

Contactor assembly for star-delta (wye-delta) start AC-3, 7.5 kW/400 V, 220 V AC 50 Hz / 240 V, 60Hz, 3-pole Size S00, screw terminals electrical and mechanical interlock 3 NO integrated



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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 3RT2017-1AP61 • 2 of the supplied contactor 3RT2017-1AP61 • 3 of the supplied contactor 3RT2015-1AP61 • of the supplied RS assembly kit 3RA2913-2BB1 • of the supplied function module for wye-delta circuits 3RA2816-0EW20 |
| General technical data | |
| size of contactor | S00 |
| product extension auxiliary switch | No |
| shock resistance at rectangular impulse | <ul style="list-style-type: none"> • at AC 6,7g / 5 ms, 4,2g / 10 ms • at DC 6,7g / 5 ms, 4,2g / 10 ms |
| shock resistance with sine pulse | <ul style="list-style-type: none"> • at AC 10,5g / 5 ms, 6,6g / 10 ms • at DC 10,5g / 5 ms, 6,6g / 10 ms |
| mechanical service life (operating cycles) | <ul style="list-style-type: none"> • of contactor typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 |
| reference code according to IEC 81346-2 | Q |
| Substance Prohibition (Date) | 10/01/2009 |
| SVHC substance name | Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1 |
| Weight | 1.12 kg |
| Ambient conditions | |
| installation altitude at height above sea level maximum | 2 000 m |
| ambient temperature | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • at AC-3 rated value maximum 690 V |
| operational current | <ul style="list-style-type: none"> • at AC-3 — at 400 V rated value 16 A |

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| operating power | |
| <ul style="list-style-type: none"> ● at AC-3 <ul style="list-style-type: none"> — at 400 V rated value — at 500 V rated value — at 690 V rated value | <p>7.5 kW</p> <p>10.3 kW</p> <p>9.2 kW</p> |
| operating frequency | |
| <ul style="list-style-type: none"> ● at AC-3 maximum | 1 000 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 | <p>220 V</p> <p>240 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>74 VA</p> <p>88 VA</p> |
| inductive power factor with closing power of the coil | |
| <ul style="list-style-type: none"> ● at 50 Hz ● at 60 Hz | <p>0.81</p> <p>0.8</p> |
| apparent holding power of magnet coil at AC | |
| <ul style="list-style-type: none"> ● at 50 Hz ● at 60 Hz | <p>11.6 VA</p> <p>15 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>0.24</p> <p>0.25</p> |
| Auxiliary circuit | |
| number of NO contacts for auxiliary contacts | |
| <ul style="list-style-type: none"> ● instantaneous contact | 3 |
| contact reliability of auxiliary contacts | < 1 error per 100 million operating cycles |
| 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 | <p>gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A</p> <p>gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 20 A</p> <p>fuse gG: 10 A</p> |
| 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 | 68 mm |
| width | 135 mm |
| depth | 145 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 — upwards — at the side — downwards ● for live parts | <p>6 mm</p> <p>0 mm</p> <p>6 mm</p> <p>6 mm</p> <p>6 mm</p> <p>6 mm</p> <p>6 mm</p> <p>0 mm</p> <p>6 mm</p> <p>6 mm</p> <p>6 mm</p> |

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|---------------|------|
| — forwards | 6 mm |
| — backwards | 0 mm |
| — upwards | 6 mm |
| — downwards | 6 mm |
| — at the side | 6 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 | <p>screw-type terminals</p> <p>screw-type terminals</p> <p>Screw-type terminals</p> <p>Screw-type terminals</p> |
| type of connectable conductor cross-sections for main contacts | |
| <ul style="list-style-type: none"> • solid • solid or stranded • finely stranded with core end processing | <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm²</p> <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x (0.5 ... 4 mm²)</p> <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)</p> |
| 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 | <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)</p> <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)</p> <p>2x (20 ... 16), 2x (18 ... 14)</p> |

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

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|---------------------------------|--------------------------|-----------------------------|
| General Product Approval | Test Certificates | Maritime application |
|---------------------------------|--------------------------|-----------------------------|



[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



Maritime application



| | | |
|--------------|----------------|--------------------|
| other | Railway | Environment |
|--------------|----------------|--------------------|



[Confirmation](#)

[Special Test Certificate](#)

[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=3RA2416-8XF31-1AP6>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2416-8XF31-1AP6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2416-8XF31-1AP6>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

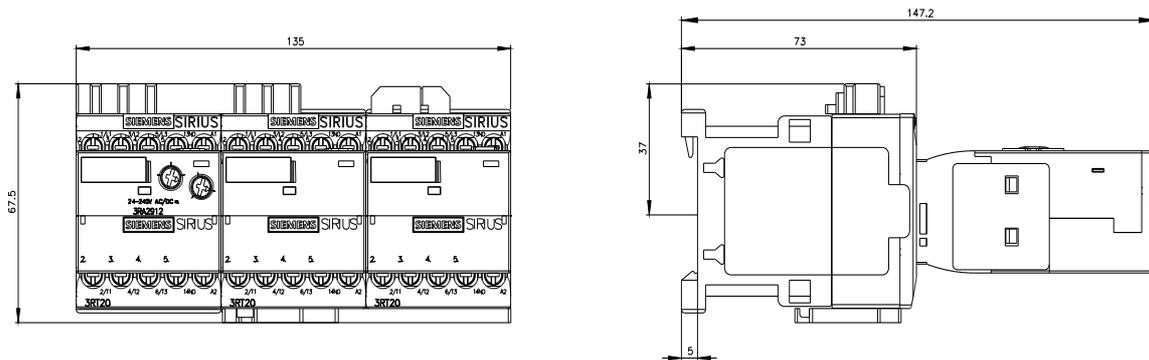
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2416-8XF31-1AP6&lang=en

