

Contactor assembly for star-delta (wye-delta) start AC-3, 90 kW/400 V 110 V AC, 50/60 Hz Size S3, screw terminal electrical and mechanical interlock 3 NO+3 NC



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| product brand name | SIRIUS |
| product designation | Contactor assembly for star-delta (wye-delta) start |
| product type designation | 3RA24 |
| manufacturer's article number | |
| <ul style="list-style-type: none"> • 1 of the supplied contactor • 2 of the supplied contactor • 3 of the supplied contactor • of the supplied RS assembly kit • of the supplied function module for wye-delta circuits | 3RT2046-1AG20 3RT2046-1AG20 3RT2037-1AG20 3RA2943-2C 3RA2816-0EW20 |
| General technical data | |
| size of contactor | S3 |
| product extension auxiliary switch | No |
| shock resistance at rectangular impulse | |
| <ul style="list-style-type: none"> • at AC | 6.7 g / 5 ms, 4.0 g / 10 ms |
| shock resistance with sine pulse | |
| <ul style="list-style-type: none"> • at AC | 10.6 g / 5 ms, 6.3 g / 10 ms |
| mechanical service life (operating cycles) | |
| <ul style="list-style-type: none"> • of contactor typical • of the contactor with added auxiliary switch block typical | 10 000 000 10 000 000 |
| reference code according to IEC 81346-2 | Q |
| Substance Prohibitance (day/month/year) | 03/01/2017 |
| SVHC substance name | Lead CAS-No. 7439-92-1 Lead monoxide (lead oxide) CAS-No. 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one CAS-No. 71868-10-5 Melamine CAS-No. 108-78-1 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol CAS-No. 119-47-1 |
| Net Weight | 5.46 kg |
| Ambient conditions | |
| installation altitude at height above sea level maximum | 2 000 m |
| ambient temperature | |
| <ul style="list-style-type: none"> • during operation • during storage | -25 ... +60 °C -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 | |
| <ul style="list-style-type: none"> • at AC-3 rated value maximum | 690 V |
| operational current | |

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| <ul style="list-style-type: none"> at AC-3 <ul style="list-style-type: none"> at 400 V rated value | 160 A |
| operating power <ul style="list-style-type: none"> at AC-3 <ul style="list-style-type: none"> at 400 V rated value at 690 V rated value | 90 kW 132 kW |
| operating frequency <ul style="list-style-type: none"> at AC-3 maximum | 850 1/h |
| Control circuit/ Control | |
| type of voltage of the control supply voltage | AC |
| control supply voltage 1 at AC <ul style="list-style-type: none"> at 50 Hz rated value at 60 Hz rated value | 110 V 110 V |
| 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 | 0.8 ... 1.1 0.85 ... 1.1 |
| apparent pick-up power of magnet coil at AC <ul style="list-style-type: none"> at 50 Hz at 60 Hz | 698 VA 594 VA |
| inductive power factor with closing power of the coil <ul style="list-style-type: none"> at 50 Hz at 60 Hz | 0.62 0.55 |
| apparent holding power of magnet coil at AC <ul style="list-style-type: none"> at 50 Hz at 60 Hz | 52 VA 38 VA |
| inductive power factor with the holding power of the coil <ul style="list-style-type: none"> at 50 Hz at 60 Hz | 0.35 0.41 |
| Auxiliary circuit | |
| number of NC contacts for auxiliary contacts <ul style="list-style-type: none"> instantaneous contact | 3 |
| number of NO contacts for auxiliary contacts <ul style="list-style-type: none"> instantaneous contact | 3 |
| UL/CSA ratings | |
| contact rating of auxiliary contacts according to UL | A600 / Q600 |
| Short-circuit protection | |
| 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 coordination 1 required with type of coordination 2 required for short-circuit protection of the auxiliary switch required | gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A fuse 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 |
| height | 180 mm |
| width | 220 mm |
| depth | 244 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 backwards | 10 mm 0 mm 10 mm 10 mm 10 mm 10 mm 10 mm 0 mm |

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| — upwards | 10 mm |
| — at the side | 10 mm |
| — downwards | 10 mm |
| • for live parts | |
| — forwards | 10 mm |
| — backwards | 0 mm |
| — upwards | 10 mm |
| — downwards | 10 mm |
| — at the side | 10 mm |

Connections/ Terminals

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| type of electrical connection | |
| <ul style="list-style-type: none"> • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil | screw-type terminals screw-type terminals Screw-type terminals Screw-type terminals |
| type of connectable conductor cross-sections for main contacts | |
| <ul style="list-style-type: none"> • solid or stranded • finely stranded with core end processing • finely stranded without core end processing | 2x (2.5 ... 16 mm ²), 2x (10 ... 50 mm ²), 1x (10 ... 70 mm ²) 2x (2.5 ... 35 mm ²), 1x (2.5 ... 50 mm ²) 2x (10 ... 35 mm ²), 1x (10 ... 50 mm ²) |
| type of connectable conductor cross-sections | |
| <ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts | 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) 2x (20 ... 16), 2x (18 ... 14) |



Safety related data

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| product function suitable for safety function | Yes |
| 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 |

Communication/ Protocol

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| product function bus communication | No |
| protocol is supported AS-Interface protocol | No |
| product function control circuit interface with IO link | No |

Approvals Certificates

| Environment | General Product Approval | other |
|---|---|--|
| Environmental Conformations |  |  EG-Konf.  |
| | | Confirmation Confirmation |

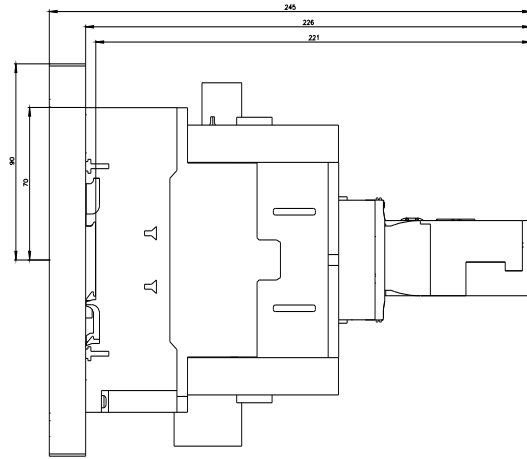
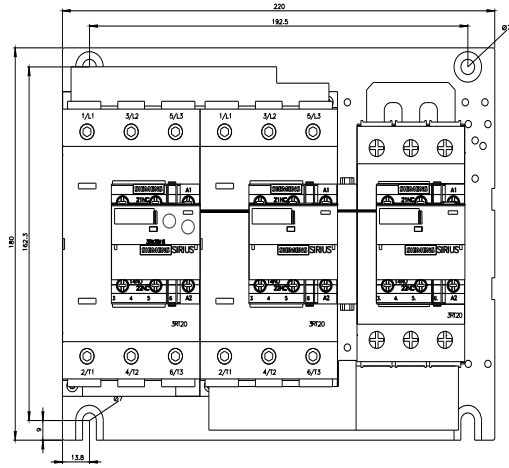
other



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=3RA2446-8XF32-1AG2>
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2446-8XF32-1AG2>
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2446-8XF32-1AG2&lang=en
Cax online generator

Characteristic curves





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8/8/2025