



capacitor contactor, AC-6b 100 kVAr, / 400 V, 3-pole, 83-155 V AC/DC, 50/60 Hz, with integrated varistor, auxiliary contacts: 2 NC, screw terminal, size: S3

| | |
|--|---|
| product brand name | SIRIUS |
| product designation | capacitor contactors |
| product type designation | 3RT26 |
| General technical data | |
| size of contactor | S3 |
| product extension auxiliary switch | Yes |
| power loss [W] for rated value of the current | |
| • at AC in hot operating state per pole | 6.5 W |
| • without load current share typical | 3 W |
| type of calculation of power loss depending on pole | quadratic |
| insulation voltage | |
| • of main circuit with degree of pollution 3 rated value | 1 000 V |
| • of auxiliary circuit with degree of pollution 3 rated value | 690 V |
| surge voltage resistance | |
| • of main circuit rated value | 8 kV |
| • of auxiliary circuit 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 | 10.3g / 5 ms, 6. g / 10 ms |
| • at DC | 6.7 g / 5 ms, 4g / 10 ms |
| shock resistance with sine pulse | |
| • at AC | 16.3g / 5 ms, 10.g / 10 ms |
| • at DC | 10.6 g / 5 ms, 6.3 g / 10 ms |
| mechanical service life (operating cycles) | |
| • of the contactor with added auxiliary switch block typical | 3 000 000 |
| electrical endurance (operating cycles) | 120 000 |
| reference code according to IEC 81346-2 | Q |
| Substance Prohibitance (Date) | 06/26/2017 |
| SVHC substance name | Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 |
| Weight | 1.9 kg |
| 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 |
| relative humidity minimum | 10 % |
| relative humidity at 55 °C according to IEC 60068-2-30 maximum | 95 % |

| Environmental footprint | |
|---|-----------------|
| Environmental Product Declaration(EPD) | Yes |
| global warming potential [CO2 eq] total | 106 kg |
| global warming potential [CO2 eq] during manufacturing | 2.47 kg |
| global warming potential [CO2 eq] during operation | 104 kg |
| global warming potential [CO2 eq] after end of life | -0.226 kg |
| 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 |
| operational current at AC-6b at 690 V at ambient temperature 60 °C rated value | 144 A |
| operating reactive power at AC-6b | |
| • at 230 V at 50/60 Hz at ambient temperature 60 °C rated value | 19 ... 57 kvar |
| • at 400 V at 50/60 Hz at ambient temperature 60 °C rated value | 33 ... 100 kvar |
| • at 500 V at 50/60 Hz at ambient temperature 60 °C rated value | 41 ... 125 kvar |
| • at 690 V at 50/60 Hz at ambient temperature 60 °C rated value | 57 ... 172 kvar |
| no-load switching frequency | |
| • at AC | 500 1/h |
| • at DC | 500 1/h |
| operating frequency at AC-6b | |
| • at 230 V maximum | 150 1/h |
| • at 240 V maximum | 150 1/h |
| • at 400 V maximum | 60 1/h |
| • at 480 V maximum | 40 1/h |
| • at 500 V maximum | 40 1/h |
| • at 600 V maximum | 20 1/h |
| • at 690 V maximum | 20 1/h |
| Control circuit/ Control | |
| type of voltage | AC/DC |
| type of voltage of the control supply voltage | AC/DC |
| control supply voltage at AC | |
| • at 50 Hz rated value | 83 ... 155 V |
| • at 60 Hz rated value | 83 ... 155 V |
| control supply voltage frequency | |
| • 1 rated value | 50 Hz |
| • 2 rated value | 60 Hz |
| control supply voltage at DC rated value | 83 ... 155 V |
| operating range factor control supply voltage rated value of magnet coil at DC | |
| • initial value | 0.8 |
| • full-scale value | 1.1 |
| operating range factor control supply voltage rated value of magnet coil at AC | |
| • at 50 Hz | 0.8 ... 1.1 |
| • at 60 Hz | 0.8 ... 1.1 |
| inrush current peak | 1.5 A |
| duration of inrush current peak | 50 µs |
| locked-rotor current mean value | 1.1 A |
| locked-rotor current peak | 2.7 A |
| duration of locked-rotor current | 150 ms |
| holding current mean value | 15 mA |
| apparent pick-up power of magnet coil at AC | 163 VA |
| apparent holding power of magnet coil at AC | 3.1 VA |
| closing power of magnet coil at DC | 76 W |
| holding power of magnet coil at DC | 1.8 W |
| closing delay | |
| • at AC | 50 ... 70 ms |
| • at DC | 50 ... 70 ms |

