SIEMENS

Data sheet

3RV1011-1JA15



Circuit breaker size S00 for motor protection, CLASS 10 A-release 7...10 A N release 130 A Screw terminal Standard switching capacity with transverse auxiliary switch 1 NO+1 NC $\,$

| product brand name | SIRIUS | | | | | | |
|---|------------------------|--|--|--|--|--|--|
| product designation | Circuit breaker | | | | | | |
| design of the product | For motor protection | | | | | | |
| product type designation | 3RV1 | | | | | | |
| General technical data | General technical data | | | | | | |
| size of the circuit-breaker | S00 | | | | | | |
| size of contactor can be combined company-specific | S00 | | | | | | |
| 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 | | | | | | |
| 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) | 01/01/2013 | | | | | | |
| 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 | 7 10 A | | | | | | |
| 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 | 10 A | | | | | | |
| operational current | | | | | | | |
| at AC-3 at 400 V rated value | 10 A | | | | | | |
| | | | | | | | |
| • at AC-3e at 400 V rated value | 10 A | | | | | | |

| • at AC-3 | |
|---|--|
| • at AC-5 — at 230 V rated value | 2.2 kW |
| — at 230 V rated value | 2.2 KW |
| | |
| — at 500 V rated value | 5.5 kW |
| — at 690 V rated value | 7.5 kW |
| • at AC-3e | |
| — at 230 V rated value | 2.2 kW |
| — at 400 V rated value | 4 kW |
| — at 500 V rated value | 5.5 kW |
| — at 690 V rated value | 7.5 kW |
| operating frequency | |
| • at AC-3 maximum | 15 1/h |
| • at AC-3e maximum | 15 1/h |
| Auxiliary circuit | |
| design of the auxiliary switch | transverse |
| number of NC contacts for auxiliary contacts | 1 |
| • note | 1 |
| number of NO contacts for auxiliary contacts | 1 |
| note | 1 |
| number of CO contacts for auxiliary contacts | 0 |
| operational current of auxiliary contacts at AC-15 | |
| • at 24 V | 2 A |
| • at 110 V | 2 A |
| • at 120 V | 2 A |
| • at 125 V | 2 A |
| • at 230 V | 0.5 A |
| operational current of auxiliary contacts at DC-13 | |
| • at 24 V | 1 A |
| • at 60 V | 0.15 A |
| Protective and monitoring functions | |
| product function | |
| | |
| ground fault detection | No |
| | No Yes |
| ground fault detection | |
| ground fault detection phase failure detection | Yes |
| • ground fault detection • phase failure detection trip class | Yes CLASS 10 |
| • ground fault detection • phase failure detection trip class design of the overload release | Yes CLASS 10 |
| • ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) | Yes CLASS 10 thermal |
| • ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value | Yes CLASS 10 thermal 100 kA |
| • ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (lcu) • at AC at 240 V rated value • at AC at 400 V rated value | Yes CLASS 10 thermal 100 kA 50 kA |
| • ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value | Yes CLASS 10 thermal 100 kA 50 kA 3 kA |
| • ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) • 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 | Yes CLASS 10 thermal 100 kA 50 kA 3 kA |
| • ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) • 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 operating short-circuit current breaking capacity (Ics) at AC | Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA |
| • ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) • 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 AC at 690 V rated value • at 240 V rated value | Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA |
| • ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) • 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 AC at 240 V rated value • at AC at 240 V rated value • at AC at 690 V rated value • at 240 V rated value • at 240 V rated value | Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA |
| ground fault detection phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) e at AC at 240 V rated value e at AC at 400 V rated value e at AC at 500 V rated value e at AC at 690 V rated value e at AC at 690 V rated value e at 240 V rated value e at 240 V rated value e at AC at 500 V rated value e at AC at 690 V rated value e at 240 V rated value e at 500 V rated value | Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA |
| ground fault detection phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) e at AC at 240 V rated value e at AC at 400 V rated value e at AC at 500 V rated value e at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC e at 240 V rated value e at 240 V rated value e at 690 V rated value e at 690 V rated value e at 690 V rated value e at 690 V rated value | Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA |
| • ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) • 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 240 V rated value • at 240 V rated value • at 400 V rated value • at 400 V rated value • at 690 V rated value • at 400 V rated value • at 400 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value | Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA |
| • ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (lcu) • 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 240 V rated value • at 690 V rated value • at 690 V rated value • at 690 V rated value | Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA |
| • ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) • 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 AC at 690 V rated value • at 240 V rated value • at 240 V rated value • at 240 V rated value • at 690 V rated value | Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA 130 A |
| ground fault detection phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) e at AC at 240 V rated value e at AC at 400 V rated value e at AC at 500 V rated value e at AC at 690 V rated value e at AC at 690 V rated value e at 240 V rated value e at 240 V rated value e at AC at 690 V rated value e at AC at 690 V rated value e at 240 V rated value e at 240 V rated value e at 690 V rated value e at 400 V rated value e at 690 V rated value | Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA 130 A |
| • ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) • 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 AC at 690 V rated value • at 240 V rated value • at 400 V rated value • at 400 V rated value • at 400 V rated value • at 690 V rated value • at 600 V rated value • at 480 V rated value • at 480 V rated value • at 600 V rated value • at 600 V rated value | Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA 130 A |
| ground fault detection phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) e at AC at 240 V rated value e at AC at 400 V rated value e at AC at 500 V rated value e at AC at 690 V rated value e at AC at 690 V rated value e at 240 V rated value e at 240 V rated value e at AC at 690 V rated value e at AC at 690 V rated value e at 240 V rated value e at 240 V rated value e at 690 V rated value e at 400 V rated value e at 690 V rated value | Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA 130 A |
| • ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) • 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 AC at 690 V rated value • at 240 V rated value • at 240 V rated value • at AC at 690 V rated value • at 240 V rated value • at 690 V rated value • at 400 V rated value • at 690 V rated value • at 600 V rated value | Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA 130 A 10 A 10 A |
| ground fault detection phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) 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 AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 400 V rated value at 500 V rated value at 690 V rated value at 480 V rated value at 480 V rated value at 600 V rated value | Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA 130 A |
| ground fault detection phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) 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 AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 400 V rated value at 690 V rated value at 480 V rated value at 600 V rated value at 600 V rated value at 600 V rated value at 480 V rated value at 600 V rated value | Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA 130 A 10 A 10 A 10 A |
| ground fault detection phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) 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 AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 690 V rated value at 690 V rated value at 690 V rated value trip class determine the full base of the | Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA 130 A 10 A 10 A 10 A 10 A 10 A 2 hp |
| ground fault detection phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) 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 operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 400 V rated value at 500 V rated value at 690 V rated value at 200 V rated value at 600 V rated value at 200/208 V rated value at 200/208 V rated value at 220/230 V rated value | Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA 130 A 10 A 10 A 10 A 10 A 10 A |
| ground fault detection phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) 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 operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 400 V rated value at 400 V rated value at 690 V rated value full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value at 600 V rated value at 600 V rated value at 230 V rated value for single-phase AC motor at 230 V rated value for 3-phase AC motor at 200/208 V rated value at 200/208 V rated value at 220/230 V rated value at 460/480 V rated value | Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 2 kA 100 kA 13 kA 2 kA 130 A 10 A 10 A 10 A 10 A 10 A 10 A 10 A |
| ground fault detection phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) 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 operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 400 V rated value at 500 V rated value at 690 V rated value at 200 V rated value at 600 V rated value at 200/208 V rated value at 200/208 V rated value at 220/230 V rated value | Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA 130 A 10 A 10 A 10 A 10 A 10 A |

