STAR-DELTA COMB. WITH ASI AC3, 22KW/400V DC24V, 3-POLE SZ S0, SPRING-LOADED TERMINAL ELECTR. AND MECH. INTERLOCK 3NO+3NC INTEGR.



| General technical data: | | | |
|--|----|---|--|
| Product brand name | | SIRIUS | |
| product designation | | star-delta (wye-delta) contactor assembly 3RA24 | |
| Product function | | wye-delta motor start-up | |
| Size of the contactor | | S0 | |
| Protection class IP / on the front | | IP20 | |
| Degree of pollution | | 3 | |
| Insulation voltage / with degree of pollution 3 / rated value | V | 690 | |
| Installation altitude / at a height over sea level / maximum | m | 2,000 | |
| Ambient temperature | | | |
| during transport | °C | -55 80 | |
| during storage | °C | -55 80 | |
| during operating | °C | -25 60 | |
| Resistance against shock | | 9.8g / 5 ms and 5.9g / 10 ms | |
| Impulse voltage resistance / rated value | kV | 6 | |
| Active power loss / per conductor / typical | W | 1.6 | |
| Item designation | | | |
| according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 | | К | |
| according to DIN EN 61346-2 | | Q | |

| Manufacturer article number | | |
|--|---|--------------------|
| of the function module for communication included in the scope | | 3RA2712-2CA00 |
| of supply | | <u> </u> |
| • 1 / of the contactor included in the scope of supply | | 3RT2027-2BB40-0CC0 |
| • 2 / of the contactor included in the scope of supply | | 3RT2027-2BB40 |
| • 3 / of the contactor included in the scope of supply | | 3RT2026-2BB40 |
| of the RS applied assembly kit | | 3RA2923-2BB2 |
| Mechanical operating cycles as operating time | | |
| of the main contacts / typical | | 10,000,000 |
| of the auxiliary contacts / typical | | 10,000,000 |
| of the contactor / typical | | 10,000,000 |
| of the contactor with added auxiliary switch block / typical | | 10,000,000 |
| Communication: | | |
| Product function | | |
| bus-communication | | Yes |
| control circuit interface with IO link | | No |
| Protocol / will be supported / AS interface protocol | | Yes |
| 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 40 °C ambient temperature / rated value | А | 40 |
| • at 60 °C ambient temperature / rated value | А | 35 |
| • at AC-2 / at 400 V / rated value | А | 40 |
| • at AC-3 / at 400 V / rated value | А | 17 |
| • with 1 current path / at DC-1 | | |
| • at 24 V / rated value | Α | 35 |
| • at 110 V / rated value | А | 4.5 |
| • with 2 current paths in series / at DC-1 | | |
| • at 24 V / rated value | Α | 35 |
| • at 110 V / rated value | Α | 35 |
| • with 3 current paths in series / at DC-1 | | |
| • at 24 V / rated value | Α | 35 |
| • at 110 V / rated value | Α | 35 |
| • with 1 current path / at DC-3 / at DC-5 | | |
| • at 24 V / rated value | А | 20 |

| • at 110 V / rated value | Α | 2.5 |
|--|-----|-------|
| • with 2 current paths in series / at DC-3 / at DC-5 | | |
| • at 24 V / rated value | Α | 35 |
| • at 110 V / rated value | Α | 15 |
| • with 3 current paths in series / at DC-3 / at DC-5 | | |
| • at 24 V / rated value | Α | 35 |
| • at 110 V / rated value | Α | 35 |
| Service power | | |
| • at AC-2 / at 400 V / rated value | kW | 18.5 |
| • at AC-3 | | |
| • at 400 V / rated value | kW | 22 |
| • at 500 V / rated value | kW | 18.5 |
| • at 690 V / rated value | kW | 22 |
| • at AC-4 / at 400 V / rated value | kW | 4.4 |
| Off-load operating frequency | 1/h | 15 |
| Frequency of operation | | |
| • at AC-1 / according to IEC 60947-6-2 / maximum | 1/h | 1,000 |
| • at AC-2 / according to IEC 60947-6-2 / maximum | 1/h | 1,000 |
| • at AC-3 / according to IEC 60947-6-2 / maximum | 1/h | 1,000 |
| • at AC-4 / according to IEC 60947-6-2 / maximum | 1/h | 300 |
| | | |

| Control circuit: | | |
|---|----|---------------|
| Design of activation | | conventional |
| Design of the surge suppressor | | with varistor |
| Type of voltage / of the controlled supply voltage | | DC |
| Control supply voltage frequency | | |
| • 1 / rated value | Hz | 50 |
| • 2 / rated value | Hz | 60 |
| Control supply voltage / 1 | | |
| for DC / rated value | V | 24 |
| Operating range factor control supply voltage rated value / of the solenoid | | |
| • for DC | | 0.8 1.1 |
| Pull-in power / of the solenoid / for DC | W | 5.9 |
| Holding power / of the solenoid / for DC | W | 5.9 |
| Resistive loss / of the magnet coil / for DC | | |
| • typical | W | 5.9 |

| Auxiliary circuit: | | |
|---|--|--|
| Product extension / auxiliary switch | No | |
| Contact reliability / of the auxiliary contacts | < 1 error per 100 million operating cycles | |

