



Circuit breaker size S00 for transformer protection with approval circuit breaker UL 489, CSA C22.2 No.5-02 A-release 0.4 A N-release 8.2 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 |
| maximum permissible voltage for safe isolation in networks with grounded star point | |
| • between main and auxiliary circuit | 400 V |
| • between main and auxiliary circuit | 400 V |
| shock resistance acc. to IEC 60068-2-27 | 25g / 11 ms |
| mechanical service life (switching cycles) | |
| • of the main contacts typical | 100 000 |
| • of auxiliary contacts typical | 100 000 |
| electrical endurance (switching cycles) typical | 100 000 |
| reference code acc. to IEC 81346-2 | Q |
| Substance Prohibition (Date) | 01.10.2009 00:00:00 |
| Ambient conditions | |
| installation altitude at height above sea level maximum | 2 000 m |
| • ambient temperature during operation | -20 ... +60 °C |
| • ambient temperature during storage | -50 ... +80 °C |
| • ambient temperature during transport | -50 ... +80 °C |
| temperature compensation | -20 ... +60 °C |
| relative humidity during operation | 10 ... 95 % |
| Main circuit | |
| number of poles for main current circuit | 3 |
| • operating voltage rated value | 690 V |
| • operating voltage at AC-3 rated value maximum | 690 V |
| operating frequency rated value | 50 ... 60 Hz |
| operational current rated value | 0.4 A |

| | |
|---|--|
| operational current at AC-3 at 400 V rated value | 0.4 A |
| operating power at AC-3 | |
| • at 230 V rated value | 60 W |
| • at 400 V rated value | 90 W |
| • at 500 V rated value | 120 W |
| • at 690 V rated value | 180 W |
| operating frequency at AC-3 maximum | 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 | |
| product function | |
| • ground fault detection | No |
| • phase failure detection | No |
| design of the overload release | thermal |
| breaking capacity operating short-circuit current (Ics) at AC | |
| • at 240 V rated value | 100 kA |
| • at 400 V rated value | 100 kA |
| • at 500 V rated value | 100 kA |
| • at 690 V rated value | 100 kA |
| breaking capacity maximum short-circuit current (Icu) | |
| • at AC at 240 V rated value | 100 kA |
| • at AC at 400 V rated value | 100 kA |
| • at AC at 500 V rated value | 100 kA |
| • at AC at 690 V rated value | 100 kA |
| • at 480 AC Y/277 V acc. to UL 489 rated value | 65 kA |
| response value current of instantaneous short-circuit trip unit | 8.2 A |
| Short-circuit protection | |
| product function short circuit protection | Yes |
| design of the short-circuit trip | magnetic |
| 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 | |
| • for grounded parts at 400 V | |
| — 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 |
| • for grounded parts at 500 V | |
| — downwards | 30 mm |
| — upwards | 30 mm |
| — at the side | 30 mm |
| • for live parts at 500 V | |
| — downwards | 30 mm |
| — upwards | 30 mm |
| — at the side | 30 mm |
| • for grounded parts at 690 V | |

| | |
|---------------------------|-------|
| — downwards | 70 mm |
| — upwards | 70 mm |
| — backwards | 0 mm |
| — at the side | 30 mm |
| — forwards | 0 mm |
| • for live parts at 690 V | |
| — downwards | 70 mm |
| — upwards | 70 mm |
| — backwards | 0 mm |
| — at the side | 30 mm |
| — forwards | 0 mm |

Connections/ Terminals

| | |
|---|--|
| product function removable terminal for auxiliary and control circuit | No |
| 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 mm ² , max. 2x 10 mm ² |
| — finely stranded with core end processing | 1 ... 16 mm ² , max. 6 + 16 mm ² |
| • at 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 2 |
| design of the thread of the connection screw | |
| • for main contacts | M4 |

Safety related data

| | |
|---|--|
| B10 value | |
| • with high demand rate acc. to SN 31920 | 5 000 |
| proportion of dangerous failures | |
| • with low demand rate acc. to SN 31920 | 50 % |
| • with high demand rate acc. to SN 31920 | 50 % |
| failure rate [FIT] | |
| • with low demand rate acc. to SN 31920 | 50 FIT |
| T1 value for proof test interval or service life acc. to IEC 61508 | 10 y |
| protection class IP on the front acc. to IEC 60529 | IP20 |
| touch protection on the front acc. to IEC 60529 | finger-safe, for vertical contact from the front |
| display version for switching status | Handle |

Certificates/ approvals

| | |
|--------------------------|---------------------------|
| General Product Approval | Declaration of Conformity |
|--------------------------|---------------------------|



