

LOAD FEEDER FUSELESS DIRECT START, AC 400V, SZ. S0, 27...32A, DC 24V SCREW CONNECTION FOR BUSBAR SYSTEMS 60MM TYPE OF COORD. 2,IQ = 150KA (ALSO ACHIEVES TYPE OF COORD.1) 1NO+1NC (CONTACTOR)

| General technical data:  |    |                             |
|--|----|-----------------------------|
| Product brand name   |    | SIRIUS                      |
| product designation  |    | non-fused load feeders 3RA2 |
| Design of the product  |    | direct starter              |
| Size of the load feeder  |    | S0                          |
| Protection class IP / on the front   |    | IP20                        |
| Degree of pollution  |    | 3                           |
| Insulation voltage / 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 | -20 60                      |
| Impulse voltage resistance / rated value   | kV | 6                           |
| Active power loss / per conductor / typical  | W  | 4.3                         |
| Item designation   |    |                             |
| <ul> <li>according to DIN 40719 extendable after IEC 204-2 / according<br/>to IEC 750</li> </ul> |    | Q                           |
| according to DIN EN 61346-2  |    | Q                           |
| Type of assignement  |    | 2                           |

| Mechanical operating cycles as operating time / of the contactor |   |               |
|--|---|---------------|
| • typical  |   | 10,000,000    |
| Manufacturer article number                                      |   |               |
| • of the circuit-breakers included in the scope of supply        |   | 3RV2021-4EA10 |
| • of the contactor included in the scope of supply               |   | 3RT2027-1BB40 |
| of the link module included in the scope of supply               |   | 3RA2921-1BA00 |
| of the busbar adapter included in the scope of supply            |   | 8US1251-5NT10 |
| Design of the switching contact                                  |   | mechanical    |
| Type of the motor protection                                     |   | bimetal       |
| Adjustable response current                                      |   |               |
| of the current-dependent overload release                        | Α | 27 32         |

| Communication:  |    |  |
|---|----|--|
| Product function / bus-communication                  | No |  |
| Protocol / will be supported                          |    |  |
| AS interface protocol                                 | No |  |
| PROFIBUS DP protocol                                  | No |  |
| PROFINET protocol                                     | No |  |
| Product extension / function module for communication | No |  |

| 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 / rated value                    | Α   | 32     |
| at AC-2 / at 400 V / rated value                    | Α   | 29     |
| • at AC-3 / at 400 V / rated value                  | Α   | 29     |
| at AC-4 / at 400 V / rated value                    | Α   | 29     |
| Service power                                       |     |        |
| • at AC-2 / at 400 V / rated value                  | W   | 15,000 |
| • at AC-3   |     |        |
| • at 400 V / rated value                            | W   | 15,000 |
| • at 500 V / rated value                            | W   | 18,500 |
| • at 690 V / rated value                            | W   | 30,000 |
| at AC-4 / at 400 V / rated value                    | W   | 15,000 |
| Off-load operating frequency                        | 1/h | 10,000 |
| 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:  |     |  |
| Type of voltage / of the controlled supply voltage      |     | DC                                     |
| Control supply voltage frequency                        |     |  |
| • 1 / rated value                                       | Hz  | 0                                      |
| Control supply voltage / 1                              |     |  |
| • for DC / rated value                                  | V   | 24                                     |
| Holding power / of the solenoid / for DC                | W   | 5.9                                    |
| Auxiliary circuit:                                      |     |  |
| Product extension / auxiliary switch                    |     | Yes                                    |
| Number of NC contacts / for auxiliary contacts          |     | 1                                      |
| Number of NO contacts / for auxiliary contacts          |     | 1                                      |
| Number of change-over switches / for auxiliary contacts |     | 0                                      |
| Inputs/ Outputs:  |     |  |
| Number of digital inputs                                |     | 0                                      |
| Short-circuit:  |     |  |
| Product function / short circuit protection             |     | Yes                                    |
| Design of the short-circuit protection                  |     | circuit-breakers                       |
| Breaking capacity limit short-circuit current (Icu)     |     |  |
| • at 400 V / rated value                                | Α   | 25,000                                 |
| • at 500 V / rated value                                | Α   | 5,000                                  |
| • at 690 V / rated value                                | А   | 2,000                                  |
| Installation/mounting/dimensions:                       |     |  |
| Built in orientation                                    |     | vertical                               |
| Type of mounting  |     | for snapping onto 60 mm busbar systems |
| Width   | mm  | 45                                     |
| Height  | mm  | 260                                    |
| Depth   | mm  | 165                                    |
| Distance, to be maintained, to the ranks assembly       |     |  |
| • forwards  | mm  | 10                                     |
| backwards   | mm  | 0                                      |
| • upwards   | mm  | 30                                     |
| • downwards   | mm  | 30                                     |
| • sidewards   | mm  | 0                                      |
| Distance, to be maintained, to earthed part             |     |  |

