

Siemens  
EcoTech



Circuit breaker size S00 for transformer protection with approval circuit breaker UL 489, CSA C22.2 No.5-02 A-release 0.32 A N-release 6.5 A screw terminal  
Standard switching capacity



|                                                                 |                                                               |
|-----------------------------------------------------------------|---------------------------------------------------------------|
| product brand name                                              | SIRIUS                                                        |
| product designation                                             | Circuit breaker                                               |
| design of the product                                           | For transformer protection according to UL 489/CSA C22.2 No.5 |
| product type designation                                        | 3RV2                                                          |
| General technical data                                          |                                                               |
| 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                                              |
| Ambient conditions                                              |                                                               |
| 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 %                                                   |
| Main circuit                                                    |                                                               |
| 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                                 | 0.32 A                                                        |
| operational current                                             |                                                               |
| • at AC-3 at 400 V rated value                                  | 0.32 A                                                        |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• at AC-3e at 400 V rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0.32 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><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 (Icu)</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 (Ics) 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 6.5 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 <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<br>30 mm<br>30 mm<br><br>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

|                                                               |                               |
|---------------------------------------------------------------|-------------------------------|
| type of electrical connection                                 |                               |
| • for main current circuit                                    | screw-type terminals          |
| arrangement of electrical connectors for main current circuit | Top and bottom                |
| type of connectable conductor cross-sections                  |                               |
| • for main contacts                                           |                               |
| — solid or stranded                                           | 1 ... 10 mm², max. 2x 10 mm²  |
| — finely stranded with core end processing                    | 1 ... 16 mm², max. 6 + 16 mm² |
| • for AWG cables for main contacts                            | 2x (14 ... 10)                |
| tightening torque                                             |                               |
| • for main contacts with screw-type terminals                 | 2.5 ... 3 N·m                 |
| design of screwdriver shaft                                   | Diameter 5 to 6 mm            |
| size of the screwdriver tip                                   | Pozidriv size 2               |
| design of the thread of the connection screw                  |                               |
| • for main contacts                                           | M4                            |

Safety related data

|                                                                  |        |
|------------------------------------------------------------------|--------|
| product function suitable for safety function                    | Yes    |
| suitability for use                                              |        |
| • safety-related switching on                                    | No     |
| • safety-related switching OFF                                   | Yes    |
| service life maximum                                             | 10 a   |
| test wear-related service life necessary                         | Yes    |
| proportion of dangerous failures                                 |        |
| • with low demand rate according to SN 31920                     | 40 %   |
| • with high demand rate according to SN 31920                    | 50 %   |
| B10 value with high demand rate according to SN 31920            | 5 000  |
| failure rate [FIT] with low demand rate according to SN 31920    | 50 FIT |
| ISO 13849                                                        |        |
| device type according to ISO 13849-1                             | 3      |
| overdimensioning according to ISO 13849-2 necessary              | Yes    |
| IEC 61508                                                        |        |
| safety device type according to IEC 61508-2                      | Type A |
| T1 value                                                         |        |
| • for proof test interval or service life according to IEC 61508 | 10 a   |

Electrical Safety

|                                                         |                                                  |
|---------------------------------------------------------|--------------------------------------------------|
| protection class IP on the front according to IEC 60529 | IP20                                             |
| touch protection on the front according to IEC 60529    | finger-safe, for vertical contact from the front |

Display

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

Approvals Certificates

|                          |  |
|--------------------------|--|
| General Product Approval |  |
|--------------------------|--|



[Confirmation](#)



EG-Konf.



CCC



UL

[KC](#)

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


[Special Test Certificate](#)
[Type Test Certificates/Test Report](#)

[Miscellaneous](#)
[Confirmation](#)

[Special Test Certificate](#)

[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=3RV2811-0DD10>

### Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2811-0DD10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2811-0DD10>