KC



[Miscellaneous](#)

| | | |
|---------------------------|-------------------|-------------------|
| Declaration of Conformity | Test Certificates | Marine / Shipping |
|---------------------------|-------------------|-------------------|



[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



other

Railway

[Confirmation](#)



[Vibration and Shock](#)

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2811-0ED10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2811-0ED10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2811-0ED10>

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

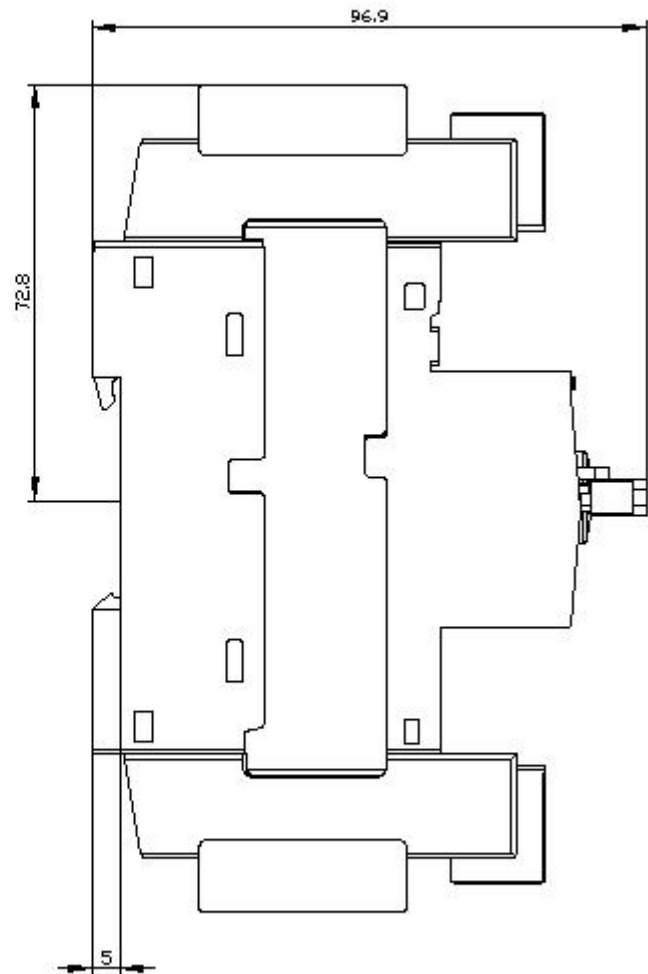
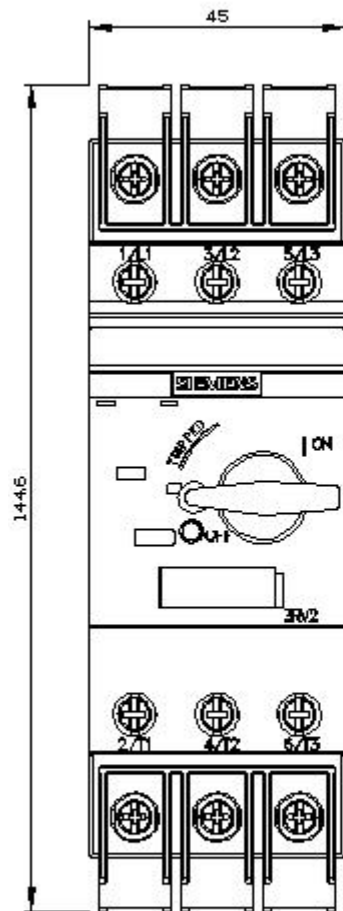
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2811-0ED10&lang=en

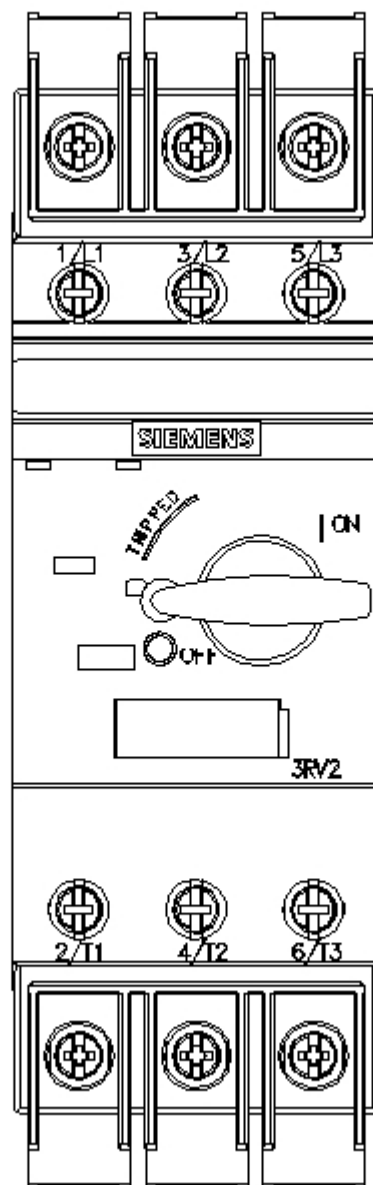
Characteristic: Tripping characteristics, I^2t , Let-through current

