## SIEMENS

## Data sheet

## 3RV2711-0JD10



Circuit breaker size S00 for system protection with approval circuit breaker UL 489, CSA C22.2 No.5-02 A-release 1 A N-release 13 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                                                      |  |  |  |  |  |
| General technical data                                          |                                                           |  |  |  |  |  |
| size of the circuit-breaker                                     | S00                                                       |  |  |  |  |  |
| product extension auxiliary switch                              | Yes                                                       |  |  |  |  |  |
| power loss [W] for rated value of the current                   |                                                           |  |  |  |  |  |
| <ul> <li>at AC in hot operating state</li> </ul>                | 5.5 W                                                     |  |  |  |  |  |
| <ul> <li>at AC in hot operating state per pole</li> </ul>       | 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                    | 25g / 11 ms                                               |  |  |  |  |  |
| mechanical service life (switching cycles)                      |                                                           |  |  |  |  |  |
| <ul> <li>of the main contacts typical</li> </ul>                | 100 000                                                   |  |  |  |  |  |
| <ul> <li>of auxiliary contacts typical</li> </ul>               | 100 000                                                   |  |  |  |  |  |
| electrical endurance (switching cycles) typical                 | 100 000                                                   |  |  |  |  |  |
| reference code according to IEC 81346-2                         | Q                                                         |  |  |  |  |  |
| Substance Prohibitance (Date)                                   | 10/01/2009                                                |  |  |  |  |  |
| Ambient conditions                                              |                                                           |  |  |  |  |  |
| installation altitude at height above sea level maximum         | 2 000 m                                                   |  |  |  |  |  |
| ambient temperature                                             |                                                           |  |  |  |  |  |
| <ul> <li>during operation</li> </ul>                            | -20 +60 °C                                                |  |  |  |  |  |
| <ul> <li>during storage</li> </ul>                              | -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                                               |                                                           |  |  |  |  |  |
| <ul> <li>rated value</li> </ul>                                 | 20 690 V                                                  |  |  |  |  |  |
| <ul> <li>at AC-3 rated value maximum</li> </ul>                 | 690 V                                                     |  |  |  |  |  |
| <ul> <li>at AC-3e rated value maximum</li> </ul>                | 690 V                                                     |  |  |  |  |  |
| operating frequency rated value                                 | 50 60 Hz                                                  |  |  |  |  |  |
| operational current rated value                                 | 1 A                                                       |  |  |  |  |  |
| operational current                                             |                                                           |  |  |  |  |  |
| <ul> <li>at AC-3 at 400 V rated value</li> </ul>                | 1 A                                                       |  |  |  |  |  |
| <ul> <li>at AC-3e at 400 V rated value</li> </ul>               | 1 A                                                       |  |  |  |  |  |
| operating power                                                 |                                                           |  |  |  |  |  |