| | |
|---|--|
| opening delay | |
| • at AC | 38 ... 57 ms |
| • at DC | 38 ... 57 ms |
| arcing time | 10 ... 20 ms |
| control version of the switch operating mechanism | Standard A1 - A2 |
| Auxiliary circuit | |
| number of NC contacts for auxiliary contacts | 2 |
| • attachable | 1 |
| • instantaneous contact | 2 |
| number of NO contacts for auxiliary contacts | 0 |
| • attachable | 1 |
| • instantaneous contact | 0 |
| operational current of auxiliary contacts at AC-12 maximum | 10 A |
| operational current of auxiliary contacts at AC-15 | |
| • at 230 V | 6 A |
| • at 400 V | 3 A |
| • at 690 V | 0 A |
| operational current of auxiliary contacts at DC-13 | |
| • at 24 V | 6 A |
| • at 60 V | 2 A |
| • at 110 V | 1 A |
| • at 125 V | 0.9 A |
| • at 220 V | 0.3 A |
| contact reliability of auxiliary contacts | 0.00000001 |
| UL/CSA ratings | |
| contact rating of auxiliary contacts according to UL | A600 / Q600 |
| Short-circuit protection | |
| design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V | C characteristic: 10 A; 0.4 kA |
| design of the fuse link | |
| • for short-circuit protection of the main circuit with type of coordination 1 required | gG: 250 A (690 V, 50 kA) |
| 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 |
| height | 140 mm |
| width | 80 mm |
| depth | 152 mm |
| required spacing | |
| • with side-by-side mounting at the side | 10 mm |
| • for grounded parts at the side | 10 mm |
| Connections/ Terminals | |
| type of electrical connection | |
| • for main current circuit | screw-type terminals |
| • for auxiliary and control circuit | screw-type terminals |
| • at contactor for auxiliary contacts | Screw-type terminals |
| • of magnet coil | Screw-type terminals |
| type of connectable conductor cross-sections for main contacts | |
| • solid | 2x (10 ... 16 mm ²) |
| • stranded | 2x (10 ... 70 mm ²), 1x (10 ... 70 mm ²) |
| • solid or stranded | 2x (10 ... 70 mm ²), 1x (10 ... 70 mm ²) |
| • finely stranded with core end processing | 2x (10 ... 50 mm ²) |
| type of connectable conductor cross-sections | |
| • for auxiliary contacts | |
| — solid | 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²), 2x 4 mm ² |
| — solid or stranded | 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²), 2x 4 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), 2x 12 |
| type of minimum connectable cross-sections for main contacts at AC-6b | |
| • at 40 °C | 1x 70 mm ² |

| | |
|---|--|
| • at 60 °C | 2x 50 mm ² |
| AWG number as coded connectable conductor cross section for main contacts | 8 |
| Safety related data | |
| product function | |
| • mirror contact according to IEC 60947-4-1 | No |
| • positively driven operation according to IEC 60947-5-1 | No |
| 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 |
| Approvals Certificates | |
| General Product Approval | |



KC



| EMV | Test Certificates | Maritime application | other | | |
|-----|--|----------------------|-------|--|------------------------------|
| | Type Test Certificates/Test Report | | | | Confirmation |

| Dangerous goods | Environment |
|---------------------------------------|---|
| Transport Information | Environmental Confirmations |

Further information

- Information on the packaging
<https://support.industry.siemens.com/cs/ww/en/view/109813875>
- 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=3RT2646-1NF35>
- Cax online generator
<http://support.automation.siemens.com/WWW/CAXorder/default.aspx?lang=en&mlfb=3RT2646-1NF35>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3RT2646-1NF35>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2646-1NF35&lang=en
- Characteristic: Tripping characteristics, I_t, Let-through current
<https://support.industry.siemens.com/cs/ww/en/ps/3RT2646-1NF35/char>
- Further characteristics (e.g. electrical endurance, switching frequency)
<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2646-1NF35&objecttype=14&gridview=view1>



