



circuit breaker frame size S00 for motor protection, Class 10 thermal release 0.18...0.25 A short-circuit release 3.3 A screw terminal standard switching capacity with transverse auxiliary switch 1 NO+1 NC

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| 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 | 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 |
| 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 |
| reference code according to IEC 81346-2 | Q |
| Substance Prohibitance (Date) | 10/01/2009 |
| SVHC substance name | Lead CAS-No. 7439-92-1 |
| Net Weight | 295 g |
| 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 current-dependent overload release | 0.18 ... 0.25 A |
| type of voltage for main current circuit | AC |
| operating voltage | |
| • rated value | 20 ... 690 V |

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| <ul style="list-style-type: none"> • at AC-3 rated value maximum | 690 V |
| <ul style="list-style-type: none"> • at AC-3e rated value maximum | 690 V |
| operating frequency rated value | 50 ... 60 Hz |
| operational current rated value | 0.25 A |
| operational current | |
| <ul style="list-style-type: none"> • at AC-3 at 400 V rated value | 0.25 A |
| <ul style="list-style-type: none"> • at AC-3e at 400 V rated value | 0.25 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 | 0 kW 0.06 kW 0.1 kW 0.1 kW |
| <ul style="list-style-type: none"> • 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 kW 0.06 kW 0.1 kW 0.1 kW |
| operating frequency | |
| <ul style="list-style-type: none"> • at AC-3 maximum | 15 1/h |
| <ul style="list-style-type: none"> • at AC-3e maximum | 15 1/h |
| Auxiliary circuit | |
| design of the auxiliary switch | transverse |
| type of voltage for auxiliary and control circuit | AC/DC |
| number of NC contacts for auxiliary contacts | 1 |
| number of NO contacts for auxiliary contacts | 1 |
| number of CO contacts for auxiliary contacts | 0 |
| operational current of auxiliary contacts at AC-15 | |
| <ul style="list-style-type: none"> • at 24 V • at 120 V • at 125 V • at 230 V | 2 A 0.5 A 0.5 A 0.5 A |
| operational current of auxiliary contacts at DC-13 | |
| <ul style="list-style-type: none"> • at 24 V • at 60 V | 1 A 0.15 A |
| Protective and monitoring functions | |
| product function | |
| <ul style="list-style-type: none"> • ground fault detection • phase failure detection | No Yes |
| trip class | CLASS 10 |
| 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 | 100 kA 100 kA 100 kA 100 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 | 3.3 A |
| UL/CSA ratings | |
| full-load current (FLA) for 3-phase AC motor | |
| <ul style="list-style-type: none"> • at 480 V rated value • at 600 V rated value | 0.25 A 0.25 A |
| contact rating of auxiliary contacts according to UL | C300 / R300 |
| UL File Number (CCN) | E47705 (NLRV, NLRV7), E156943 (NKJH, NKJH7) |
| Short-circuit protection | |

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| product function short circuit protection | Yes |
| design of the short-circuit trip | magnetic |
| design of the fuse link | Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current $I_k < 400$ A) |
| <ul style="list-style-type: none"> for short-circuit protection of the auxiliary switch required | |
| Installation/ mounting/ dimensions | |
| 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 | <ul style="list-style-type: none"> with side-by-side mounting at the side 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 |
| 0 mm | |
| 30 mm | |
| 30 mm | |
| 9 mm | |
| 30 mm | |
| 30 mm | |
| 9 mm | |
| 30 mm | |
| 30 mm | |
| 9 mm | |
| 30 mm | |
| 30 mm | |
| 9 mm | |
| 50 mm | |
| 50 mm | |
| 0 mm | |
| 30 mm | |
| 0 mm | |
| 50 mm | |
| 50 mm | |
| 0 mm | |
| 30 mm | |
| 0 mm | |
| Connections/ Terminals | |
| type of electrical connection | screw-type terminals |
| <ul style="list-style-type: none"> for main current circuit for auxiliary and control circuit | |
| arrangement of electrical connectors for main current circuit | Top and bottom |
| type of connectable conductor cross-sections | <ul style="list-style-type: none"> 2x (0,75 ... 2,5 mm²), 2x 4 mm² 2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²) 2x (18 ... 14), 2x 12 |
| <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 | |
| <ul style="list-style-type: none"> for auxiliary contacts <ul style="list-style-type: none"> — solid or stranded — finely stranded with core end processing for AWG cables for auxiliary contacts | |
| type of connectable conductor cross-sections | <ul style="list-style-type: none"> 2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²) 2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²) 2x (20 ... 16), 2x (18 ... 14) |
| <ul style="list-style-type: none"> for auxiliary contacts <ul style="list-style-type: none"> — solid or stranded — finely stranded with core end processing for AWG cables for auxiliary contacts | |
| <ul style="list-style-type: none"> for auxiliary contacts <ul style="list-style-type: none"> — solid or stranded — finely stranded with core end processing for AWG cables for auxiliary contacts | |
| tightening torque | 0.8 ... 1.2 N·m |
| <ul style="list-style-type: none"> for main contacts with screw-type terminals | |

