## **Product data sheet**



LOAD FEEDER FUSELESS REVERSING DUTY, AC 400V, SZ S00, 0.22...0.32A, DC 24V SCREW CONNECTION FOR BUSBAR SYSTEMS 60MM TYPE OF COORDINATION 2, IQ = 150KA (ALSO FULFILLS TYPE OF COORDINATION 1) 1NC (CONTACTOR)

| General technical data:  |    |                             |
|--|----|-----------------------------|
| Product brand name   |    | SIRIUS                      |
| product designation  |    | non-fused load feeders 3RA2 |
| Design of the product  |    | reversing 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   |                       | 3RV2011-0DA10  |
| • of the contactor included in the scope of supply  |                       | <u>3RT2015-1BB42</u>                                     |
| of the RS applied assembly kit  |                       | <u>8US1250-5AS10</u>                                     |
| • of the link module included in the scope of supply  |                       | 3RA1921-1DA00  |
| • of the busbar adapter included in the scope of supply   |                       | <u>8US1251-5DS10</u>                                     |
| Design of the switching contact   |                       | mechanical   |
| Type of the motor protection  |                       | bimetal  |
| Adjustable response current   |                       |  |
| of the current-dependent overload release   | Α                     | 0.22 0.32  |
| 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  |
|   | V                     |  |
| Number of NO contacts / for main contacts   | V                     | 3  |
| Number of NO contacts / for main contacts  Operating voltage / at AC-3 / rated value / maximum  | V                     | 3  |
| Number of NO contacts / for main contacts  Operating voltage / at AC-3 / rated value / maximum  Operating current   |                       | 3<br>690   |
| Number of NO contacts / for main contacts  Operating voltage / at AC-3 / rated value / maximum  Operating current  • at AC-1 / at 400 V / rated value   | А                     | 3<br>690<br>0.32   |
| Number of NO contacts / for main contacts  Operating voltage / at AC-3 / rated value / maximum  Operating current  • at AC-1 / at 400 V / rated value  • at AC-2 / at 400 V / rated value   | A<br>A                | 3<br>690<br>0.32<br>0.3                                  |
| Number of NO contacts / for main contacts  Operating voltage / at AC-3 / rated value / maximum  Operating current  • at AC-1 / at 400 V / rated value  • at AC-2 / at 400 V / rated value  • at AC-3 / at 400 V / rated value   | A<br>A<br>A           | 3<br>690<br>0.32<br>0.3<br>0.3                           |
| Number of NO contacts / for main contacts  Operating voltage / at AC-3 / rated value / maximum  Operating current  • at AC-1 / at 400 V / rated value  • at AC-2 / at 400 V / rated value  • at AC-3 / at 400 V / rated value  • at AC-4 / at 400 V / rated value   | A<br>A<br>A           | 3<br>690<br>0.32<br>0.3<br>0.3                           |
| Number of NO contacts / for main contacts  Operating voltage / at AC-3 / rated value / maximum  Operating current  • at AC-1 / at 400 V / rated value  • at AC-2 / at 400 V / rated value  • at AC-3 / at 400 V / rated value  • at AC-4 / at 400 V / rated value  Service power  | A<br>A<br>A           | 3<br>690<br>0.32<br>0.3<br>0.3                           |
| Number of NO contacts / for main contacts  Operating voltage / at AC-3 / rated value / maximum  Operating current  • at AC-1 / at 400 V / rated value  • at AC-2 / at 400 V / rated value  • at AC-3 / at 400 V / rated value  • at AC-4 / at 400 V / rated value  Service power  • at AC-2 / at 400 V / rated value  | A<br>A<br>A           | 3<br>690<br>0.32<br>0.3<br>0.3                           |
| Number of NO contacts / for main contacts  Operating voltage / at AC-3 / rated value / maximum  Operating current  • at AC-1 / at 400 V / rated value  • at AC-2 / at 400 V / rated value  • at AC-3 / at 400 V / rated value  • at AC-4 / at 400 V / rated value  Service power  • at AC-2 / at 400 V / rated value  • at AC-3 / at 400 V / rated value  | A<br>A<br>A<br>W      | 3<br>690<br>0.32<br>0.3<br>0.3<br>0.3                    |
| Number of NO contacts / for main contacts  Operating voltage / at AC-3 / rated value / maximum  Operating current  • at AC-1 / at 400 V / rated value  • at AC-2 / at 400 V / rated value  • at AC-3 / at 400 V / rated value  • at AC-4 / at 400 V / rated value  Service power  • at AC-2 / at 400 V / rated value  • at AC-3  • at 400 V / rated value   | A<br>A<br>A<br>W      | 3<br>690<br>0.32<br>0.3<br>0.3<br>0.3                    |
| Number of NO contacts / for main contacts  Operating voltage / at AC-3 / rated value / maximum  Operating current  • at AC-1 / at 400 V / rated value  • at AC-2 / at 400 V / rated value  • at AC-3 / at 400 V / rated value  • at AC-4 / at 400 V / rated value  Service power  • at AC-2 / at 400 V / rated value  • at AC-3  • at 400 V / rated value  • at 500 V / rated value                           | A<br>A<br>A<br>W      | 3<br>690<br>0.32<br>0.3<br>0.3<br>0.3<br>90              |
| Number of NO contacts / for main contacts  Operating voltage / at AC-3 / rated value / maximum  Operating current  • at AC-1 / at 400 V / rated value  • at AC-2 / at 400 V / rated value  • at AC-3 / at 400 V / rated value  • at AC-4 / at 400 V / rated value  Service power  • at AC-2 / at 400 V / rated value  • at AC-3  • at 400 V / rated value  • at 500 V / rated value  • at 690 V / rated value | A<br>A<br>A<br>W<br>W | 3<br>690<br>0.32<br>0.3<br>0.3<br>0.3<br>90<br>90<br>120 |