| Short-circuit protection | | | | |
|---|---|--|--|--|
| product function short circuit protection | Yes | | | |
| design of the short-circuit trip | magnetic | | | |
| design of the fuse link | | | | |
| for short-circuit protection of the auxiliary switch required | fuse gG: 10 A, miniature circuit breaker C 6 A (short-circuit current lk < 400 A) | | | |
| design of the fuse link for IT network for short-circuit | | | | |
| protection of the main circuit | | | | |
| • 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 50 A | | | |
| Installation/ mounting/ dimensions | | | | |
| mounting position | any | | | |
| fastening method | screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 | | | |
| height | 90 mm | | | |
| width | 45 mm | | | |
| depth | 75 mm | | | |
| required spacing | | | | |
| for grounded parts at 400 V | | | | |
| — downwards | 20 mm | | | |
| — upwards | 20 mm | | | |
| — at the side | 9 mm | | | |
| for live parts at 400 V | | | | |
| — downwards | 20 mm | | | |
| — upwards | 20 mm | | | |
| — at the side | 9 mm | | | |
| for grounded parts at 500 V | | | | |
| — downwards | 20 mm | | | |
| — upwards | 20 mm | | | |
| — at the side | 9 mm | | | |
| for live parts at 500 V | | | | |
| — downwards | 20 mm | | | |
| — upwards | 20 mm | | | |
| — at the side | 9 mm | | | |
| for grounded parts at 690 V | | | | |
| — downwards | 20 mm | | | |
| — upwards | 20 mm | | | |
| — backwards | 0 mm | | | |
| — at the side | 9 mm | | | |
| — forwards | 0 mm | | | |
| • for live parts at 690 V | | | | |
| — downwards | 20 mm | | | |
| — upwards | 20 mm | | | |
| — backwards | 0 mm | | | |
| — at the side | 9 mm | | | |
| — forwards | 0 mm | | | |
| Connections/ Terminals | | | | |
| type of electrical connection | | | | |
| for main current circuit | screw-type terminals | | | |
| for auxiliary and control circuit | screw-type terminals | | | |
| arrangement of electrical connectors for main current | Top and bottom | | | |
| circuit | | | | |
| type of connectable conductor cross-sections | | | | |
| for main contacts | | | | |
| — solid or stranded | 2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x (1 4 mm²) | | | |
| — finely stranded with core end processing | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) | | | |
| type of connectable conductor cross-sections | | | | |
| for auxiliary contacts | | | | |
| — solid or stranded | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) | | | |
| tightening torque | | | | |
| for main contacts with screw-type terminals | 0.8 1.2 N·m | | | |

