SIEMENS

Product data sheet

3RT2025-2AG24



CONTACTOR, AC-3, 7.5KW/400V, 2NO+2NC, AC110V 50/60HZ, 3-POLE, SZ S0 SPRING-LOADED TERMINAL REMOVABLE AUX. SWITCH

| General technical data: | | | |
|--|----|----------------------------|--|
| Product brand name | | SIRIUS | |
| Size of the contactor | | S0 | |
| Product extension / auxiliary switch | | No | |
| Protection class IP / on the front | | IP20 | |
| Protection against electrical shock | | finger-safe | |
| Degree of pollution | | 3 | |
| Installation altitude / at a height over sea level / maximum | m | 2,000 | |
| Ambient temperature / during storage | °C | -55 80 | |
| Ambient temperature / during operating | °C | -25 60 | |
| Shock resistance | | | |
| • at rectangular impulse | | | |
| • at AC | | 7,5g / 5 ms, 4,7g / 10 ms | |
| • at sine pulse | | | |
| • at AC | | 11,8g / 5 ms, 7,4g / 10 ms | |
| Impulse voltage resistance / rated value | kV | 6 | |
| Insulation voltage / rated value | V | 690 | |
| Mechanical operating cycles as operating time | | | |
| of the contactor / typical | | 10,000,000 | |
| of the contactor with added auxiliary switch block / typical | | 10,000,000 | |

• of the contactor with added electronics-compatible auxiliary switch block / typical

5,000,000

| Main circuit: | | | |
|--|-----|-------|--|
| Number of NC contacts / for main contacts | | 0 | |
| Number of NO contacts / for main contacts | | 3 | |
| Operating current | | | |
| • at AC-1 / at 400 V | | | |
| • at 40 °C ambient temperature / rated value | А | 40 | |
| • at 60 °C ambient temperature / rated value | А | 35 | |
| • at AC-2 / at 400 V / rated value | А | 17 | |
| • at AC-3 / at 400 V / rated value | А | 17 | |
| • at AC-4 / at 400 V / rated value | А | 15.5 | |
| Operating current | | | |
| • with 1 current path / at DC-1 | | | |
| • at 24 V / rated value | А | 35 | |
| • at 110 V / rated value | А | 4.5 | |
| • with 2 current paths in series / at DC-1 | | | |
| • at 24 V / rated value | А | 35 | |
| • at 110 V / rated value | А | 35 | |
| • with 3 current paths in series / at DC-1 | | | |
| • at 24 V / rated value | А | 35 | |
| • at 110 V / rated value | А | 35 | |
| • with 1 current path / at DC-3 / at DC-5 | | | |
| • at 24 V / rated value | А | 20 | |
| • at 110 V / rated value | А | 2.5 | |
| • with 2 current paths in series / at DC-3 / at DC-5 | | | |
| • at 24 V / rated value | А | 35 | |
| • at 110 V / rated value | А | 15 | |
| • with 3 current paths in series / at DC-3 / at DC-5 | | | |
| • at 24 V / rated value | А | 35 | |
| • at 110 V / rated value | А | 35 | |
| Service power | | | |
| • at AC-2 / at 400 V / rated value | kW | 7.5 | |
| • at AC-3 / at 400 V / rated value | kW | 7.5 | |
| • at AC-4 / at 400 V / rated value | kW | 7.5 | |
| Active power loss / per conductor / typical | W | 0.9 | |
| Off-load operating frequency | | | |
| • at AC | 1/h | 5,000 | |
| • at DC | 1/h | 1,500 | |

| Frequency of operation | | |
|--|-----|-------|
| • at AC-1 / according to IEC 60947-6-2 / maximum | 1/h | 1,000 |
| • at AC-2 / according to IEC 60947-6-2 / maximum | 1/h | 1,000 |
| • at AC-3 / according to IEC 60947-6-2 / maximum | 1/h | 1,000 |
| • at AC-4 / according to IEC 60947-6-2 / maximum | 1/h | 300 |

| Control circuit: | | |
|--|-----|----------|
| Type of voltage / of the controlled supply voltage | | AC |
| Control supply voltage / 1 | | |
| • at 50 Hz / for AC / rated value | V | 110 |
| • at 60 Hz / for AC / rated value | V | 110 |
| Working range factor supply voltage rated value / of the magnet coil | | |
| • at 50 Hz / for AC | | 0.8 1.1 |
| • at 60 Hz / for AC | | 0.85 1.1 |
| Apparent pull-in power / of the solenoid / for AC | V·A | 68 |
| Apparent holding power / of the solenoid / for AC | V·A | 7.9 |
| Inductive power factor | | |
| with the pull-in power of the coil | | 0.82 |
| with the pull-in power of the coil | | 0.25 |
| Closing delay | | |
| • at AC | ms | 9 38 |
| Opening delay | | |
| • at AC | ms | 4 16 |
| Arcing time | ms | 10 10 |