| • at AC-3                                                                               |                                                                                        |
|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| — at 230 V rated value                                                                  | 0.2 kW                                                                                 |
| — at 400 V rated value                                                                  | 0.3 kW                                                                                 |
| — at 500 V rated value                                                                  | 0.4 kW                                                                                 |
| — at 690 V rated value                                                                  | 0.6 kW                                                                                 |
| • at AC-3e                                                                              |                                                                                        |
| — at 230 V rated value                                                                  | 0.2 kW                                                                                 |
| — at 400 V rated value                                                                  | 0.3 kW                                                                                 |
| — at 500 V rated value                                                                  | 0.4 kW                                                                                 |
| — at 690 V rated value                                                                  | 0.6 kW                                                                                 |
| operating frequency                                                                     |                                                                                        |
| <ul> <li>at AC-3 maximum</li> </ul>                                                     | 15 1/h                                                                                 |
| <ul> <li>at AC-3e maximum</li> </ul>                                                    | 15 1/h                                                                                 |
| Auxiliary circuit                                                                       |                                                                                        |
| number of NC contacts for auxiliary contacts                                            | 0                                                                                      |
| number of NO contacts for auxiliary contacts                                            | 0                                                                                      |
| number of CO contacts for auxiliary contacts                                            | 0                                                                                      |
| Protective and monitoring functions                                                     | ů –                                                                                    |
|                                                                                         |                                                                                        |
| product function                                                                        | N.                                                                                     |
| ground fault detection                                                                  | No                                                                                     |
| phase failure detection                                                                 | No                                                                                     |
| design of the overload release                                                          | thermal                                                                                |
| breaking capacity maximum short-circuit current (Icu)                                   |                                                                                        |
| • at AC at 240 V rated value                                                            | 100 kA                                                                                 |
| <ul> <li>at AC at 400 V rated value</li> </ul>                                          | 100 kA                                                                                 |
| <ul> <li>at AC at 500 V rated value</li> </ul>                                          | 100 kA                                                                                 |
| <ul> <li>at AC at 690 V rated value</li> </ul>                                          | 100 kA                                                                                 |
| at 480 AC Y/277 V according to UL 489 rated value                                       | 65 kA                                                                                  |
| breaking capacity operating short-circuit current (Ics)<br>at AC                        |                                                                                        |
| <ul> <li>at 240 V rated value</li> </ul>                                                | 100 kA                                                                                 |
| <ul> <li>at 400 V rated value</li> </ul>                                                | 100 kA                                                                                 |
| <ul> <li>at 500 V rated value</li> </ul>                                                | 100 kA                                                                                 |
| • at 690 V rated value                                                                  | 100 kA                                                                                 |
| response value current of instantaneous short-circuit trip<br>unit                      | 13 A                                                                                   |
| Short-circuit protection                                                                |                                                                                        |
| product function short circuit protection                                               | Yes                                                                                    |
| design of the short-circuit trip                                                        | magnetic                                                                               |
| design of the fuse link for IT network for short-circuit protection of the main circuit |                                                                                        |
| • at 500 V                                                                              | gL/gG 10 A                                                                             |
| • at 690 V                                                                              | gL/gG 10 A                                                                             |
| Installation/ mounting/ dimensions                                                      |                                                                                        |
| mounting position                                                                       | any                                                                                    |
| fastening method                                                                        | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 |
| height                                                                                  | 144 mm                                                                                 |
| width                                                                                   | 45 mm                                                                                  |
| depth                                                                                   | 97 mm                                                                                  |
| required spacing                                                                        |                                                                                        |
| <ul> <li>for grounded parts at 400 V</li> </ul>                                         |                                                                                        |
| — downwards                                                                             | 30 mm                                                                                  |
| — upwards                                                                               | 30 mm                                                                                  |
| — at the side                                                                           | 30 mm                                                                                  |
| • for live parts at 400 V                                                               |                                                                                        |
| — downwards                                                                             | 30 mm                                                                                  |
| — upwards                                                                               | 30 mm                                                                                  |
| — at the side                                                                           | 30 mm                                                                                  |
| <ul> <li>for grounded parts at 500 V</li> </ul>                                         |                                                                                        |
| · IOI grounded parts at 500 v                                                           |                                                                                        |

