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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 | S0 |
| 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 | 13.25 W |
| • at AC in hot operating state per pole | 4.4 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 | 25g / 11 ms |
| mechanical service life (operating cycles) | |
| • of the main contacts typical | 500 |
| • of auxiliary contacts typical | 500 |
| electrical endurance (operating cycles) typical | 500 |
| reference code according to IEC 81346-2 | Q |
| Substance Prohibitation (Date) | 10/01/2009 |
| SVHC substance name | Lead - 7439-92-1 Lead titanium zirconium oxide - 12626-81-2 |
| Net Weight | 380 g |
| Ambient conditions | |
| installation altitude at height above sea level maximum | 2 000 m |
| ambient temperature | |
| • during operation | -50 ... +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 | 27 ... 32 A |
| type of voltage for main current circuit | AC |
| operating voltage | |

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| <ul style="list-style-type: none"> • rated value | 20 ... 690 V |
| <ul style="list-style-type: none"> • at AC-3 rated value maximum | 690 V |
| operating frequency rated value | 50 ... 60 Hz |
| operational current rated value | 32 A |
| operational current | |
| <ul style="list-style-type: none"> • at AC-3 at 400 V rated value | 32 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 | 7.5 kW 15 kW 18.5 kW 30 kW |
| operating frequency | |
| <ul style="list-style-type: none"> • at AC-3 maximum | 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 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 | 25 kA 25 kA 10 kA 4 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 | 10 kA 10 kA 5 kA 2 kA |
| response value current of instantaneous short-circuit trip unit | 400 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 400 V • at 500 V • at 690 V | gG 63 A gG 63 A gG 63 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 | 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 | 0 mm 30 mm 30 mm 9 mm |

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| — 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 | |
| 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 (1 ... 2.5 mm ²), 2x (2.5 ... 10 mm ²) |
| — finely stranded with core end processing | 2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²), 1x 10 mm ² |
| tightening torque | |
| • for main contacts with screw-type terminals | 2 ... 2.5 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 | M4 |
| IEC 61508 | |
| T1 value | |
| • for proof test interval or service life according to IEC 61508 | 10 a |
| 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 | |
| Environmental Product Declaration | |
| • global warming potential [CO ₂ eq] / during manufacturing | 2.68 kg |
| • global warming potential [CO ₂ eq] / during sales | 0.143 kg |
| • global warming potential [CO ₂ eq] / during operation | 72.7 kg |
| • global warming potential [CO ₂ eq] / after end of life | -0.445 kg |
| • global warming potential [CO ₂ eq] / total | 75.078 kg |
| Environment | General Product Approval |

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|---|---|---|
| General Product Approval | Test Certificates | Maritime application |
|    | Type Test Certificates/Test Report Special Test Certificate |  |
| Maritime application | | other |
|    |   | Miscellaneous |
| other | Railway | |
|  | Confirmation  | Confirmation Special Test Certificate |

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>

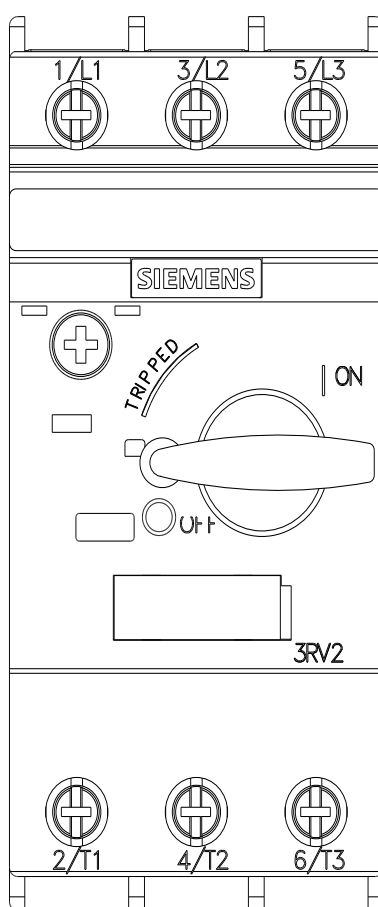
Industry Mall (Online ordering system)
<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2021-4EA10-0BA0>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-4EA10-0BA0>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2021-4EA10-0BA0&lang=en

Cax online generator
<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2021-4EA10-0BA0>

Characteristic curves
https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>





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