Auxiliary circuit:

| Contact reliability / of the auxiliary contacts | | 1 faulty switching per 100 million (17 V, 1 mA) |
|--|---|---|
| Number of NC contacts / for auxiliary contacts / instantaneous switching | | 2 |
| Number of NO contacts / for auxiliary contacts / instantaneous switching | | 2 |
| Operating current / of the auxiliary contacts | | |
| • at AC-12 / maximum | А | 10 |
| • at AC-15 | | |
| • at 230 V | А | 6 |
| • at 400 V | А | 3 |
| • at DC-12 | | |
| • at 48 V | А | 6 |
| • at 60 V | А | 6 |
| • at 110 V | А | 3 |

| • at 220 V | А | 1 |
|------------|---|-----|
| • at DC-13 | | |
| • at 24 V | А | 6 |
| • at 48 V | А | 2 |
| • at 60 V | А | 2 |
| • at 110 V | А | 1 |
| • at 220 V | А | 0.3 |

| Short-circuit: | | | | |
|---|--|---|--|--|
| Design of the fuse link | | | | |
| for short-circuit protection of the auxiliary switch / required | | fuse gL/gG: 10 A | | |
| for short-circuit protection of the main circuit | | | | |
| with type of assignment 1 / required | | gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 63 A | | |
| at type of coordination 2 / required | | gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25A | | |

| Installation/mounting/dimensions: | | | |
|---|----|--|--|
| Built in orientation | | vertical | |
| Type of mounting | | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022 | |
| Type of fixing/fixation / series installation | | Yes | |
| Width | mm | 45 | |
| Height | mm | 102 | |
| Depth | mm | 144 | |
| Distance, to be maintained, to the ranks assembly / sidewards | mm | 0 | |
| Distance, to be maintained, to earthed part / sidewards | mm | 6 | |

Connections:

| Design of the electrical connection | |
|---|-------------------------|
| for main current circuit | spring-loaded terminals |
| for auxiliary and control current circuit | spring-loaded terminals |
| Type of the connectable conductor cross-section | |
| for main contacts | |
| • solid | 2x (1 10 mm²) |
| stranded | 2x (1 10 mm²) |
| finely stranded | |
| with conductor end processing | 2x (1 6 mm2) |
| without conductor final cutting | 2x (1 6 mm2) |
| for AWG conductors / for main contacts | 1x (18 8) |
| for auxiliary contacts | |
| • solid | 2x (0.5 2.5 mm2) |

| finely stranded | | | | |
|---|-----------------------|----------------------------|-------------------|------|
| with conductor end processing | | | 2x (0.5 1.5 mm2) | |
| without conductor final cutting | | | 2 x (0.5 1.5 mm2) | |
| for AWG conductors / for auxiliary contacts | 3 | | 2x (20 14) | |
| Certificates/approvals: | | | | |
| General Product Approval | | | Test Certificates | |
| cqc CSA | ROSTEST | | Manufacturer | |
| Shipping Approval | | | | |
| ABS DNV | GL | Llovd's Register LRS | PRS | RINA |
| Shipping Approval other | | | | |
| RMRS Manufacturer | VDE | | | |
| UL/CSA ratings: | | | | |
| yielded mechanical performance (hp) | | | | |
| for single-phase squirrel cage motors | | | | |
| • at 110/120 V / rated value | | hp | 1 | |
| • at 230 V / rated value | | hp | 3 | |
| for three-phase squirrel cage motors | | | | |
| • at 200/208 V / rated value | | hp | 3 | |
| • at 220/230 V / rated value | | hp | 5 | |
| • at 460/480 V / rated value | | hp | 10 | |
| • at 575/600 V / rated value | | hp | 15 | |
| Operating current (FLA) / for three-phase so | quirrel cage motors | | | |
| • at 480 V / rated value | | А | 14 | |
| • at 600 V / rated value | | А | 17 | |
| Contact rating designation / for auxiliary co UL | ntacts / according to | | A600 / Q600 | |

| Safety:related Parameter: | | |
|--|---|-----------|
| B10 value / with high demand rate | | |
| according to SN 31920 | | 1,000,000 |
| T1 value / for proof test interval or service life | | |
| according to IEC 61508 | а | 20 |
| Proportion of dangerous failures | | |
| with low demand rate / according to SN 31920 | % | 40 |

| • with high demand rate / according to SN 31920 | % | 73 |
|---|-----|-----|
| Failure rate (FIT value) / with low demand rate | | |
| according to SN 31920 | FIT | 100 |
| Product function | | |
| • mirror contact to IEC 60947-4-1 | | Yes |
| positively driven operation to IEC 60947-5-1 | | No |

Further information:

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

http://www.siemens.com/industrial-controls/mall

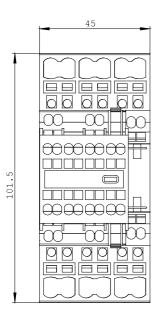
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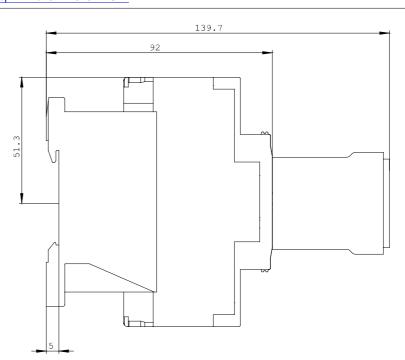
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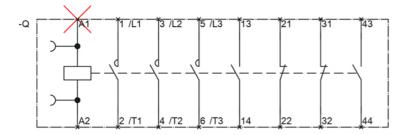
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RT2025-2AG24/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2025-2AG24







last change:

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