SIEMENS

## Data sheet 3RT2628-1AB05

capacitor contactor, AC-6b 33 kVAr, / 400 V, 3-pole, 24 V AC, 50 Hz, auxiliary contacts: 1 NO + 2 NC, screw terminal, size: S0

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| **product brand name** | SIRIUS |
| **product designation** | capacitor contactors |
| **product type designation** | 3RT26 |
| **General technical data** | |
| **size of contactor** | S0 |
| product extension auxiliary switch | No |
| **power loss [W] for rated value of the current** | |
| ● at AC in hot operating state per pole | 3.8 W |
| ● without load current share typical | 2.5 W |
| **type of calculation of power loss depending on pole** | quadratic |
| **insulation voltage** | |
| ● of main circuit with degree of pollution 3 rated value | 690 V |
| ● of auxiliary circuit with degree of pollution 3 rated value | 690 V |
| **surge voltage resistance** | |
| ● of main circuit rated value | 6 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 | 8,3g / 5 ms, 5,3g / 10 ms |
| **shock resistance with sine pulse** | |
| ● at AC | 13,5g / 5 ms, 8,3g / 10 ms |
| **mechanical service life (operating cycles)** | |
| ● of the contactor with added auxiliary switch block typical | 3 000 000 |
| **electrical endurance (operating cycles)** | 150 000 |
| **reference code according to IEC 81346-2** | Q |
| **Substance Prohibitance (Date)** | 05/01/2014 |
| **Weight** | 0.55 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 |

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| 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 | 47.6 A |
| **operating reactive power at AC-6b** | |
| ● at 230 V at 50/60 Hz at ambient temperature 60 °C rated value | 6 ... 19 kvar |
| ● at 400 V at 50/60 Hz at ambient temperature 60 °C rated value | 11 ... 33 kvar |
| ● at 500 V at 50/60 Hz at ambient temperature 60 °C rated value | 14 ... 41 kvar |
| ● at 690 V at 50/60 Hz at ambient temperature 60 °C rated value | 19 ... 57 kvar |
| **no-load switching frequency** | |
| ● at AC | 500 1/h |
| **operating frequency at AC-6b** | |
| ● at 230 V maximum | 100 1/h |
| ● at 240 V maximum | 100 1/h |
| ● at 400 V maximum | 100 1/h |
| ● at 480 V maximum | 70 1/h |
| ● at 500 V maximum | 65 1/h |
| ● at 600 V maximum | 45 1/h |
| ● at 690 V maximum | 36 1/h |
| **Control circuit/ Control** | |
| **type of voltage** | AC |
| **type of voltage of the control supply voltage** | AC |
| **control supply voltage at AC** | |
| ● at 50 Hz rated value | 24 V |
| **control supply voltage frequency** | |
| **● 1 rated value** | 50 Hz |
| **operating range factor control supply voltage rated value of magnet coil at AC** | |
| ● at 50 Hz | 0.8 ... 1.1 |
| **apparent pick-up power of magnet coil at AC** | 77 VA |
| **inductive power factor with closing power of the coil** | 0.82 |
| **apparent holding power of magnet coil at AC** | 9.8 VA |
| **inductive power factor with the holding power of the coil** | 0.25 |
| **closing delay** | |
| ● at AC | 8 ... 40 ms |
| **opening delay** | |
| ● at AC | 4 ... 16 ms |
| **arcing time** | 10 ... 10 ms |
| **control version of the switch operating mechanism** | Standard A1 - A2 |
| **residual current of the electronics for control with signal <0>** | |
| ● at AC at 230 V maximum permissible | 7 mA |
| **Auxiliary circuit** | |
| **number of NC contacts for auxiliary contacts** | 2 |
| ● attachable | 0 |
| ● instantaneous contact | 2 |
| **number of NO contacts for auxiliary contacts** | 1 |
| ● attachable | 0 |
| ● instantaneous contact | 1 |
| **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 | 1 A |
| **operational current of auxiliary contacts at DC-13** | |
| ● at 24 V | 6 A |

