## **Product data sheet**



LOAD FEEDER FUSELESS DIRECT START,
AC 400V, SZ S00 0.55...0.8A,
DC 24V SCREW CONNECTION FOR BUSBAR SYSTEMS
60MM TYPE OF COORDINATION 2,
IQ = 150KA (ALSO FULFILLS TYPE OF COORDINATION 1)
1NO (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  |    | S00                         |
| 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  | 2                           |
| 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          |   | 3RV2011-0HA10 |
| of the contactor included in the scope of supply                 |   | 3RT2015-1BB41 |
| of the link module included in the scope of supply               |   | 3RA1921-1DA00 |
| of the busbar adapter included in the scope of supply            |   | 8US1251-5DS10 |
| Design of the switching contact                                  |   | mechanical    |
| Type of the motor protection                                     |   | bimetal       |
| Adjustable response current                                      |   |               |
| of the current-dependent overload release                        | Α | 0.55 0.8      |

| 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   | 0.8    |
| • at AC-2 / at 400 V / rated value                  | Α   | 0.6    |
| • at AC-3 / at 400 V / rated value                  | Α   | 0.6    |
| • at AC-4 / at 400 V / rated value                  | Α   | 0.6    |
| Service power                                       |     |        |
| • at AC-2 / at 400 V / rated value                  | W   | 180    |
| • at AC-3   |     |        |
| • at 400 V / rated value                            | W   | 180    |
| at 500 V / rated value                              | W   | 180    |
| at 690 V / rated value                              | W   | 250    |
| • at AC-4 / at 400 V / rated value                  | W   | 180    |
| 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      | 750                                    |
|---|----------|--|
| • at AC-3 / according to IEC 60947-6-2 / maximum        | 1/h      | 750                                    |
| • at AC-4 / according to IEC 60947-6-2 / maximum        | 1/h      | 250                                    |
| 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        | 4                                      |
| Auxiliary circuit:                                      |          |  |
| Product extension / auxiliary switch                    |          | Yes                                    |
| Number of NC contacts / for auxiliary contacts          |          | 0                                      |
| 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        | 100,000                                |
| • at 500 V / rated value                                | Α        | 100,000                                |
| • at 690 V / rated value                                | Α        | 100,000                                |
| Installation/mounting/dimensions:                       |          |  |
| Built in orientation                                    |          | vertical                               |
| Type of mounting  |          | for snapping onto 60 mm busbar systems |
| Width   | mm       | 45                                     |
| Height  | mm       | 200                                    |
| Depth   | mm       | 155.1                                  |
| Center line spacing                                     | mm       | 60                                     |
| Distance, to be maintained, to the ranks assembly       |          |  |
| • forwards  | mm       | 0                                      |
| • backwards   | mm       | 0                                      |
| • upwards   |          |  |
| · upwarus   | mm       | 20                                     |
| • downwards   | mm<br>mm | 30                                     |

| Distance, to be maintained, to earthed part     |    |    |
|---|----|----|
| • forwards                                      | mm | 0  |
| • backwards                                     | mm | 0  |
| • upwards                                       | mm | 20 |
| • downwards                                     | mm | 10 |
| • sidewards                                     | mm | 9  |
| Distance, to be maintained, conductive elements |    |    |
| • forwards                                      | mm | 0  |
| • backwards                                     | mm | 0  |
| • upwards                                       | mm | 20 |
| • 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 (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x (1 4 mm²) |
| • stranded  | 2x (0.5 1.5 mm2), 2x (0.75 2.5 mm2), 2x (1 4 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 main contacts          | 2x (20 16), 2x (18 14), 2x 12                     |
| for auxiliary contacts                            |   |
| • solid   | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 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 16), 2x (18 14), 2x 12                     |

| Certificates/approvals:            |                     |
|------------------------------------|---------------------|
| Verification of suitability        | CE / UL / CSA / CCC |
| Varification of suitability / ATEX | No                  |

## **General Product Approval**

For use in hazardous locations

**Test Certificates** 

**ROSTEST** 



 $\frac{\mathsf{DEKRA}\;\mathsf{EXAM},}{\mathsf{DMT}}$ 

Manufacturer

## **Shipping Approval**

other







Manufacturer other

| UL/CSA ratings  |   |             |
|---|---|-------------|
| Operating current (FLA) / for three-phase squirrel cage motors        |   |             |
| • at 480 V / rated value  | Α | 0.8         |
| • at 600 V / rated value  | Α | 0.8         |
| 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                   |     |             |
| 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   | 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** 

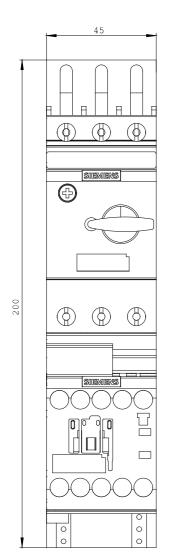
http://www.siemens.com/cax

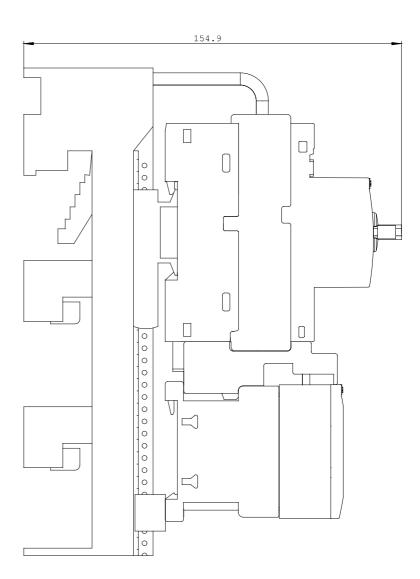
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

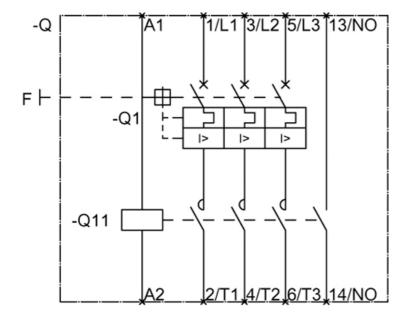
http://support.automation.siemens.com/WW/view/en/3RA2110-0HD15-1BB4/all

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RA2110-0HD15-1BB4}$ 







last change: Oct 24, 2011