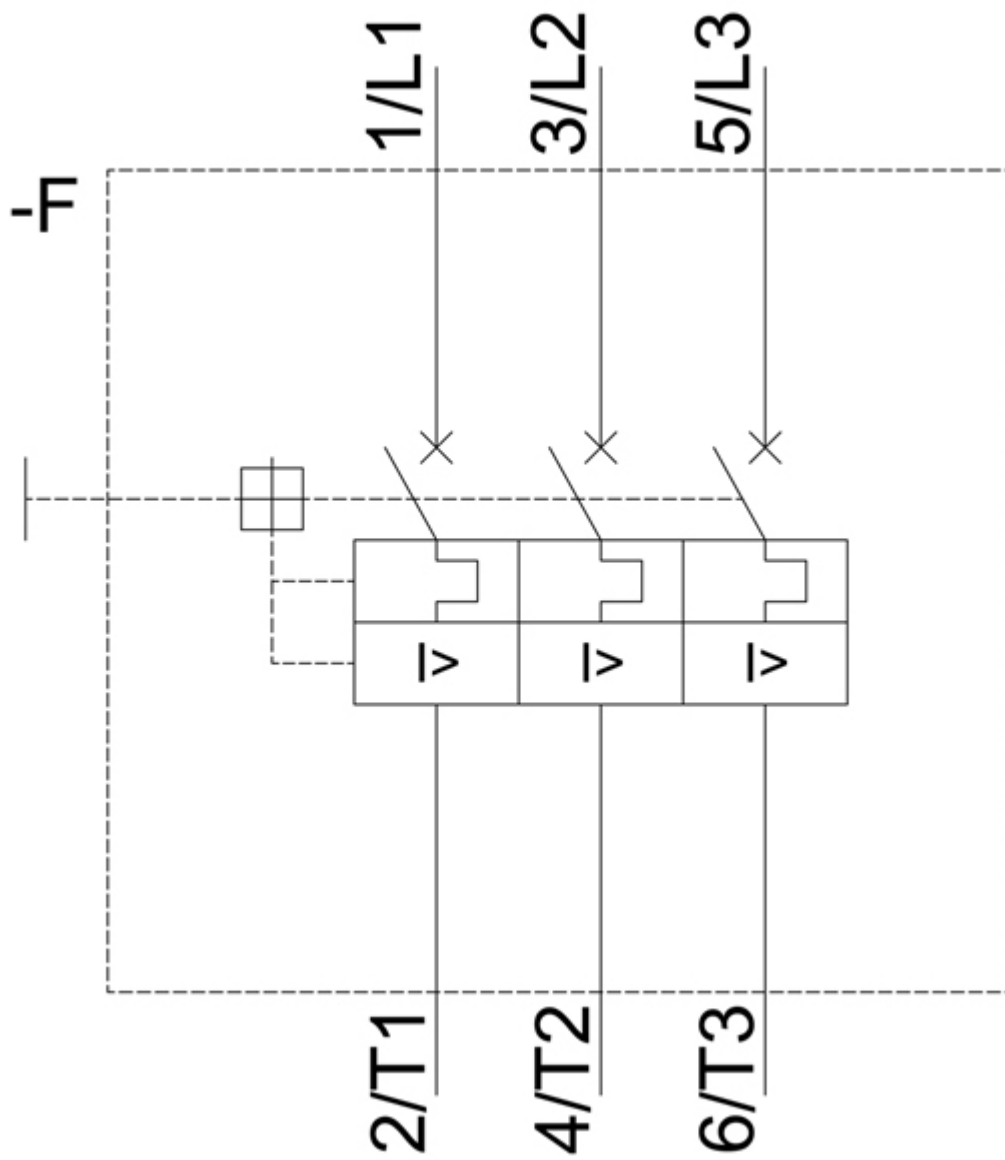
<https://support.industry.siemens.com/cs/ww/en/ps/3RV2811-0ED10/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2811-0ED10&objecttype=14&gridview=view1>







last modified:

12/15/2020 