| for auxiliary contacts with screw-type terminals | | 0.8 1.2 N·m | | | | | |
|--|---|--|---------------------------|---|------------------------------|--------------------------|--|
| size of the screwdriver tip | | Pozidriv size 2 | | | | | |
| design of the thread of the | e connection screw | N | | | | | |
| for main contacts | | M3 | M3 | | | | |
| of the auxiliary and control contacts | | M3 | | | | | |
| Safety related data | | | | | | | |
| B10 value | | | | | | | |
| with high demand rat | with high demand rate according to SN 31920 | | 5 000 | | | | |
| proportion of dangerous failures | | | | | | | |
| with low demand rate | 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 | | | - | Rocker switch | | | |
| | status | | RUCKE | er Switch | _ | | |
| Certificates/ approvals | | | | | | | |
| General Product Approva | 1 | | | | For use in hazardous | s locations | |
| <u>Confirmation</u> | | (ب س | | EHC | ATEX | IECE× | |
| Declaration of Conformity | 1 | Test Certificat | tes | | Marine / Shipping | | |
| UK CA | CE EG-Konf. | <u>Special Test C</u> <u>ate</u> | <u>ertific-</u> | Type Test Certific- ates/Test Report | ABS | BUREAU VERITAS | |
| Marine / Shipping | | | | | | other | |
| Lloyds Register urs | PRS | - EINA | | RMRS RMRS | DINV-GL DINV-GL | <u>Confirmation</u> | |
| other | | Railway | | | | | |
| | | | | | | | |
| <u>Miscellaneous</u> | | <u>Special Test C</u> <u>ate</u> | <u>erunc-</u> | | | | |
| | | | | | | | |
| Further information | | | | | | | |
| Siemens has decided to e | | | | ion husin | | | |
| https://press.siemens.com/c Siemens is working on the Please contact your local Si EAC relevant market (other Information on the packag https://support.industry.siem | e renewal of the cu emens office on the than the sanctioned ging | estatus of validity of AEAEU member state | ates. f the EAC | certification if you inter | nd to import or offer to sup | ply these products to an | |
| Information- and Downloa https://www.siemens.com/ic Industry Mall (Online orde | <u>:10</u> | , Brochures,…) | | | | | |
| https://mall.industry.siemen | | atalog/product?mlfb | <u>=3RV10</u> | <u>11-1JA15</u> | | | |

Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-1JA15

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

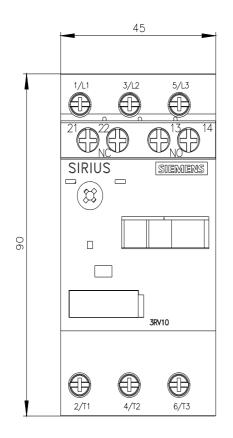
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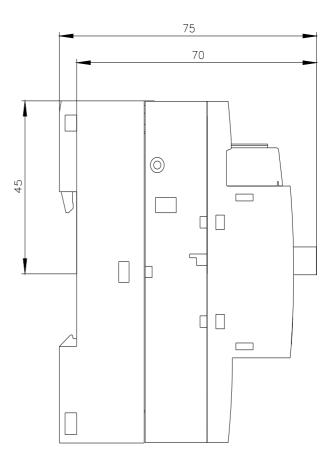
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

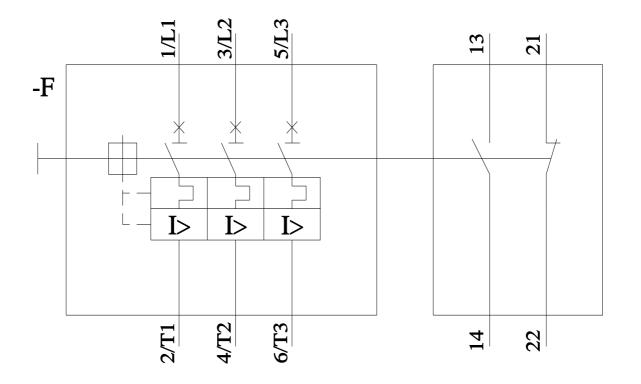
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Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-1JA15/char Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1011-1JA15&objecttype=14&gridview=view1







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