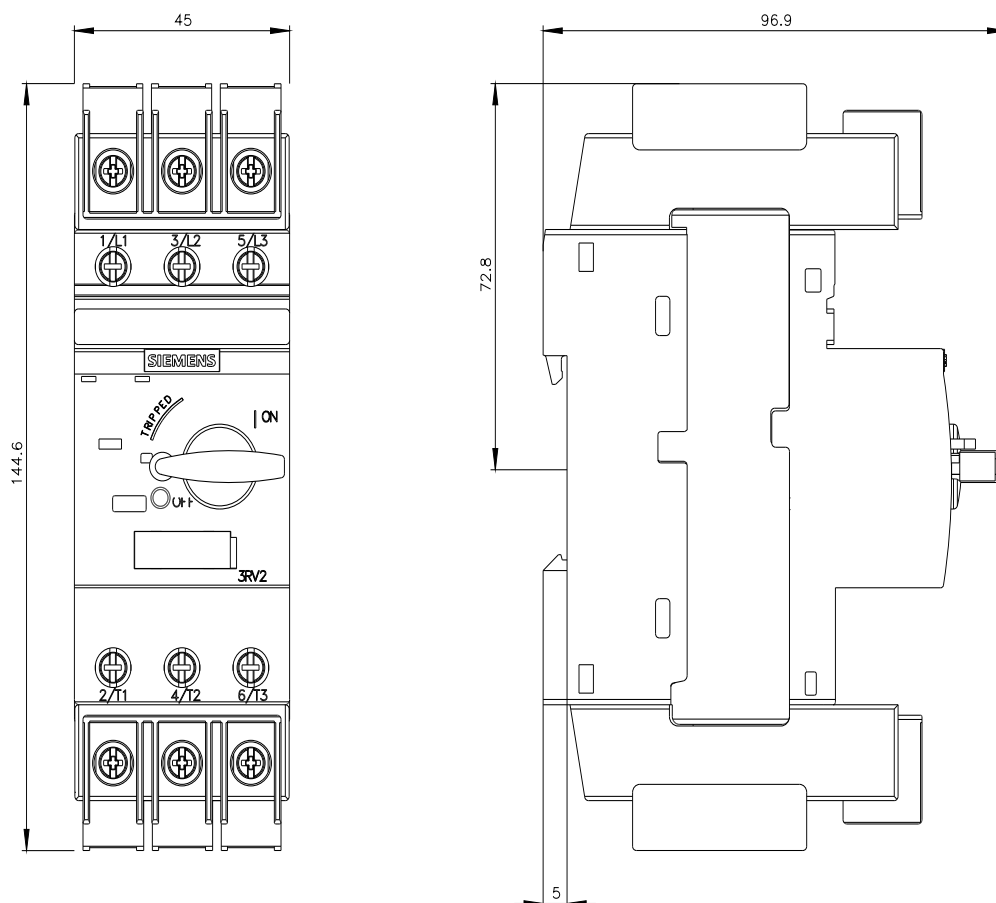
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV2711-0BD10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2711-0BD10&lang=en)

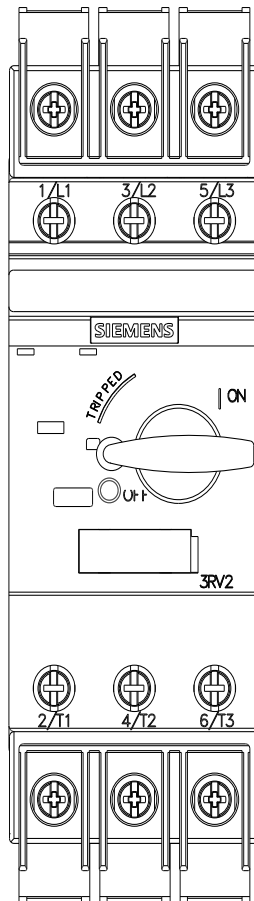
Characteristic: Tripping characteristics, I<sub>t</sub><sup>2</sup>, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2711-0BD10/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2711-0BD10&objecttype=14&gridview=view1>





last modified:

4/12/2024