SIEMENS

Data sheet 3RV2011-4AA10



Circuit breaker size S00 for motor protection, CLASS 10 A-release 10...16 A N-release 208 A screw terminal Standard switching capacity

| product brand name | SIRIUS |
|---|----------------------|
| product designation | Circuit breaker |
| design of the product | For motor protection |
| product type designation | 3RV2 |
| General technical data | |
| size of the circuit-breaker | S00 |
| size of contactor can be combined company-specific | S00, S0 |
| product extension auxiliary switch | Yes |
| power loss [W] for rated value of the current | |
| at AC in hot operating state | 9.25 W |
| at AC in hot operating state per pole | 3.1 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 (operating cycles) | |
| of the main contacts typical | 100 000 |
| of auxiliary contacts typical | 100 000 |
| electrical endurance (operating cycles) typical | 100 000 |
| type of protection according to ATEX directive 2014/34/EU | Ex II (2) GD |
| certificate of suitability according to ATEX directive 2014/34/EU | DMT 02 ATEX F 001 |
| 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 | |
| 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 |
| adjustable current response value current of the | 10 16 A |
| current-dependent overload release | |
| 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 | 16 A |

| operational current | |
|--|---------------|
| at AC-3 at 400 V rated value | 16 A |
| at AC-3 at 400 V rated value at AC-3e at 400 V rated value | 16 A |
| operating power | 10 /1 |
| • at AC-3 | |
| — at 230 V rated value | 4 kW |
| — at 400 V rated value | 7.5 kW |
| — at 500 V rated value | 7.5 kW |
| — at 690 V rated value | 11 kW |
| • at AC-3e | |
| — at 230 V rated value | 4 kW |
| — at 400 V rated value | 7.5 kW |
| — at 500 V rated value | 7.5 kW |
| — at 690 V rated value | 11 kW |
| operating frequency | |
| at AC-3 maximum | 15 1/h |
| at AC-3e 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 | Yes |
| trip class | CLASS 10 |
| design of the overload release | thermal |
| maximum short-circuit current breaking capacity (Icu) | |
| at AC at 240 V rated value | 100 kA |
| at AC at 400 V rated value | 55 kA |
| at AC at 500 V rated value | 10 kA |
| at AC at 690 V rated value | 4 kA |
| operating short-circuit current breaking capacity (Ics) at AC | |
| at 240 V rated value | 100 kA |
| at 400 V rated value | 30 kA |
| at 500 V rated value | 5 kA |
| • at 690 V rated value | 2 kA |
| response value current of instantaneous short-circuit trip unit | 208 A |
| UL/CSA ratings | |
| full-load current (FLA) for 3-phase AC motor | |
| at 480 V rated value | 16 A |
| at 600 V rated value | 16 A |
| yielded mechanical performance [hp] | |
| • for single-phase AC motor | Alle |
| — at 110/120 V rated value | 1 hp |
| — at 230 V rated value | 2 hp |
| • for 3-phase AC motor | 3 hn |
| — at 200/208 V rated value— at 220/230 V rated value | 3 hp |
| — at 220/230 V rated value — at 460/480 V rated value | 5 hp 10 hp |
| | ΙΟΤΙΡ |
| Short-circuit protection | V |
| product function short circuit protection | Yes |
| design of the short-circuit trip design of the fuse link for IT network for short-circuit protection of the main circuit | magnetic |
| • at 240 V | gL/gG 80 A |
| • at 400 V | gL/gG 63 A |
| • at 500 V | gL/gG 50 A |
| • at 690 V | gL/gG 40 A |
| Installation/ mounting/ dimensions | <u></u> |
| mounting position | any |
| - - | |