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| ● 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: 100 A (690 V, 50 kA) |
| ● for short-circuit protection of the auxiliary switch required | gG: 10 A (690 V, 1 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** | 150 mm |
| **width** | 45 mm |
| **depth** | 155 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 | 1x (2.5 ... 25 mm²) |
| ● stranded | 2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²) |
| ● solid or stranded | 1x (2,5 ... 25 mm²) |
| ● finely stranded with core end processing | 1x (2.5 ... 16 mm²) |
| **type of connectable conductor cross-sections** | |
| ● for auxiliary contacts | |
| — solid | 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm² |
| — solid or stranded | 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm² |
| — finely stranded with core end processing | 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) |
| ● 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 16 mm² |
| ● at 60 °C | 1x 25 mm² |
| **AWG number as coded connectable conductor cross section for main contacts** | 10 ... 4 |
| **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** | |

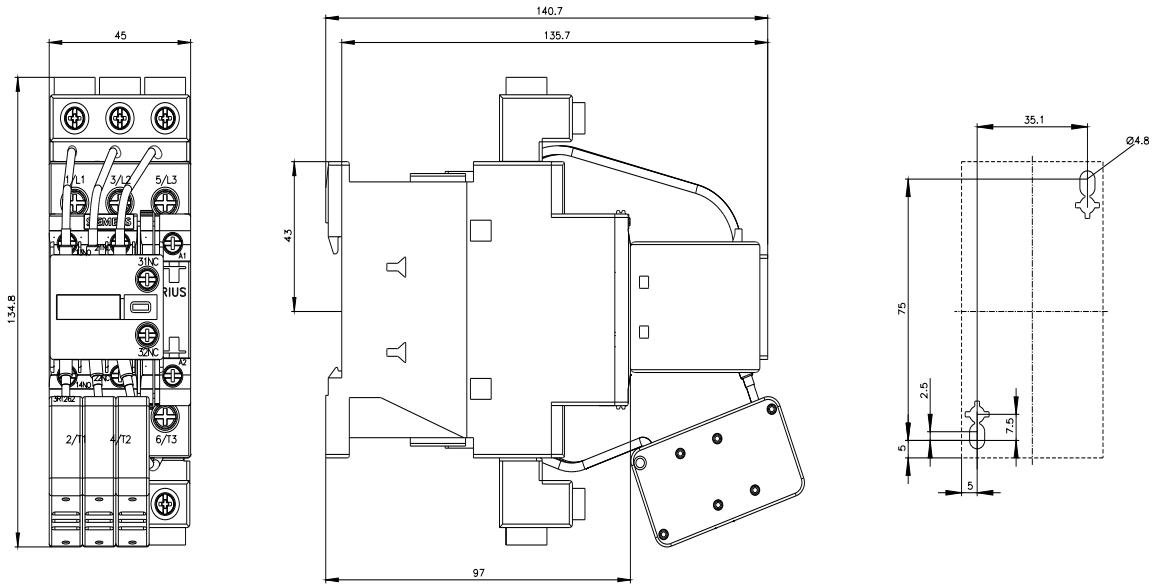
| General Product Approval | EMV |
|---|---|

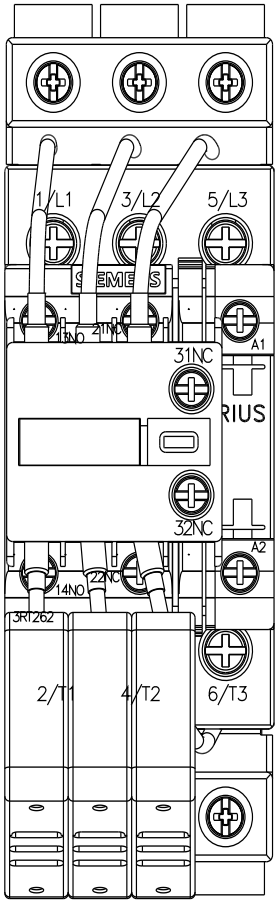
| Test Certificates | Maritime application | | | other | |
|---|---|---|---|---|---|
| Type Test Certificates/Test Report | | | | Miscellaneous | |

