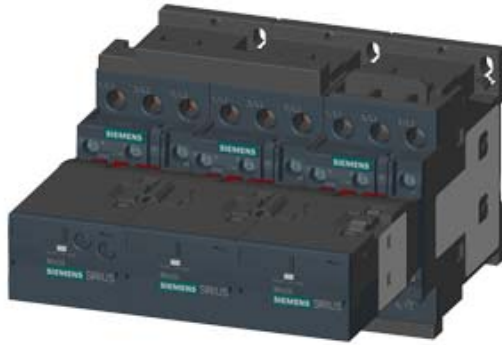


STAR-DELTA COMB. AC3, 15/18.5KW/400V AC230V, 50/60HZ, 3-POLE SZ S0, SCREW TERMINAL ELECTR. AND MECH. INTERLOCK 3NO+3NC INTEGR.



| | |
|--|--|
| product brand name | SIRIUS |
| Product designation | star-delta (wye-delta) contactor assembly 3RA24 |
| Manufacturer 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 | 3RT2026-1AL20 3RT2026-1AL20 3RT2024-1AL20 3RA2923-2BB1 3RA2816-0EW20 |

General technical data:

| | | |
|--|----|-------------------------------|
| Insulation voltage | | |
| <ul style="list-style-type: none"> • with degree of pollution 3 Rated value | V | 690 |
| Degree of pollution | | 3 |
| Shock resistance | | 12.5g / 5 ms and 7.8g / 10 ms |
| Surge voltage resistance Rated value | kV | 6 |
| Mechanical service life (switching cycles) | | |
| <ul style="list-style-type: none"> • of the contactor typical • of the contactor with added auxiliary switch block typical | | 10 000 000 10 000 000 |
| Protection class IP | | |
| <ul style="list-style-type: none"> • on the front | | IP20 |
| Equipment marking | | |
| <ul style="list-style-type: none"> • acc. to DIN EN 81346-2 | | Q |

Main circuit:

| | | |
|---|--|---|
| Number of poles for main current circuit | | 3 |
|---|--|---|

| | | |
|--|-----|-------|
| Number of NC contacts for main contacts | | 0 |
| Number of NO contacts for main contacts | | 3 |
| Operating voltage | | |
| • at AC-3 Rated value maximum | V | 690 |
| Operating current | | |
| • at AC-1 | | |
| — at 400 V at ambient temperature 40 °C Rated value | A | 40 |
| — at 400 V at ambient temperature 60 °C Rated value | A | 35 |
| • at AC-2 at 400 V Rated value | A | 32 |
| • at AC-3 | | |
| — at 400 V Rated value | A | 40 |
| Operating power | | |
| • at AC-2 at 400 V Rated value | kW | 15 |
| • at AC-4 at 400 V Rated value | kW | 3.5 |
| Operating power | | |
| • at AC-3 | | |
| — at 400 V Rated value | kW | 18.5 |
| — at 500 V Rated value | kW | 19 |
| — at 690 V Rated value | kW | 19 |
| Operating frequency | | |
| • at AC-3 maximum | 1/h | 1 000 |
| No-load switching frequency | 1/h | 1 500 |

Control circuit/ Control:

| | | |
|---|---|-------------|
| Type of voltage of the control supply voltage | | AC |
| Control supply voltage 1 with AC | | |
| • at 50 Hz Rated value | V | 230 |
| • at 60 Hz Rated value | V | 230 |
| Operating range factor control supply voltage rated value of the magnet coil with AC | | |
| • at 50 Hz | | 0.8 ... 1.1 |
| • at 60 Hz | | 0.8 ... 1.1 |

Auxiliary circuit:

| | | |
|------------------------------|--|---|
| Number of NC contacts | | |
| • for auxiliary contacts | | |
| — instantaneous contact | | 3 |
| — lagging switching | | 0 |
| Number of NO contacts | | |
| • for auxiliary contacts | | |
| — instantaneous contact | | 3 |
| — leading contact | | 0 |

| | | |
|---|---|--|
| Product expansion Auxiliary switch | | No |
| Operating current of the auxiliary contacts at AC-12 maximum | A | 10 |
| Operating current of the auxiliary contacts at AC-15 | | |
| • at 230 V | A | 6 |
| • at 400 V | A | 3 |
| Operating current of the auxiliary contacts at DC-13 | | |
| • at 24 V | A | 10 |
| • at 60 V | A | 2 |
| • at 110 V | A | 1 |
| • at 220 V | A | 0.3 |
| Contact reliability of the auxiliary contacts | | < 1 error per 100 million operating cycles |

UL/CSA ratings:

| | | |
|--|--|-------------|
| Contact rating of the auxiliary contacts acc. to UL | | A600 / Q600 |
|--|--|-------------|

Short-circuit:

| | | |
|---|--|---|
| Design of the fuse link | | |
| • for short-circuit protection of the main circuit | | |
| — with type of assignment 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 |
| Mounting type | | screw and snap-on mounting onto 35 mm standard mounting rail |
| Height | mm | 101 |
| Width | mm | 135 |
| Depth | mm | 171 |
| Required spacing | | |
| • with side-by-side mounting | | |
| — forwards | mm | 6 |
| — Backwards | mm | 0 |
| — upwards | mm | 6 |
| — downwards | mm | 6 |
| — at the side | mm | 6 |
| • for grounded parts | | |
| — forwards | mm | 6 |
| — Backwards | mm | 0 |

| | | |
|------------------|----|---|
| — upwards | mm | 6 |
| — at the side | mm | 6 |
| — downwards | mm | 6 |
| • for live parts | | |
| — forwards | mm | 6 |
| — Backwards | mm | 0 |
| — upwards | mm | 6 |
| — downwards | mm | 6 |
| — at the side | mm | 6 |