| Number of NC contacts / for auxiliary contacts | | |
|--|---|-----|
| • instantaneous switching | | 3 |
| lagging switching | | 0 |
| Number of NO contacts / for auxiliary contacts | | |
| • instantaneous switching | | 3 |
| leading switching | | 0 |
| Operating current / of the auxiliary contacts | | |
| • at AC-12 / maximum | Α | 10 |
| • at AC-15 | | |
| • at 230 V | Α | 6 |
| • at 400 V | Α | 3 |
| • at DC-12 | | |
| • at 48 V | Α | 6 |
| • at 60 V | Α | 6 |
| • at 110 V | Α | 3 |
| • at 220 V | Α | 1 |
| • at DC-13 | | |
| • at 24 V | Α | 10 |
| • at 48 V | Α | 2 |
| • at 60 V | Α | 2 |
| • at 110 V | Α | 1 |
| • at 220 V | Α | 0.3 |

| Sno | rt-ci | ircu | lit: |
|-----|-------|------|------|
| | | | |

| 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: 100 A |
| • at type of coordination 2 / required | gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A |
| • for short-circuit protection of the auxiliary switch / required | fuse gL/gG: 10 A |

| Installation/mounting/dimensions: | | | |
|---|----|--|--|
| Built in orientation | | any | |
| Type of mounting | | screw and snap-on mounting onto 35 mm standard mounting rail | |
| Width | mm | 135 | |
| Height | mm | 114 | |
| Depth | mm | 181 | |
| Distance, to be maintained, to the ranks assembly | | | |
| • forwards | mm | 6 | |
| • backwards | mm | 0 | |

| • upwards | mm | 6 |
|---|----|---|
| • downwards | mm | 6 |
| • sidewards | mm | 6 |
| Distance, to be maintained, to earthed part | | |
| • forwards | mm | 6 |
| • backwards | mm | 0 |
| • upwards | mm | 6 |
| • downwards | mm | 6 |
| • sidewards | mm | 6 |
| Distance, to be maintained, conductive elements | | |
| • forwards | mm | 6 |
| • backwards | mm | 0 |
| • upwards | mm | 6 |
| • downwards | mm | 6 |
| • sidewards | mm | 6 |
| | | |

| Connections: | | | |
|---|-------------------------|--|--|
| Design of the electrical connection | | | |
| • for main current circuit | spring-loaded terminals | | |
| • for auxiliary and control current circuit | spring-loaded terminals | | |
| Type of the connectable conductor cross-section | | | |
| • for main contacts | | | |
| • solid | 2x (1 10 mm2) | | |
| • stranded | 2x (1 10 mm²) | | |
| • finely stranded | | | |
| with conductor end processing | 2x (1 6 mm2) | | |
| without conductor final cutting | 2x (1 6 mm2) | | |
| • for AWG conductors / for main contacts | 1x (18 8) | | |
| • for auxiliary contacts | | | |
| • solid | 2x (0.5 2.5 mm2) | | |
| • finely stranded | | | |
| with conductor end processing | 2x (0.5 1.5 mm2) | | |
| without conductor final cutting | 2 x (0.5 1.5 mm2) | | |
| • for AWG conductors / for auxiliary contacts | 2x (20 14) | | |

| Certificates/approvals: | | |
|-----------------------------|---------------|--|
| Verification of suitability | CE/UL/CSA/CCC | |

General Product Approval **Test Certificates**

ROSTEST

Manufacturer

Shipping Approval













Shipping Approval

other



other

| UII / | CSA | ratir | าตร |
|-------|-----|--------|-----|
| | | 100011 | .90 |
| | | | |

Contact rating designation / for auxiliary contacts / according to

A600 / Q600

| Safety: | | | | |
|---|-----|-------------|--|--|
| B10 value / with high demand rate | | | | |
| • according to SN 31920 | | 1,000,000 | | |
| Failure rate (FIT value) / with low demand rate | | | | |
| • according to SN 31920 | FIT | 100 | | |
| Proportion of dangerous failures | | | | |
| • with low demand rate / according to SN 31920 | % | 40 | | |
| with high demand rate / according to SN 31920 | % | 75 | | |
| T1 value / for proof test interval or service life | | | | |
| according to IEC 61508 | а | 20 | | |
| Protection against electrical shock | | finger-safe | | |

Further information:

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

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

Industry Mall (Online ordering system)

http://www.siemens.com/industrial-controls/mall

CAx-Online-Generator

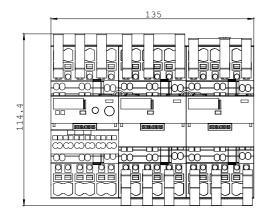
http://www.siemens.com/cax

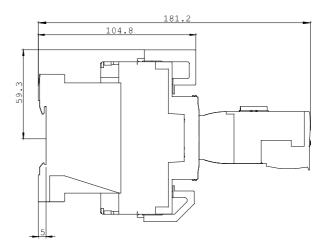
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

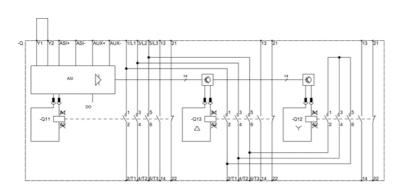
http://support.automation.siemens.com/WW/view/en/3RA2426-8XH32-2BB4/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2426-8XH32-2BB4







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