SIEMENS

Data sheet 3RV2011-1GA10



Circuit breaker size S00 for motor protection, CLASS 10 A-release 4.5...6.3 A N-release 82 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 | 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 | |
| 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 according 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 | |
| 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 | |
| temperature compensation | -20 +60 °C | |
| relative humidity during operation | 10 95 % | |
| Main circuit | | |
| number of poles for main current circuit | 3 | |
| adjustable current response value current of the | 4.5 6.3 A | |
| | | |

| ourrent dependent everleed valees | |
|---|----------------|
| current-dependent overload release | |
| operating voltage | 600.1/ |
| • rated value | 690 V |
| • rated value | 20 690 V |
| at AC-3 rated value maximum | 690 V |
| operating frequency rated value | 50 60 Hz |
| operational current rated value | 6.3 A |
| operational current | 0.0.4 |
| at AC-3 at 400 V rated value | 6.3 A |
| operating power | |
| | 4 5 144/ |
| — at 230 V rated value | 1.5 kW |
| — at 400 V rated value — at 500 V rated value | 2.2 kW 3 kW |
| — at 500 V rated value — at 690 V rated value | 4 kW |
| | 4 KVV |
| operating frequency • at AC-3 maximum | 15 1/h |
| 20110 2 1110111111111 | 15 1/11 |
| 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 |
| breaking capacity operating short-circuit current (lcs) 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 | 4 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 | 6 kA |
| response value current of instantaneous short-circuit trip unit | 82 A |
| UL/CSA ratings | |
| full-load current (FLA) for 3-phase AC motor | |
| at 480 V rated value | 6.3 A |
| at 600 V rated value | 6.3 A |
| yielded mechanical performance [hp] | |
| • for single-phase AC motor | |
| — at 110/120 V rated value | 0.25 hp |
| — at 230 V rated value | 0.5 hp |
| • for 3-phase AC motor | |
| — at 200/208 V rated value | 1 hp |
| — at 220/230 V rated value | 1.5 hp |
| — at 460/480 V rated value | 3 hp |
| — at 575/600 V rated value | 5 hp |
| 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 400 V | gL/gG 50 A |
| ● at 500 V | gL/gG 40 A |
| | |

| ● at 690 V | gL/gG 35 A |
|---|--|
| Installation/ mounting/ dimensions | |
| mounting position | any |
| fastening method | screw and snap-on mounting onto 35 mm standard mounting rail |
| luotolling moulou | according to DIN EN 60715 |
| height | 97 mm |
| width | 45 mm |
| depth | 97 mm |
| required spacing | |
| for grounded parts at 400 V | |
| — downwards | 30 mm |
| — upwards | 30 mm |
| — at the side | 9 mm |
| for live parts at 400 V | |
| — 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 |
| — forwards | 0 mm |
| • for live parts at 690 V | |
| — downwards | 50 mm |
| — upwards | 50 mm |
| — backwards | 0 mm |
| — at the side | 30 mm |
| — forwards | 0 mm |
| Connections/ Terminals | |
| product component removable terminal for auxiliary | No |
| and control circuit | |
| type of electrical connection | and the state of t |
| for main current circuit Arrangement of electrical connectors for main current | 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 | |
| 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 | |
| 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 |
| 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 version for switching status | Handle |
| | |

Certificates/ approvals

General Product Approval





Confirmation



<u>KC</u>



For use in hazardous locations

Declaration of Conformity

Test Certificates







UK Declaration of Conformity Special Test Certificate
ate

Type Test Certificates/Test Report

Marine / Shipping













Marine / Shipping

other

Railway



Confirmation



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=3RV2011-1GA10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-1GA10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1GA10

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

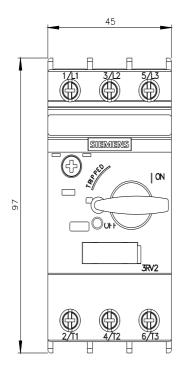
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-1GA10&lang=en

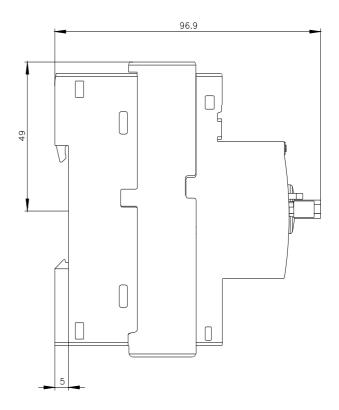
Characteristic: Tripping characteristics, I2t, Let-through current

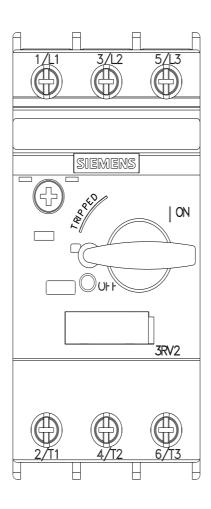
https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1GA10/char

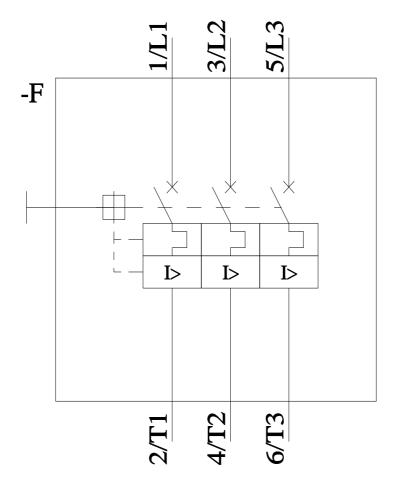
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-1GA10&objecttype=14&gridview=view1









last modified: 1/27/2022 🖸