



CIRCUIT-BREAKER SZ S00, FOR PLANT PROTECTION, WITH APPROBATION CIRCUIT-BREAKER UL 489. CSA C22.2 NO.5-02. A-RELEASE 4 A, N-RELEASE 52 A, SCREW CONNECTION, STANDARD SW. CAPACITY

| | |
|--|----------------------|
| product brand name | SIRIUS |
| Product designation | 3RV2 circuit breaker |
| General technical data: | |
| Active power loss total typical | 6 W |
| Insulation voltage | 690 V |
| • with degree of pollution 3 Rated value | 690 V |
| Surge voltage resistance Rated value | 6 kV |
| Mechanical service life (switching cycles) | |
| • of the main contacts typical | 100 000 |
| • of the auxiliary contacts typical | 100 000 |
| Electrical endurance (switching cycles) | |
| • typical | 100 000 |
| Temperature compensation | -20 ... +60 °C |
| Protection class IP | |
| • on the front | IP20 |
| • of the terminal | IP20 |
| Equipment marking | |
| • acc. to DIN EN 81346-2 | Q |
| Main circuit: | |
| Number of poles for main current circuit | 3 |
| Operating voltage | |
| • Rated value | 690 V |
| • at AC-3 Rated value maximum | 690 V |
| Operating frequency Rated value | 50 ... 60 Hz |
| Operating frequency | |

- at AC-3 maximum

15 1/h

Auxiliary circuit:

| | |
|--|-----|
| Number of NC contacts | |
| <ul style="list-style-type: none"> • for auxiliary contacts | 0 |
| Number of NO contacts | |
| <ul style="list-style-type: none"> • for auxiliary contacts | 0 |
| Number of CO contacts | |
| <ul style="list-style-type: none"> • for auxiliary contacts | 0 |
| Product expansion Auxiliary switch | Yes |

Protective and monitoring functions:

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|--|--|
| Design of the overload circuit breaker | thermal |
| Operational short-circuit current breaking capacity (Ics) with AC | |
| <ul style="list-style-type: none"> • at 240 V Rated value • at 400 V Rated value • at 500 V Rated value • at 690 V Rated value | 100 kA 100 kA 100 kA 4 kA |
| Maximum short-circuit current breaking capacity (Icu) | |
| <ul style="list-style-type: none"> • with AC at 240 V Rated value • with AC at 400 V Rated value • with AC at 500 V Rated value • with AC at 690 V Rated value • at 480 AC Y/277 V acc. to UL 489 Rated value | 100 kA 100 kA 100 kA 6 kA 65 000 A |
| Breaking capacity short-circuit current (Icn) | |
| <ul style="list-style-type: none"> • with 1 current path for DC at 150 V Rated value • with 2 current paths in series for DC at 300 V Rated value • with 3 current paths in series for DC at 450 V Rated value | 10 kA 10 kA 10 kA |
| Response value current of the instantaneous short-circuit release | 52 A |

Short-circuit:

| | |
|--|--|
| Design of the short-circuit trip | magnetic |
| Design of the fuse link for IT network for short-circuit protection of the main circuit | |
| <ul style="list-style-type: none"> • at 400 V • at 500 V • at 690 V | gL/gG 32 A gL/gG 32 A gL/gG 25 A |

Installation/ mounting/ dimensions:

| | |
|--------------------------|-----|
| mounting position | any |
|--------------------------|-----|

| | |
|---|--|
| Mounting type | 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 style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards 0 mm — Backwards 0 mm — upwards 50 mm — downwards 50 mm — at the side 0 mm • for grounded parts <ul style="list-style-type: none"> — forwards 0 mm — Backwards 0 mm — upwards 50 mm — at the side 30 mm — downwards 50 mm • for live parts <ul style="list-style-type: none"> — forwards 0 mm — Backwards 0 mm — upwards 50 mm — downwards 50 mm — at the side 30 mm | |

Connections/ Terminals:

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|--|----------------------|
| Product function | |
| <ul style="list-style-type: none"> • removable terminal for auxiliary and control circuit | No |
| Type of electrical connection | |
| <ul style="list-style-type: none"> • for main current circuit | screw-type terminals |
| Arrangement of electrical connectors for main current circuit | Top and bottom |
| Type of connectable conductor cross-section | |
| <ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — single or multi-stranded 1 ... 10 mm², max. 2x 10 mm² — finely stranded with core end processing 1 ... 16 mm², max. 6 + 16 mm² • for AWG conductors for main contacts 2x 14 | |
| Design of screwdriver shaft | Diameter 5 to 6 mm |
| Design of the thread of the connection screw | |
| <ul style="list-style-type: none"> • for main contacts | M4 |

Safety related data:

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|---|--------|
| B10 value with high demand rate acc. to SN 31920 | 50 000 |
|---|--------|

| | |
|---|-------------|
| Proportion of dangerous failures | |
| <ul style="list-style-type: none"> with low demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 | 40 % |
| T1 value for proof test interval or service life acc. to IEC 61508 | 10 y |
| Protection against electrical shock | finger-safe |

| | |
|------------------------------------|-----|
| Mechanical data: | |
| Size of the circuit-breaker | S00 |

| | |
|--|--|
| Ambient conditions: | |
| Installation altitude at height above sea level maximum | 2 000 m |
| Ambient temperature | |
| <ul style="list-style-type: none"> during operation during storage during transport | -20 ... +60 °C -50 ... +80 °C -50 ... +80 °C |
| Relative humidity during operation | 10 ... 95 % |

| | |
|--|--------|
| Display: | |
| Display version | |
| <ul style="list-style-type: none"> for switching status | Handle |

| | | |
|---------------------------------|----------------------------------|--------------------------|
| Certificates/ approvals: | | |
| General Product Approval | Declaration of Conformity | Test Certificates |



[KTL](#)



EG-Konf.