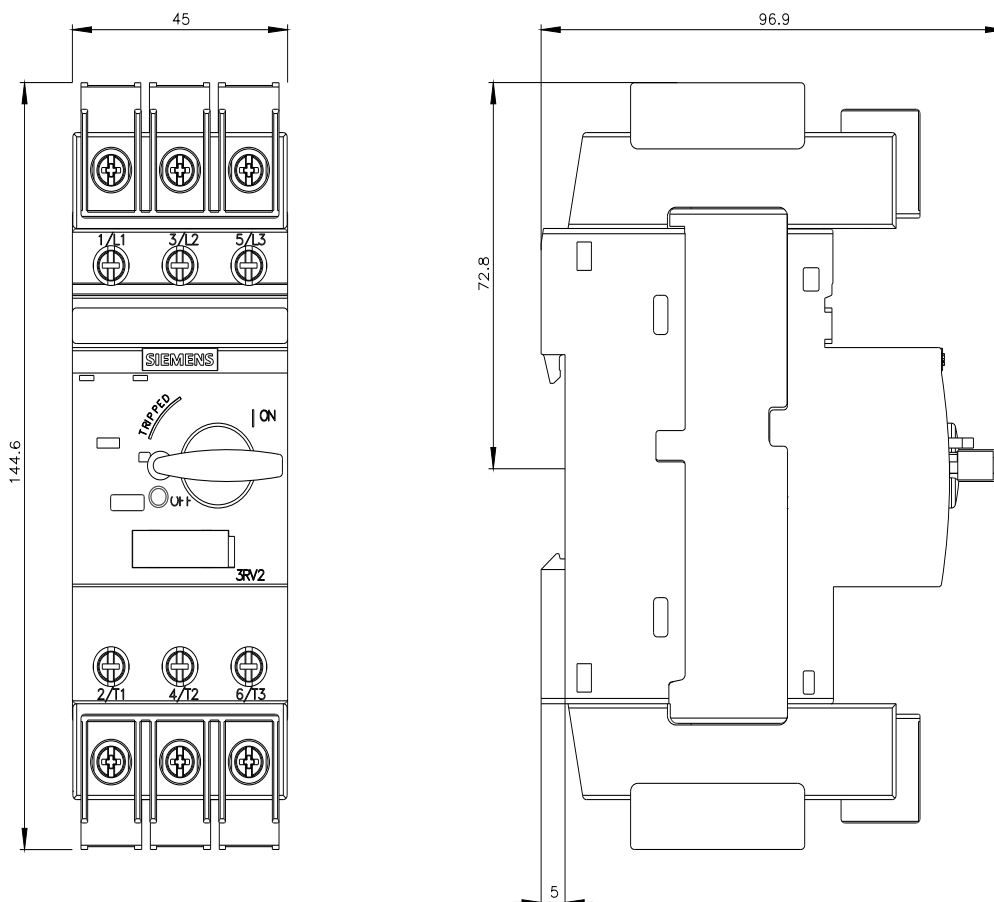
### Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

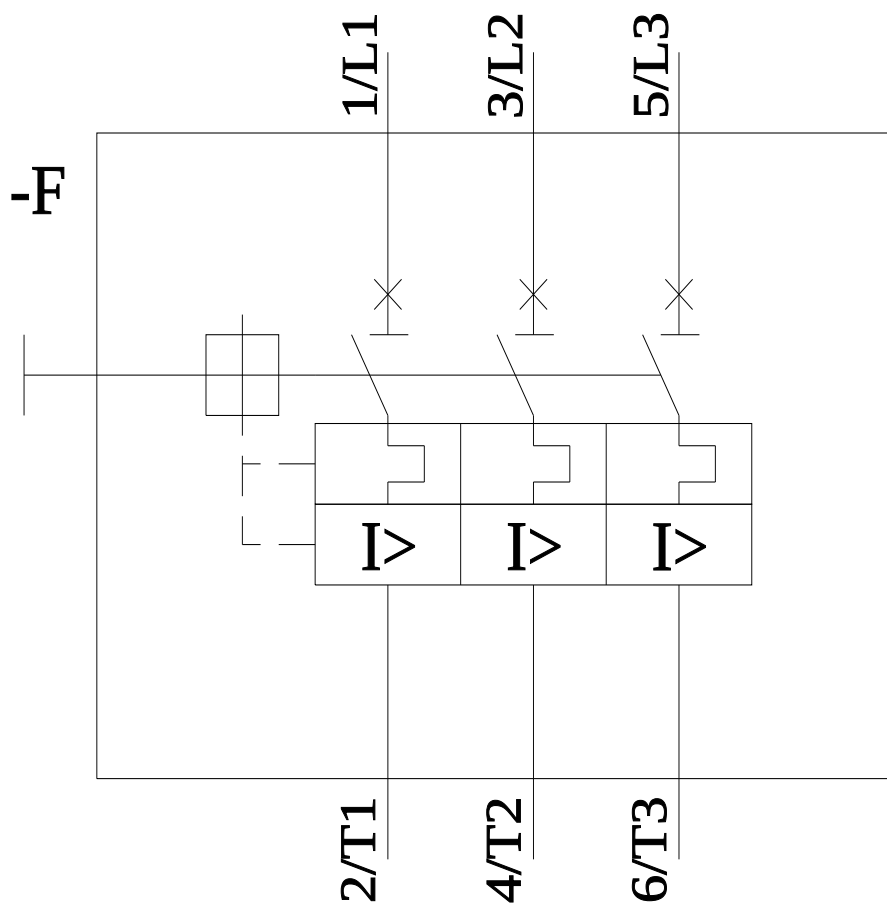
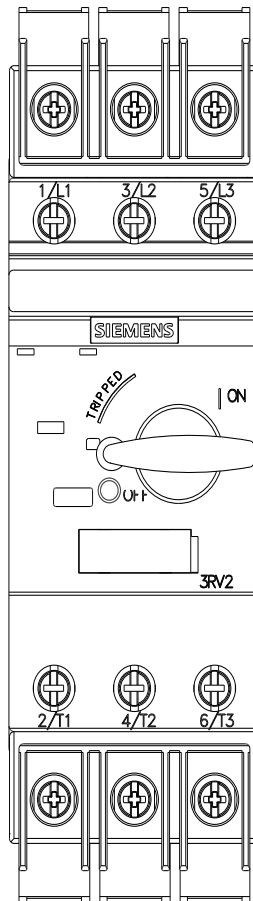
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV2811-0DD10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2811-0DD10&lang=en)

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2811-0DD10/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2811-0DD10&objecttype=14&gridview=view1>




last modified:

4/12/2024 