| fastening method | screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 |
|---|--|
| height | 97 mm |
| width | 45 mm |
| depth | 97 mm |
| required spacing | |
| with side-by-side mounting at the side | 0 mm |
| • for grounded parts at 400 V | |
| — downwards | 30 mm |
| — upwards | 30 mm |
| — upwards — at the side | 9 mm |
| | 9 111111 |
| • for live parts at 400 V | 22 |
| — downwards | 30 mm |
| — upwards | 30 mm |
| — at the side | 9 mm |
| for grounded parts at 500 V | |
| — downwards | 30 mm |
| — upwards | 30 mm |
| — at the side | 9 mm |
| for live parts at 500 V | |
| — downwards | 30 mm |
| — upwards | 30 mm |
| — at the side | 9 mm |
| • for grounded parts at 690 V | |
| — downwards | 50 mm |
| — upwards | 50 mm |
| — backwards | 0 mm |
| — at the side | 30 mm |
| — at the side — forwards | 0 mm |
| | O IIIIII |
| • for live parts at 690 V | F0 |
| — downwards | 50 mm |
| — upwards | 50 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 | 2x (0,75 2,5 mm²), 2x 4 mm² |
| — finely stranded with core end processing | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) |
| at AWG cables for main contacts | 2x (18 14), 2x 12 |
| tightening torque | LA (10 17), LA 12 |
| for main contacts with screw-type terminals | 0.8 1.2 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 | M2 |
| • for main contacts | M3 |
| Safety related data | |
| B10 value | |
| with high demand rate according to SN 31920 | 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 | 10 y |
| IEC 61508 | |
| 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 |

Certificates/ approvals

General Product Approval



Confirmation





KC



For use in hazardous locations

Declaration of Conformity

Test Certificates









Type Test Certificates/Test Report

Special Test Certificate

Marine / Shipping













Marine / Shipping

other

Railway



Confirmation



Vibration and Shock

Confirmation

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=3RV2011-4AA10

Cax online generator

 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RV2011-4AA10}$

 ${\bf Service \& Support~(Manuals,~Certificates,~Characteristics,~FAQs,...)}$

https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-4AA10

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

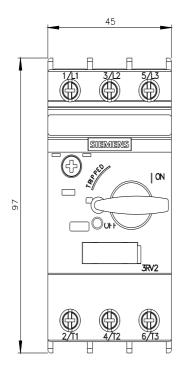
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-4AA10&lang=en

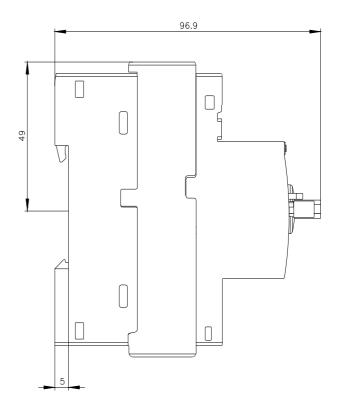
Characteristic: Tripping characteristics, I2t, Let-through current

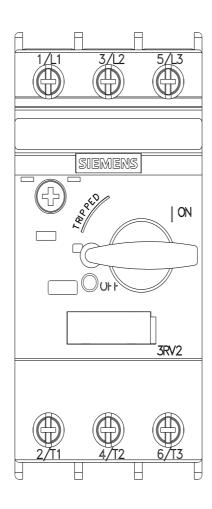
https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-4AA10/char

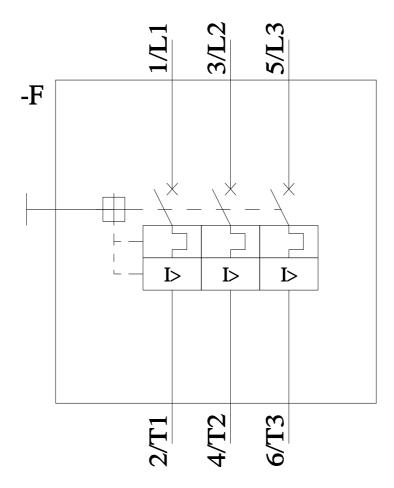
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-4AA10&objecttype=14&gridview=view1









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