



CONTACTOR, AC-3, 11KW/400V, 1NO+1NC, DC 24V, 3-POLE, SZ S0 SCREW TERMINAL

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| product brand name | SIRIUS |
| Product designation | 3RT2 contactor |
| General technical data: | |
| Product expansion function module for communication | No |
| Insulation voltage | |
| • Rated value | 690 V |
| maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1 | 400 V |
| Degree of pollution | 3 |
| Shock resistance | |
| • at rectangular impulse | |
| — for DC | 10g / 5 ms, 7,5g / 10 ms |
| • with sine pulse | |
| — for DC | 15g / 5 ms, 10g / 10 ms |
| Surge voltage resistance Rated value | 6 kV |
| Mechanical service life (switching cycles) | |
| • of the contactor typical | 10 000 000 |
| • of the contactor with added electronics-compatible auxiliary switch block typical | 5 000 000 |
| • of the contactor with added auxiliary switch block typical | 10 000 000 |
| Thermal short-time current restricted to 10 s | 200 A |
| Protection class IP | |
| • on the front | IP20 |

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| <ul style="list-style-type: none"> • of the terminal | IP20 |
| Equipment marking | |
| <ul style="list-style-type: none"> • acc. to DIN EN 61346-2 | Q |
| <ul style="list-style-type: none"> • acc. to DIN EN 81346-2 | Q |
| Main circuit: | |
| Number of poles for main current circuit | 3 |
| Number of NC contacts for main contacts | 0 |
| Number of NO contacts for main contacts | 3 |
| Operating voltage | |
| <ul style="list-style-type: none"> • at AC-3 Rated value maximum | 690 V |
| Operating current | |
| <ul style="list-style-type: none"> • at AC-1 <ul style="list-style-type: none"> — at 400 V at ambient temperature 40 °C Rated value — up to 690 V at ambient temperature 40 °C Rated value — up to 690 V at ambient temperature 60 °C Rated value • at AC-2 at 400 V Rated value • at AC-3 <ul style="list-style-type: none"> — at 400 V Rated value — at 500 V Rated value — at 690 V Rated value • at AC-4 at 400 V Rated value | 40 A 40 A 35 A 25 A 25 A 18 A 13 A 15.5 A |
| Operating current with 1 current path | |
| <ul style="list-style-type: none"> • at DC-1 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value — at 220 V Rated value — at 440 V Rated value — at 600 V Rated value • at DC-3 at DC-5 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value — at 220 V Rated value — at 440 V Rated value — at 600 V Rated value | 35 A 4.5 A 1 A 0.4 A 0.25 A 20 A 2.5 A 1 A 0.09 A 0.06 A |
| Operating current with 2 current paths in series | |
| <ul style="list-style-type: none"> • at DC-1 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value — at 220 V Rated value | 35 A 35 A 5 A |

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| — at 440 V Rated value | 1 A |
| — at 600 V Rated value | 0.8 A |
| • at DC-3 at DC-5 | |
| — at 110 V Rated value | 15 A |
| — at 220 V Rated value | 3 A |
| — at 24 V Rated value | 35 A |
| — at 440 V Rated value | 0.27 A |
| — at 600 V Rated value | 0.16 A |
| Operating current with 3 current paths in series | |
| • at DC-1 | |
| — at 24 V Rated value | 35 A |
| — at 110 V Rated value | 35 A |
| — at 220 V Rated value | 35 A |
| — at 440 V Rated value | 2.9 A |
| — at 600 V Rated value | 1.4 A |
| • at DC-3 at DC-5 | |
| — at 110 V Rated value | 35 A |
| — at 220 V Rated value | 10 A |
| — at 24 V Rated value | 35 A |
| — at 440 V Rated value | 0.6 A |
| — at 600 V Rated value | 0.6 A |
| Operating power | |
| • at AC-1 | |
| — at 230 V at 60 °C Rated value | 13.3 kW |
| — at 400 V at 60 °C Rated value | 23 kW |
| — at 690 V at 60 °C Rated value | 40 kW |
| Operating power for ≥ 200000 operating cycles at AC-4 | |
| • at 400 V Rated value | 4.4 kW |
| • at 690 V Rated value | 7.7 kW |
| Active power loss at AC-3 at 400 V for rated value of the operating current per conductor | 1.6 W |
| Operating frequency | |
| • at AC-1 maximum | 1 000 1/h |
| • at AC-2 maximum | 750 1/h |
| • at AC-3 maximum | 750 1/h |
| • at AC-4 maximum | 250 1/h |
| No-load switching frequency | |
| • with AC | 5 000 1/h |
| • for DC | 1 500 1/h |

