

Siemens
EcoTech



circuit breaker frame size S00 for transformer protection with approval circuit breaker UL 489, CSA C22.2 no. 5-02 thermal overload release 1.6 A short-circuit release 33 A screw terminal standard switching capacity

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| 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 | 7.25 W |
| • at AC in hot operating state per pole | 2.4 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 Prohibition (Date) | 10/01/2009 |
| SVHC substance name | Lead - 7439-92-1 |
| Net Weight | 0.509 kg |
| 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 % |
| Environmental footprint | |
| Environmental Product Declaration (EPD) | Yes |
| global warming potential [CO ₂ eq] total | 74.698 kg |
| global warming potential [CO ₂ eq] during manufacturing | 1.98 kg |
| global warming potential [CO ₂ eq] during sales | 0.134 kg |
| global warming potential [CO ₂ eq] during operation | 72.7 kg |
| global warming potential [CO ₂ eq] after end of life | -0.116 kg |
| Siemens Eco Profile (SEP) | Siemens EcoTech |

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| Main circuit | |
| number of poles for main current circuit | 3 |
| type of voltage for main current circuit | AC |
| operating voltage <ul style="list-style-type: none"> • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum | 20 ... 690 V 690 V 690 V |
| operating frequency rated value | 50 ... 60 Hz |
| operational current rated value | 1.6 A |
| operational current <ul style="list-style-type: none"> • at AC-3 at 400 V rated value • at AC-3e at 400 V rated value | 1.6 A 1.6 A |
| operating power <ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value • at AC-3e <ul style="list-style-type: none"> — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value | 0.3 kW 0.6 kW 0.8 kW 1.1 kW 0.3 kW 0.6 kW 0.8 kW 1.1 kW |
| operating frequency <ul style="list-style-type: none"> • at AC-3 maximum • at AC-3e maximum | 15 1/h 15 1/h |
| Auxiliary circuit | |
| type of voltage for auxiliary and control circuit | AC/DC |
| 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 <ul style="list-style-type: none"> • ground fault detection • phase failure detection | No No |
| design of the overload release | thermal |
| maximum short-circuit current breaking capacity (Icu) <ul style="list-style-type: none"> • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at 480 AC Y/277 V according to UL 489 rated value | 100 kA 100 kA 100 kA 100 kA 65 kA |
| operating short-circuit current breaking capacity (Ics) at 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 100 kA |
| response value current of instantaneous short-circuit trip unit | 33 A |
| UL/CSA ratings | |
| Category Control Number (CCN) | E156943 (NKJH, NKJH7) |
| 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 <ul style="list-style-type: none"> • at 500 V • at 690 V | gG 20 A gG 16 A |
| Installation/ mounting/ dimensions | |
| mounting position | any |

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| fastening method | screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 |
| height | 144 mm |
| width | 45 mm |
| depth | 97 mm |
| required spacing | |
| <ul style="list-style-type: none"> • for grounded parts at 400 V <ul style="list-style-type: none"> — downwards — upwards — at the side • for live parts at 400 V <ul style="list-style-type: none"> — downwards — upwards — at the side • for grounded parts at 500 V <ul style="list-style-type: none"> — downwards — upwards — at the side • for live parts at 500 V <ul style="list-style-type: none"> — downwards — upwards — at the side • for grounded parts at 690 V <ul style="list-style-type: none"> — downwards — upwards — backwards — at the side — forwards • for live parts at 690 V <ul style="list-style-type: none"> — downwards — upwards — backwards — at the side — forwards | 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 70 mm 70 mm 0 mm 30 mm 0 mm 70 mm 70 mm 0 mm 30 mm 0 mm |
| Connections/ Terminals | |
| 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-sections | |
| <ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts | 1 ... 10 mm ² , max. 2x 10 mm ² 1 ... 16 mm ² , max. 6 + 16 mm ² 2x (14 ... 10) |
| tightening torque | |
| <ul style="list-style-type: none"> • 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 | |
| <ul style="list-style-type: none"> • for main contacts | M4 |
| Safety related data | |
| product function suitable for safety function | Yes |
| suitability for use | |
| <ul style="list-style-type: none"> • safety-related switching on • safety-related switching OFF | No Yes |
| service life maximum | 10 a |
| test wear-related service life necessary | Yes |
| proportion of dangerous failures | |
| <ul style="list-style-type: none"> • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 | 40 % 50 % |