| — downwards                                                             | 30 mm                                            |  |  |  |  |
|-------------------------------------------------------------------------|--------------------------------------------------|--|--|--|--|
| — upwards                                                               | 30 mm                                            |  |  |  |  |
| — at the side                                                           | 30 mm                                            |  |  |  |  |
| <ul> <li>for live parts at 500 V</li> </ul>                             |                                                  |  |  |  |  |
| — downwards                                                             | 30 mm                                            |  |  |  |  |
| — upwards                                                               | 30 mm                                            |  |  |  |  |
| — at the side                                                           | 30 mm                                            |  |  |  |  |
| <ul> <li>for grounded parts at 690 V</li> </ul>                         |                                                  |  |  |  |  |
| — downwards                                                             | 70 mm                                            |  |  |  |  |
| — upwards                                                               | 70 mm                                            |  |  |  |  |
| — backwards                                                             | 0 mm                                             |  |  |  |  |
| — at the side                                                           | 30 mm                                            |  |  |  |  |
| — forwards                                                              | 0 mm                                             |  |  |  |  |
| <ul> <li>for live parts at 690 V</li> </ul>                             |                                                  |  |  |  |  |
| — downwards                                                             | 70 mm                                            |  |  |  |  |
| — upwards                                                               | 70 mm                                            |  |  |  |  |
| — backwards                                                             | 0 mm                                             |  |  |  |  |
| — at the side                                                           | 30 mm                                            |  |  |  |  |
| — forwards                                                              | 0 mm                                             |  |  |  |  |
| onnections/ Terminals                                                   |                                                  |  |  |  |  |
| type of electrical connection                                           |                                                  |  |  |  |  |
| for main current circuit                                                | screw-type terminals                             |  |  |  |  |
| arrangement of electrical connectors for main current                   | Top and bottom                                   |  |  |  |  |
| circuit                                                                 |                                                  |  |  |  |  |
| type of connectable conductor cross-sections                            |                                                  |  |  |  |  |
| <ul> <li>for main contacts</li> </ul>                                   |                                                  |  |  |  |  |
| — solid or stranded                                                     | 1 10 mm², max. 2x 10 mm²                         |  |  |  |  |
| <ul> <li>finely stranded with core end processing</li> </ul>            | 1 16 mm², max. 6 + 16 mm²                        |  |  |  |  |
| <ul> <li>at AWG cables for main contacts</li> </ul>                     | 2x (14 10)                                       |  |  |  |  |
| tightening torque                                                       |                                                  |  |  |  |  |
| <ul> <li>for main contacts with screw-type terminals</li> </ul>         | 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                            |                                                  |  |  |  |  |
| <ul> <li>for main contacts</li> </ul>                                   | M4                                               |  |  |  |  |
| afety related data                                                      |                                                  |  |  |  |  |
| B10 value                                                               |                                                  |  |  |  |  |
| <ul> <li>with high demand rate according to SN 31920</li> </ul>         | 5 000                                            |  |  |  |  |
| proportion of dangerous failures                                        |                                                  |  |  |  |  |
| • with low demand rate according to SN 31920                            | 50 %                                             |  |  |  |  |
| with high demand rate according to SN 31920                             | 50 %                                             |  |  |  |  |
| failure rate [FIT]                                                      |                                                  |  |  |  |  |
| with low demand rate according to SN 31920                              | 50 FIT                                           |  |  |  |  |
| T1 value for proof test interval or service life according to IEC 61508 | 10 у                                             |  |  |  |  |
| protection class IP on the front according to IEC<br>60529              | IP20                                             |  |  |  |  |
| touch protection on the front according to IEC 60529                    | finger-safe, for vertical contact from the front |  |  |  |  |
| display version for switching status                                    | Handle                                           |  |  |  |  |
| display version for switching status                                    |                                                  |  |  |  |  |
| ertificates/ approvals                                                  |                                                  |  |  |  |  |
|                                                                         |                                                  |  |  |  |  |

**Declaration of Conformity** 

Test Certificates

Marine / Shipping

|                   | CE<br>EG-Konf.      | <u>Special Test Certific-</u><br><u>ate</u> | <u>Type Test Certific-</u><br>ates/Test Report | BUREAU<br>VERITAS | Hoyd's<br>Register<br>us |
|-------------------|---------------------|---------------------------------------------|------------------------------------------------|-------------------|--------------------------|
| Marine / Shipping | other               |                                             | Railway                                        |                   |                          |
| RMRS RMRS         | <u>Confirmation</u> | UDE VDE                                     | 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=3RV2711-0JD10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2711-0JD10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2711-0JD10

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

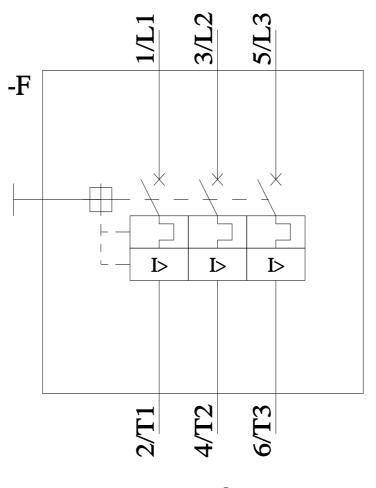
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2711-0JD10&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV2711-0JD10/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2711-0JD10&objecttype=14&gridview=view1



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