Control circuit/ Control:

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| Type of voltage of the control supply voltage | DC |
| Control supply voltage for DC | |
| • Rated value | 24 V |
| Operating range factor control supply voltage rated value of the magnet coil for DC | 0.8 ... 1.1 |
| Closing power of the magnet coil for DC | 5.9 W |
| Holding power of the magnet coil for DC | 5.9 W |
| Closing delay | |
| • for DC | 50 ... 170 ms |
| Opening delay | |
| • for DC | 15 ... 17.5 ms |
| Arcing time | 10 ... 10 ms |
| Residual current of the electronics for control with signal <0> | |
| • with AC at 230 V maximum permissible | 7 mA |
| • for DC at 24 V maximum permissible | 16 mA |

Auxiliary circuit:

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| Number of NC contacts | |
| • for auxiliary contacts | |
| — instantaneous contact | 1 |
| Number of NO contacts | |
| • for auxiliary contacts | |
| — instantaneous contact | 1 |
| Product expansion Auxiliary switch | Yes |
| Operating current at AC-12 maximum | 10 A |
| Operating current at AC-15 | |
| • at 230 V Rated value | 10 A |
| • at 400 V Rated value | 3 A |
| • at 690 V Rated value | 1 A |
| Operating current at DC-12 | |
| • at 60 V Rated value | 6 A |
| • at 110 V Rated value | 3 A |
| • at 125 V Rated value | 2 A |
| • at 220 V Rated value | 1 A |
| • at 600 V Rated value | 0.15 A |
| Operating current at DC-13 | |
| • at 24 V Rated value | 10 A |
| • at 60 V Rated value | 2 A |
| • at 110 V Rated value | 1 A |
| • at 125 V Rated value | 0.3 A |
| • at 220 V Rated value | 0.3 A |
| • at 600 V Rated value | 0.3 A |

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| Contact reliability of the auxiliary contacts | 1 faulty switching per 100 million (17 V, 1 mA) |
| UL/CSA ratings: | |
| Full-load current (FLA) for three-phase AC motor | |
| <ul style="list-style-type: none"> • at 480 V Rated value • at 600 V Rated value | <p>21 A</p> <p>22 A</p> |
| yielded mechanical performance [hp] | |
| <ul style="list-style-type: none"> • for single-phase AC motor <ul style="list-style-type: none"> — at 110/120 V Rated value — at 230 V Rated value • for three-phase AC motor <ul style="list-style-type: none"> — at 200/208 V Rated value — at 220/230 V Rated value — at 460/480 V Rated value — at 575/600 V Rated value | <p>2 hp</p> <p>3 hp</p> <p>5 hp</p> <p>7.5 hp</p> <p>15 hp</p> <p>20 hp</p> |
| Contact rating of the auxiliary contacts acc. to UL | A600 / Q600 |
| Short-circuit: | |
| Design of the fuse link | |
| <ul style="list-style-type: none"> • for short-circuit protection of the main circuit <ul style="list-style-type: none"> — with type of assignment 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required | <p>gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 100 A</p> <p>gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A</p> <p>fuse gL/gG: 10 A</p> |
| Installation/ mounting/ dimensions: | |
| mounting position | +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface |
| Mounting type | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022 |
| <ul style="list-style-type: none"> • Side-by-side mounting | Yes |
| Height | 85 mm |
| Width | 45 mm |
| Depth | 107 mm |
| Required spacing | |
| <ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards | <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> |

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| — Backwards | 0 mm |
| — upwards | 0 mm |
| — at the side | 6 mm |
| — downwards | 0 mm |
| • for live parts | |
| — forwards | 0 mm |
| — Backwards | 0 mm |
| — upwards | 0 mm |
| — downwards | 0 mm |
| — at the side | 6 mm |

Connections/ Terminals:

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|--|---|
| Type of electrical connection | |
| • for main current circuit | screw-type terminals |
| • for auxiliary and control current circuit | screw-type terminals |
| Type of connectable conductor cross-section | |
| • for main contacts | |
| — single or multi-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 |
| • for AWG conductors for main contacts | 2x (16 ... 12), 2x (14 ... 8) |
| • for auxiliary contacts | |
| — single or multi-stranded | 2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²) |
| — finely stranded with core end processing | 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) |
| • for AWG conductors for auxiliary contacts | 2x (20 ... 16), 2x (18 ... 14) |