| • 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                                  |     |       |

| 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          |  | 1   |
| Number of NO contacts / for auxiliary contacts          |  | 0   |
| 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 (lcu) |   |                  |
| • 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 | 90                                     |
| 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   | mm | 20                                     |
| • downwards                                       | mm | 30                                     |

| • sidewards                                     | mm | 0  |
|---|----|----|
| 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                              |
| <ul> <li>for auxiliary and control current circuit</li> </ul> | 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 | 0.32        |
| • at 600 V / rated value  | Α | 0.32        |
| 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 | 250         |
| 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** 

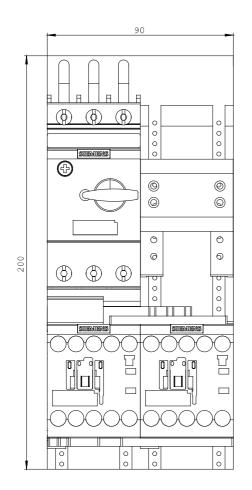
http://www.siemens.com/cax

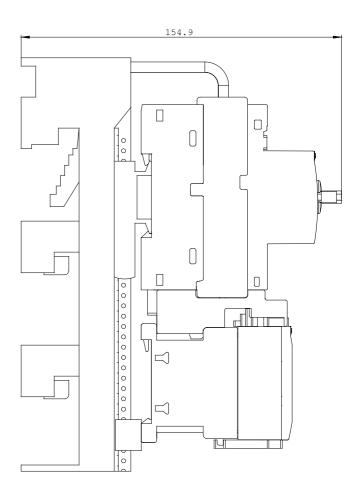
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

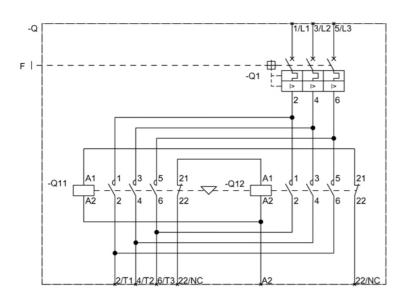
http://support.automation.siemens.com/WW/view/en/3RA2210-0DD15-2BB4/all

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RA2210-0DD15-2BB4}}$ 







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