Connections/ Terminals:

| | | |
|--|-----|---|
| Type of electrical connection | | |
| • for main current circuit | | screw-type terminals |
| • for auxiliary and control current circuit | | screw-type terminals |
| Type of connectable conductor cross-section | | |
| • for main contacts | | |
| — single or multi-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 conductors for main contacts | | 2x (16 ... 12), 2x (14 ... 8) |
| • for auxiliary contacts | | |
| — single or multi-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 conductors for auxiliary contacts | | 2x (20 ... 16), 2x (18 ... 14) |
| Apparent pick-up power of the magnet coil with AC | | |
| • at 50 Hz | V·A | 65 |

Safety related data:

| | | |
|---|-----|-------------|
| B10 value with high demand rate acc. to SN 31920 | | 1 000 000 |
| Proportion of dangerous failures | | |
| • with low demand rate acc. to SN 31920 | % | 40 |
| • with high demand rate acc. to SN 31920 | % | 75 |
| Failure rate [FIT] with low demand rate acc. to SN 31920 | FIT | 100 |
| T1 value for proof test interval or service life acc. to IEC 61508 | y | 20 |
| Protection against electrical shock | | finger-safe |

Mechanical data:

| | | |
|--------------------------|--|----|
| Size of contactor | | S0 |
|--------------------------|--|----|






Communication/ Protocol:

| | | |
|--|--|----|
| Product function Bus communication | | No |
| Protocol is supported | | |
| • AS-interface protocol | | No |
| Product function Control circuit interface with IO link | | No |

Ambient conditions:

| | | |
|---|----|-------------|
| Installation altitude at height above sea level maximum | m | 2 000 |
| Ambient temperature | | |
| • during operation | °C | -25 ... +60 |
| • during storage | °C | -55 ... +80 |

Certificates/ approvals:

| General Product Approval | Declaration of Conformity | Test Certificates | Shipping Approval | | |
|---|---|--|--|---|--|
|  |  EG-Konf. | Special Test Certificate |  ABS |  BUREAU VERITAS |  DNV |

| Shipping Approval | other | | | | |
|---|--|--|---|---|---|
|  GL |  LRS |  PRS |  RINA |  RMRS | Environmental Confirmations |

| other |
|-----------------------|
| other |

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<http://www.siemens.com/industrymall>

Cax online generator

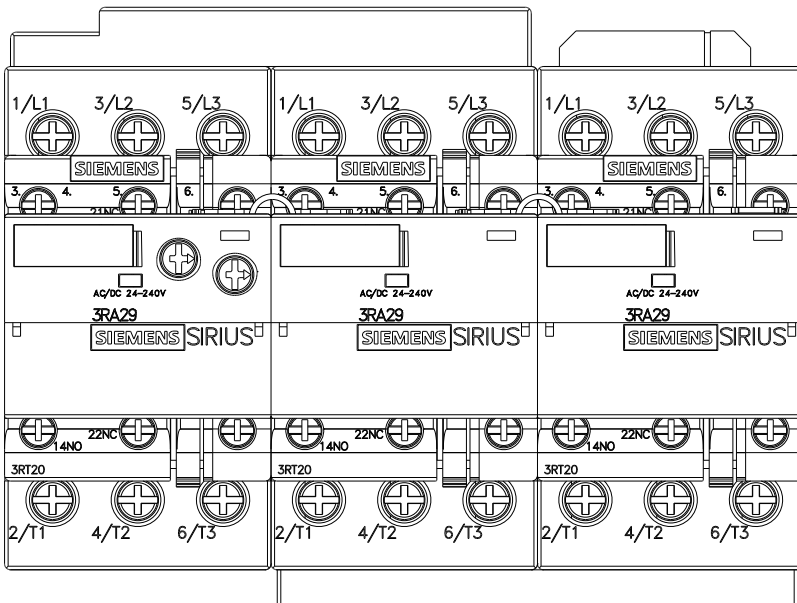
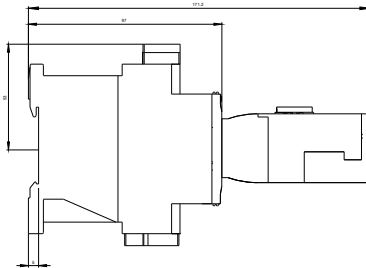
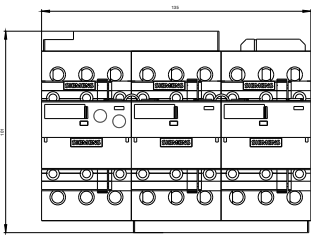
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA24258XF321AL2>

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

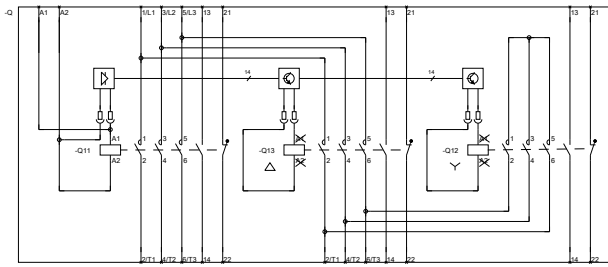
<http://support.automation.siemens.com/WW/view/en/3RA24258XF321AL2/all>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA24258XF321AL2&lang=en



STAR-DELTA-ACD/RES:18.5KW/400V



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last modified:

11.03.2015