








Contactor AC 220 V 50/60 HZ AC3 7.5 kW 400 V AUX contacts 1 NO +1 NC 3-pole, size S0 screw terminal

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| product brand name | SIRIUS |
| product designation | Power contactor |
| product type designation | 3RT6 |
| General technical data | |
| size of contactor | S0 |
| product extension auxiliary switch | Yes |
| power loss [W] for rated value of the current | |
| • at AC in hot operating state per pole | 0.9 W |
| • without load current share typical | 1.97 W |
| insulation voltage rated value | 690 V |
| degree of pollution | 3 |
| surge voltage resistance rated value | 6 kV |
| maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 | 400 V |
| shock resistance at rectangular impulse | |
| • at AC | 7,5g / 5 ms, 4,7g / 10 ms |
| shock resistance with sine pulse | |
| • at AC | 11,8g / 5 ms, 7,4g / 10 ms |
| mechanical service life (operating cycles) | |
| • of contactor typical | 10 000 000 |
| • of the contactor with added auxiliary switch block typical | 10 000 000 |
| Substance Prohibitance (Date) | 05/01/2012 |
| Ambient conditions | |
| installation altitude at height above sea level maximum | 2 000 m |
| ambient temperature | |
| • during operation | -25 ... +60 °C |
| • during storage | -55 ... +80 °C |
| Main circuit | |
| number of poles for main current circuit | 3 |
| number of NO contacts for main contacts | 3 |
| number of NC contacts for main contacts | 0 |
| operating voltage | |
| • at AC-3 rated value maximum | 690 V |
| • at AC-3e rated value maximum | 690 V |
| operational current | |
| • at AC-1 up to 690 V | |
| — at ambient temperature 40 °C rated value | 40 A |
| — at ambient temperature 60 °C rated value | 35 A |
| • at AC-3 | |
| — at 400 V rated value | 17 A |

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| <ul style="list-style-type: none"> — at 690 V rated value ● at AC-3e <ul style="list-style-type: none"> — at 400 V rated value — at 690 V rated value | <p>13 A</p> <p>17 A</p> <p>13 A</p> |
| connectable conductor cross-section in main circuit at AC-1 | |
| <ul style="list-style-type: none"> ● at 60 °C minimum permissible ● at 40 °C minimum permissible | <p>10 mm²</p> <p>10 mm²</p> |
| operational current for approx. 200000 operating cycles at AC-4 | |
| <ul style="list-style-type: none"> ● at 400 V rated value ● at 690 V rated value | <p>7.7 A</p> <p>7.7 A</p> |
| operating power | |
| <ul style="list-style-type: none"> ● at AC-1 <ul style="list-style-type: none"> — at 230 V rated value — at 230 V at 60 °C rated value — at 400 V at 60 °C rated value — at 690 V at 60 °C rated value ● at AC-3 <ul style="list-style-type: none"> — at 230 V rated value — at 400 V rated value — at 690 V rated value ● at AC-3e <ul style="list-style-type: none"> — at 400 V rated value — at 690 V rated value | <p>13.3 kW</p> <p>13.3 kW</p> <p>23 kW</p> <p>40 kW</p> <p>4 kW</p> <p>7.5 kW</p> <p>11 kW</p> <p>7.5 kW</p> <p>11 kW</p> |
| operating power for approx. 200000 operating cycles at AC-4 | |
| <ul style="list-style-type: none"> ● at 400 V rated value ● at 690 V rated value | <p>3.5 kW</p> <p>6 kW</p> |
| no-load switching frequency | |
| <ul style="list-style-type: none"> ● at AC | 5 000 1/h |
| operating frequency | |
| <ul style="list-style-type: none"> ● at AC-1 maximum ● at AC-3 maximum ● at AC-3e maximum ● at AC-4 maximum | <p>1 000 1/h</p> <p>1 000 1/h</p> <p>1 000 1/h</p> <p>300 1/h</p> |
| Control circuit/ Control | |
| type of voltage of the control supply voltage | AC |
| control supply voltage at AC | |
| <ul style="list-style-type: none"> ● at 50 Hz rated value ● at 60 Hz rated value | <p>220 V</p> <p>220 V</p> |
| operating range factor control supply voltage rated value of magnet coil at AC | |
| <ul style="list-style-type: none"> ● at 50 Hz ● at 60 Hz | <p>0.8 ... 1.1</p> <p>0.85 ... 1.1</p> |
| apparent pick-up power of magnet coil at AC | |
| <ul style="list-style-type: none"> ● at 50 Hz ● at 60 Hz | <p>68 VA</p> <p>67 VA</p> |
| inductive power factor with closing power of the coil | |
| <ul style="list-style-type: none"> ● at 50 Hz ● at 60 Hz | <p>0.72</p> <p>0.74</p> |
| apparent holding power of magnet coil at AC | |
| <ul style="list-style-type: none"> ● at 50 Hz ● at 60 Hz | <p>7.9 VA</p> <p>6.5 VA</p> |
| inductive power factor with the holding power of the coil | |
| <ul style="list-style-type: none"> ● at 50 Hz ● at 60 Hz | <p>0.25</p> <p>0.28</p> |
| Auxiliary circuit | |
| number of NC contacts for auxiliary contacts instantaneous contact | 1 |
| number of NO contacts for auxiliary contacts instantaneous contact | 1 |

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| operational current at AC-12 maximum | 10 A |
| operational 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 |
| operational current at DC-12 | |
| • at 24 V rated value | 6 A |
| • at 110 V rated value | 3 A |
| • at 220 V rated value | 1 A |
| operational current at DC-13 | |
| • at 24 V rated value | 6 A |
| • at 110 V rated value | 1 A |
| • at 220 V rated value | 0.3 A |
| contact reliability of auxiliary contacts | 1 faulty switching per 100 million (17 V, 1 mA) |
| UL/CSA ratings | |
| yielded mechanical performance [hp] for 3-phase AC motor at 460/480 V rated value | 10 hp |
| Short-circuit protection | |
| design of the fuse link | |
| • for short-circuit protection of the main circuit | |
| — with type of coordination 1 required | gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 63 A |
| — with type of assignment 2 required | gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25 A |
| • for short-circuit protection of the auxiliary switch required | fuse gL/gG: 10 A |
| 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 |
| fastening method | screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 50022 |
| • side-by-side mounting | Yes |
| height | 85 mm |
| width | 45 mm |
| depth | 97 mm |
| required spacing with side-by-side mounting at the side | 0 mm |
| Connections/ Terminals | |
| type of electrical connection | |
| • for main current circuit | screw-type terminals |
| • for auxiliary and control circuit | screw-type terminals |
| 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 |
| • for AWG cables for main contacts | 2x (16 ... 12), 2x (14 ... 8) |
| type of connectable conductor cross-sections | |
| • for auxiliary contacts | |
| — solid or 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 cables for auxiliary contacts | 2x (20 ... 16), 2x (18 ... 14) |
| Safety related data | |
| product function mirror contact according to IEC 60947-4-1 | Yes |
| 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 |
| Certificates/ approvals | |
| General Product Approval | EMC |
|   Confirmation    | |
| Declaration of Con- formity | other |



Confirmation

Further information

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/products?pnid=16027&lc=en-CN>