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| 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 | 10 a |
| • for proof test interval or service life according to IEC 61508 | |
| 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 | |



| General Product Approval | Test Certificates | Maritime application | other |
|--------------------------|-------------------|----------------------|-------|
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[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



[Miscellaneous](#)

| other | Railway | Environment |
|-------|---------|-------------|
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[Confirmation](#)



[Special Test Certificate](#)



| Environment |
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[Environmental Conformations](#)

| Further information |
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Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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=3RV2811-1AD10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2811-1AD10>

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

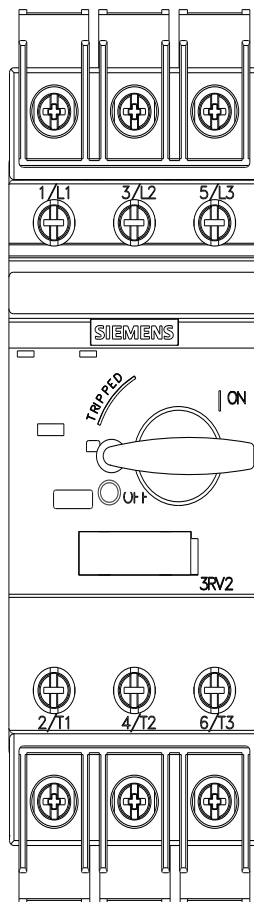
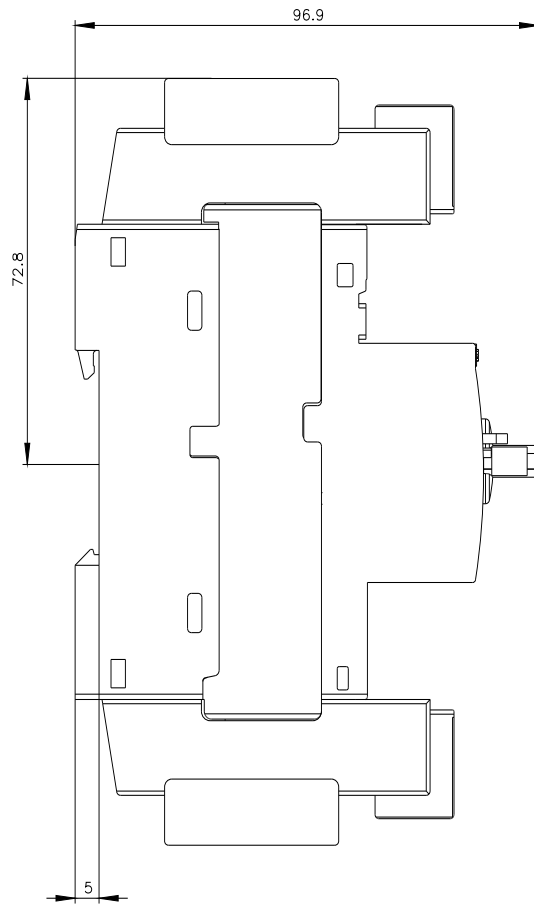
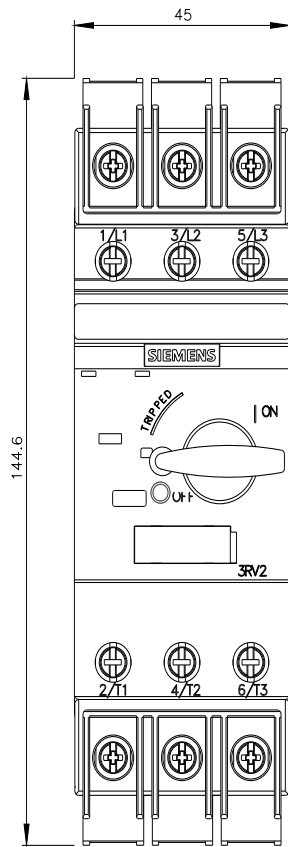
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Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2811-1AD10>

Characteristic curves

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