Safety related data:

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|---|-------------|
| B10 value with high demand rate acc. to SN 31920 | 1 000 000 |
| Proportion of dangerous failures | |
| • with low demand rate acc. to SN 31920 | 40 % |
| • with high demand rate acc. to SN 31920 | 73 % |
| Product function | |
| • Mirror contact acc. to IEC 60947-4-1 | Yes |
| T1 value for proof test interval or service life acc. to IEC 61508 | 20 y |
| Protection against electrical shock | finger-safe |

Mechanical data:

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| Size of contactor | S0 |
|--------------------------|----|

Ambient conditions:

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| Installation altitude at height above sea level maximum | 2 000 m |
| Ambient temperature | |
| • during operation | -25 ... +60 °C |

• during storage

-55 ... +80 °C

Certificates/ approvals:

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|---------------------------------|------------|--|
| General Product Approval | EMC | Functional Safety/Safety of Machinery |
|---------------------------------|------------|--|



[Type Examination](#)

| | | |
|----------------------------------|--------------------------|--------------------------|
| Declaration of Conformity | Test Certificates | Shipping Approval |
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EG-Konf.

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

[other](#)



ABS



BUREAU VERITAS

Shipping Approval



DNV



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RINA



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VDE

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<http://www.siemens.com/industrymall>

Cax online generator

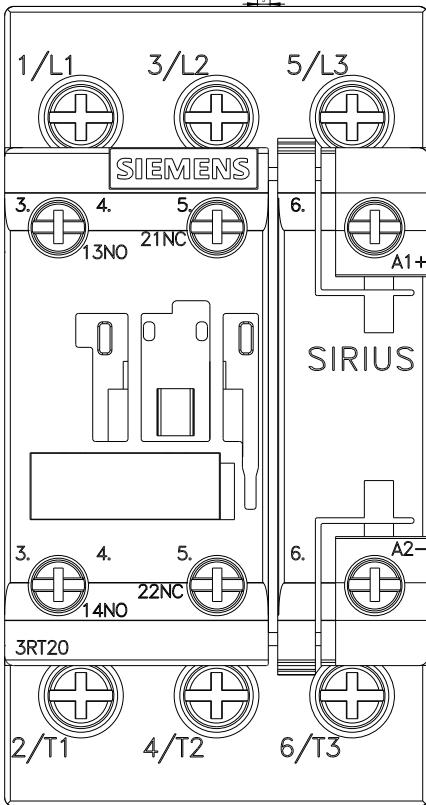
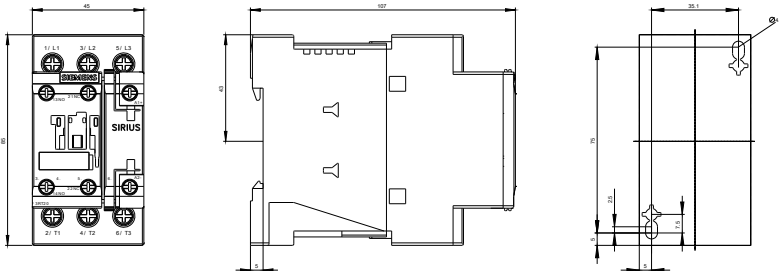
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT20261BB40>

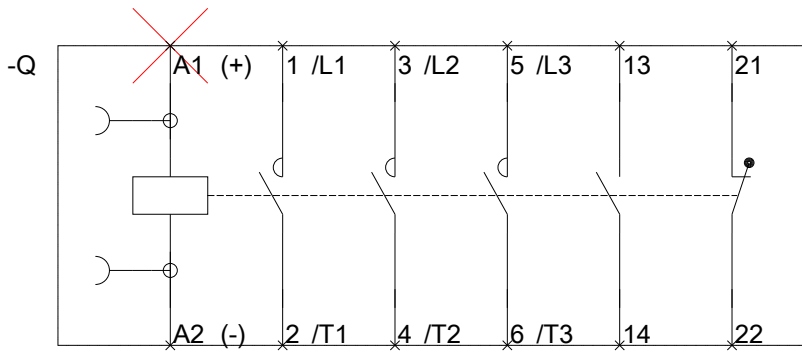
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RT20261BB40>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT20261BB40&lang=en





last modified:

14.05.2015