[Type Test Certificates/Test Report](#)

| | |
|--------------------------|--------------------------|
| Test Certificates | Shipping Approval |
|--------------------------|--------------------------|

[Special Test Certificate](#)



ABS



BUREAU VERITAS



GL



LRS



PRS

| | |
|--------------------------|--------------|
| Shipping Approval | other |
|--------------------------|--------------|



RINA



RMRS

[Environmental Confirmations](#)

[Confirmation](#)



VDE

[other](#)

Further information

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

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<http://www.siemens.com/industrymall>

Cax online generator

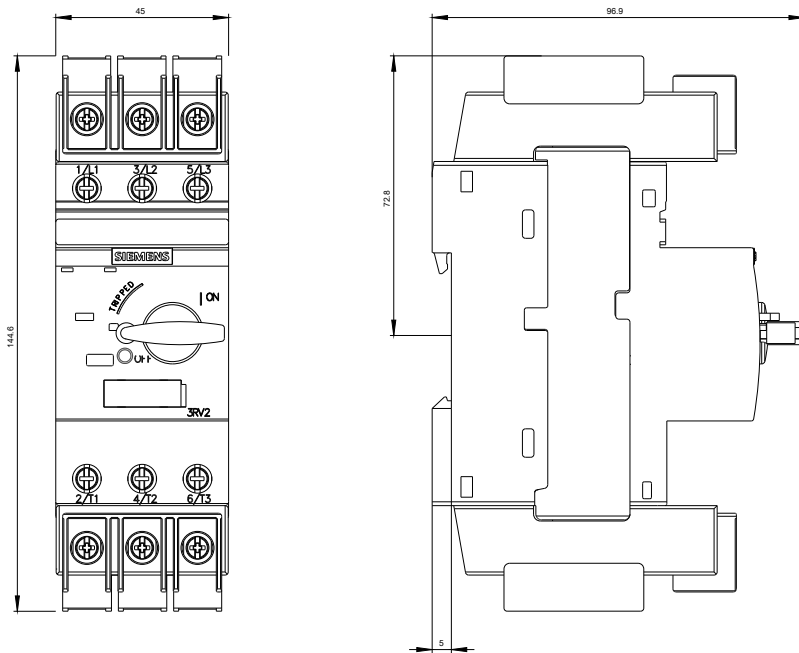
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RV27111ED10>

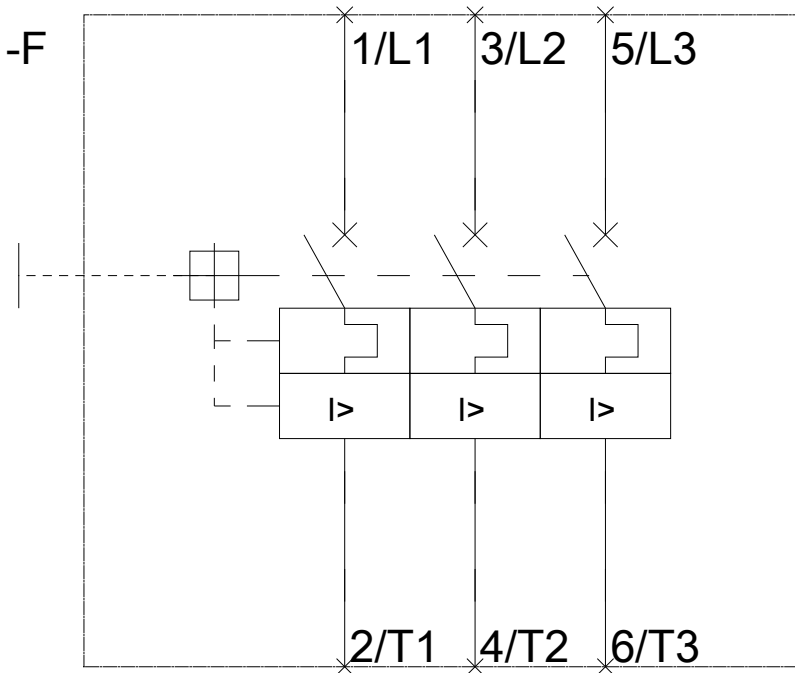
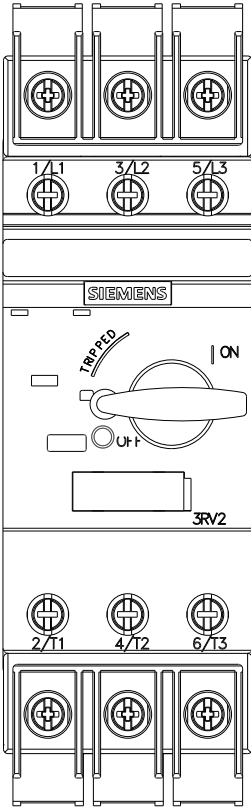
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RV27111ED10>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RV27111ED10&lang=en





last modified:

14.05.2015