| • forwards                                      | mm | 10 |
|---|----|----|
| • backwards                                     | mm | 0  |
| • upwards                                       | mm | 30 |
| • downwards                                     | mm | 10 |
| • sidewards                                     | mm | 9  |
| Distance, to be maintained, conductive elements |    |    |
| • forwards                                      | mm | 10 |
| • backwards                                     | mm | 0  |
| • upwards                                       | mm | 30 |
| • downwards                                     | mm | 10 |
| • sidewards                                     | mm | 9  |

| Connections:                                      |   |
|---|---|
| Design of the electrical connection               |   |
| • for main current circuit                        | screw-type terminals                      |
| for auxiliary and control current circuit         | screw-type terminals                      |
| Type of the connectable conductor cross-section   |   |
| • for main contacts                               |   |
| • solid   | 2x (1 2.5 mm²), 2x (2.5 10 mm²)           |
| • stranded  | 2x (1.0 2.5 mm2), 2x (2.5 10 mm2)         |
| • finely stranded                                 |   |
| <ul> <li>with conductor end processing</li> </ul> | 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² |
| • for AWG conductors / for main contacts          | 2 x (16 14), 2x (14 8)                    |
| for auxiliary contacts                            |   |
| • solid   | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)       |
| • finely stranded                                 |   |
| <ul> <li>with conductor end processing</li> </ul> | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)       |
| • for AWG conductors / for auxiliary contacts     | 2x (20 14)                                |

| Certificates/approvals:     |                                |                   |                   |                     |      |
|-----------------------------|--------------------------------|-------------------|-------------------|---------------------|------|
| Verification of suitab      | oility                         |                   |                   | CE / UL / CSA / CCC |      |
| Varification of suitab      | oility / ATEX                  |                   |                   | No                  |      |
| General Product<br>Approval | For use in hazardous locations | Test Certificates | Shipping Approval |                     |      |
| ROSTEST                     | DEKRA EXAM,<br>DMT             | Manufacturer      | ABS               | PRS                 | RINA |
| other                       |                                |                   |                   |                     |      |

## UL/CSA ratings

Manufacturer

other

| yielded mechanical performance (hp)                                   |    |             |
|---|----|-------------|
| • for single-phase squirrel cage motors                               |    |             |
| • at 230 V / rated value  | hp | 5           |
| • for three-phase squirrel cage motors                                |    |             |
| • at 220/230 V / rated value  | hp | 10          |
| • at 460/480 V / rated value  | hp | 20          |
| • at 575/600 V / rated value  | hp | 25          |
| Operating current (FLA) / for three-phase squirrel cage motors        |    |             |
| • at 480 V / rated value  | Α  | 14          |
| • at 600 V / rated value  | Α  | 17          |
| Contact rating designation / for auxiliary contacts / according to UL |    | 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 | 150         |
| Proportion of dangerous failures                                 |     |             |
| <ul> <li>with low demand rate / according to SN 31920</li> </ul> | %   | 40          |
| with high demand rate / according to SN 31920                    | %   | 75          |
| T1 value / for proof test interval or service life               |     |             |
| according to IEC 61508   | а   | 10          |
| 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** 

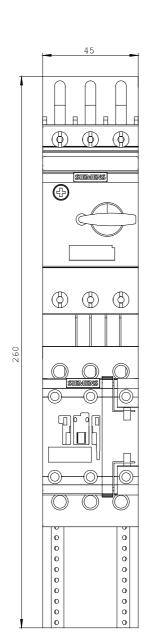
http://www.siemens.com/cax

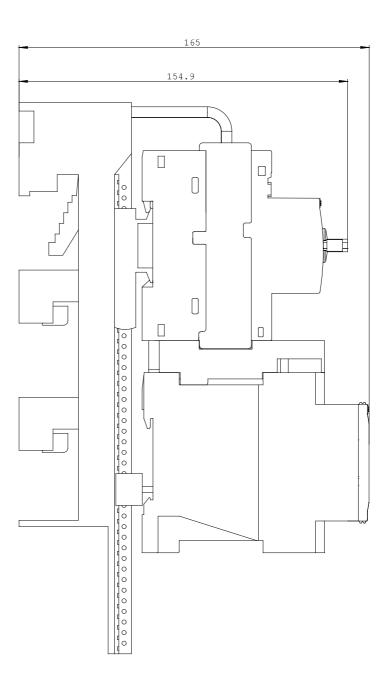
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

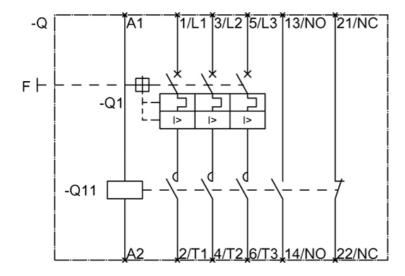
http://support.automation.siemens.com/WW/view/en/3RA2120-4ED27-0BB4/all

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RA2120-4ED27-0BB4







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