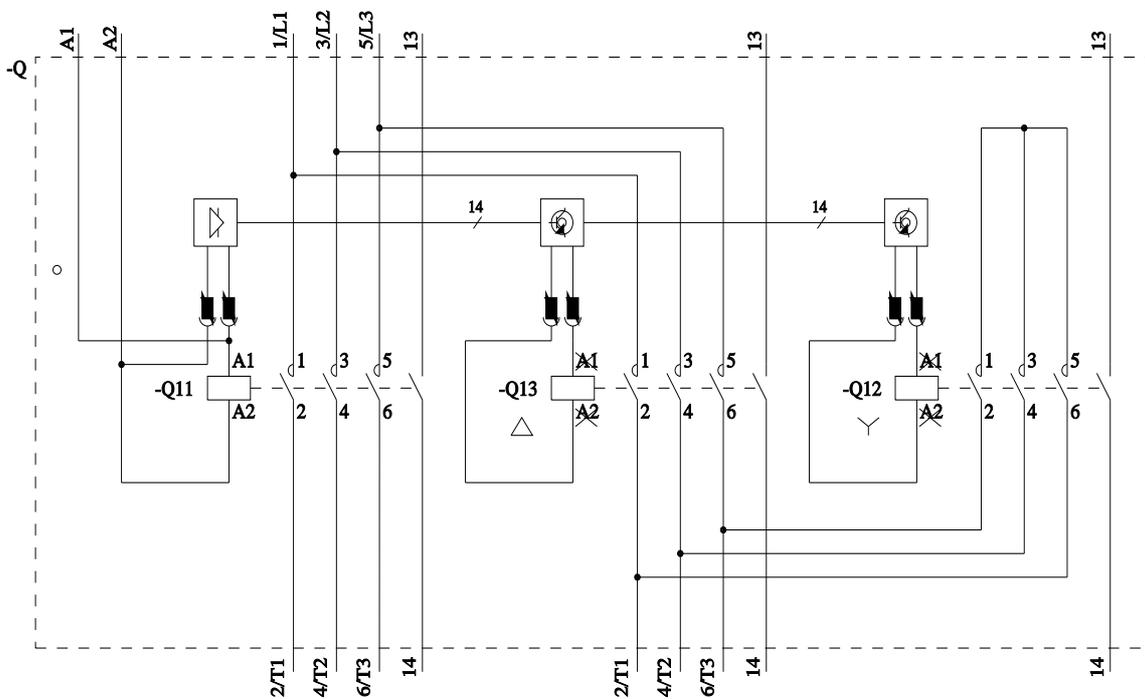
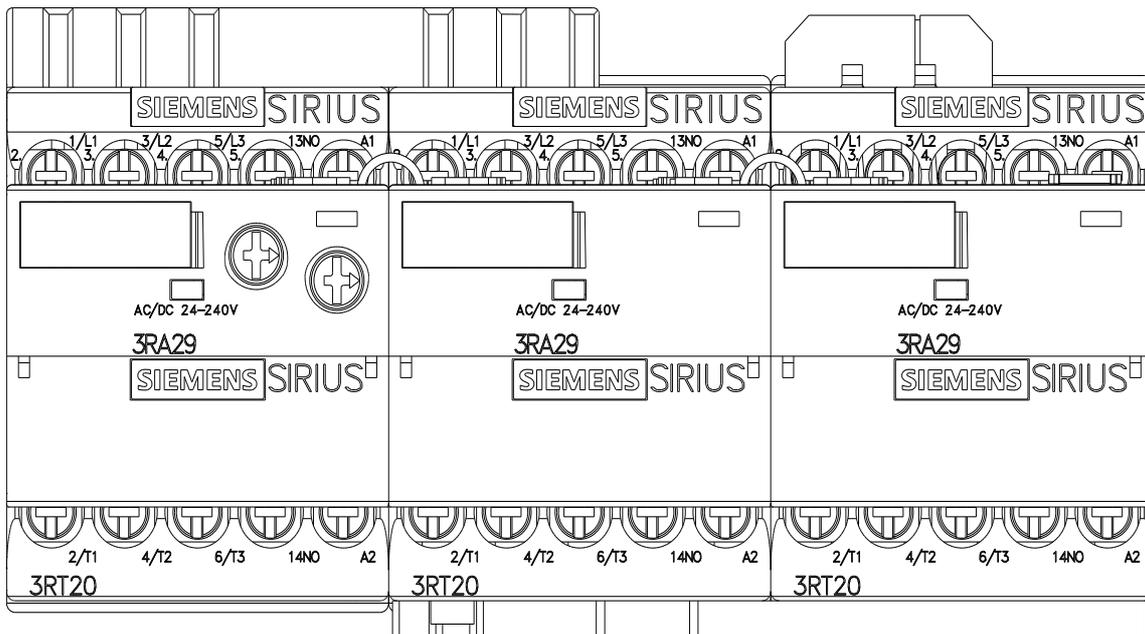
Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2416-8XF31-1AP6/char>

Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2416-8XF31-1AP6&objecttype=14&gridview=view1>





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