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| <ul style="list-style-type: none"> for auxiliary 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 | |
| <ul style="list-style-type: none"> for main contacts | M3 |
| <ul style="list-style-type: none"> of the auxiliary and control contacts | M3 |

Safety related data

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| product function suitable for safety function | Yes |
| suitability for use | |
| <ul style="list-style-type: none"> safety-related switching on | No |
| <ul style="list-style-type: none"> safety-related switching OFF | 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 | 40 % |
| <ul style="list-style-type: none"> with high demand rate according to SN 31920 | 50 % |
| 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

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| device type according to ISO 13849-1 | 3 |
| overdimensioning according to ISO 13849-2 necessary | Yes |

IEC 61508

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| safety device type according to IEC 61508-2 | Type A |
| T1 value | |
| <ul style="list-style-type: none"> for proof test interval or service life according to IEC 61508 | 10 a |

Electrical Safety

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| 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

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| display version for switching status | Handle |
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Approvals Certificates

Environmental Product Declaration

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| <ul style="list-style-type: none"> global warming potential [CO2 eq] / during manufacturing | 1.98 kg |
| <ul style="list-style-type: none"> global warming potential [CO2 eq] / during sales | 0.134 kg |
| <ul style="list-style-type: none"> global warming potential [CO2 eq] / during operation | 72.7 kg |
| <ul style="list-style-type: none"> global warming potential [CO2 eq] / after end of life | -0.116 kg |
| <ul style="list-style-type: none"> global warming potential [CO2 eq] / total | 74.698 kg |

Environment General Product Approval

[Environmental Conformations](#)

General Product Approval For use in hazardous locations Maritime application

Maritime application other

Further information

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=3RV2011-0CA15>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0CA15>

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

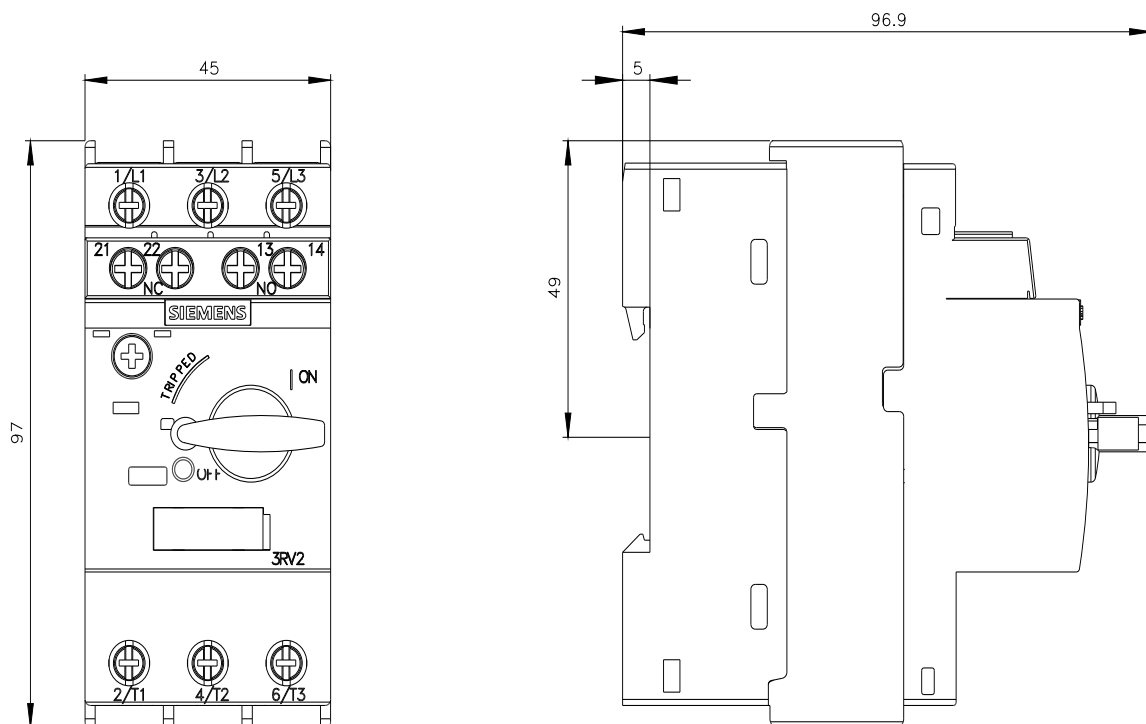
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-0CA15&lang=en

Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-0CA15>

Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)





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