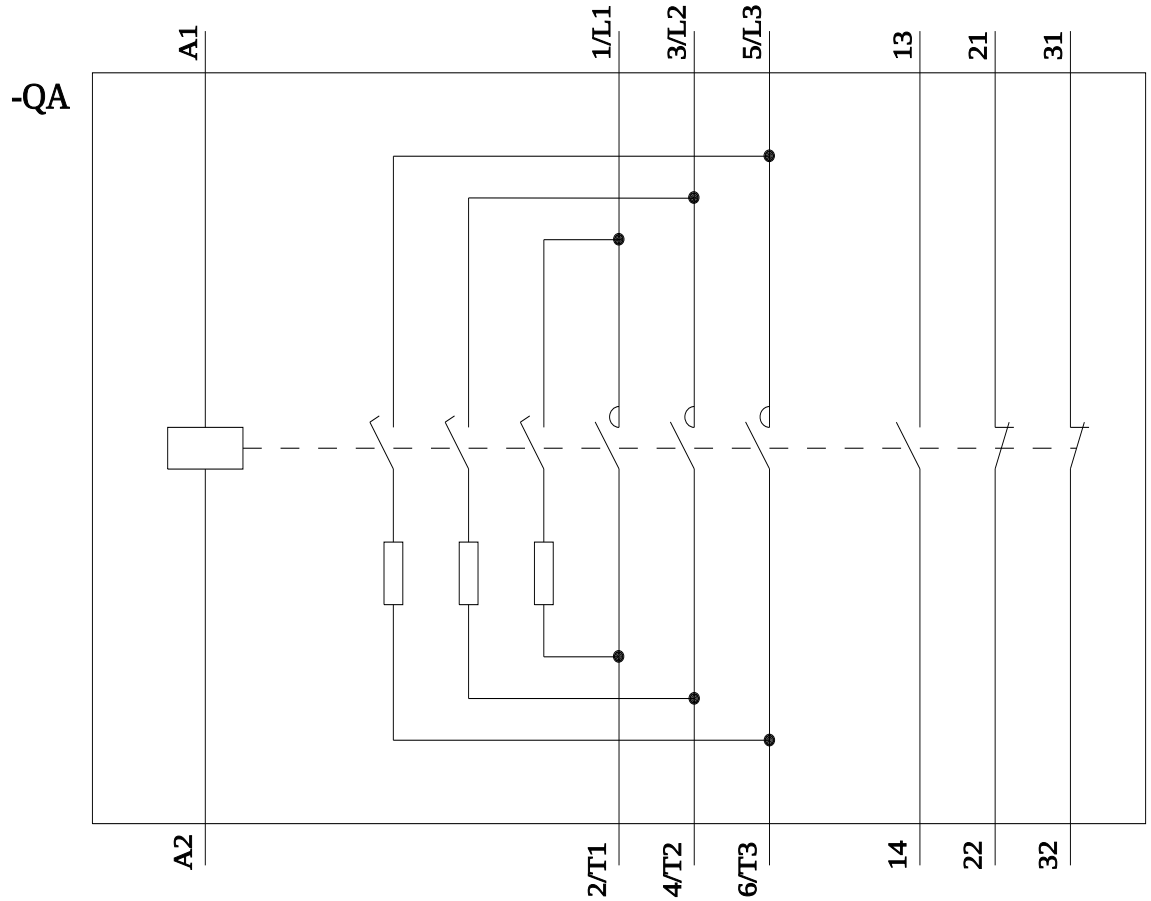
| other | Dangerous goods | Environment | |
|---|---|---|---|
| Confirmation | Transport Information | | Environmental Confirmations |

## 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=3RT2628-1AB05
**Cax online generator**
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2628-1AB05
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3RT2628-1AB05
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2628-1AB05&lang=en
**Characteristic: Tripping characteristics, I²t, Let-through current**
https://support.industry.siemens.com/cs/ww/en/ps/3RT2628-1AB05/char
**Further characteristics (e.g. electrical endurance, switching frequency)**
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2628-1AB05&objecttype=14&gridview=view1



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