## **Product data sheet**



LOAD FEEDER FUSELESS REVERSING DUTY,
AC 400V, SZ S00, 1.4. . .2A,
AC 230V SPRING-LOADED CONNECTION FOR RAILMOUNTING,
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  | 2.3                         |
| 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            |   | <u>3RV2011-1BA20</u> |
| <ul> <li>of the contactor included in the scope of supply</li> </ul> |   | 3RT2015-2AP02        |
| of the link module included in the scope of supply                   |   | 3RA2911-2AA00        |
| Design of the switching contact                                      |   | mechanical           |
| Type of the motor protection   |   | bimetal              |
| Adjustable response current  |   |                      |
| of the current-dependent overload release                            | Α | 1.4 2                |
| 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  |   |                      |

| 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   | 2      |
| • at AC-2 / at 400 V / rated value                  | Α   | 1.9    |
| • at AC-3 / at 400 V / rated value                  | Α   | 1.9    |
| • at AC-4 / at 400 V / rated value                  | Α   | 1.9    |
| Service power                                       |     |        |
| • at AC-2 / at 400 V / rated value                  | W   | 750    |
| • at AC-3   |     |        |
| • at 400 V / rated value                            | W   | 750    |
| • at 500 V / rated value                            | W   | 750    |
| • at 690 V / rated value                            | W   | 1,100  |
| • at AC-4 / at 400 V / rated value                  | W   | 750    |
| 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   |          | AC   |
| Control supply voltage frequency   | _        | AC   |
| • 1 / rated value  | Hz       | 50   |
| Control supply voltage / 1   |          | 30   |
| • at 50 Hz / for AC / rated value  | V        | 230  |
| • at 60 Hz / for AC / rated value  | V        | 230  |
| Apparent holding power / of the solenoid / for AC  |          | 4.2  |
| Inductive power factor / with the pull-in power of the coil  |          | 0.25   |
| mudelive power ractor / with the pull-in power of the con  |          | 0.23   |
| 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 (Icu)  | _        |  |
| • at 400 V / rated value   |          |  |
| at 500 V / rated value   | А        | 100,000  |
| at 500 v / ration value  | A<br>A   | 100,000<br>100,000   |
| • at 690 V / rated value   |          |  |
|  | Α        | 100,000  |
| • at 690 V / rated value   | Α        | 100,000  |
| • at 690 V / rated value  Installation/mounting/dimensions:  | Α        | 100,000<br>10,000  |
| • at 690 V / rated value  Installation/mounting/dimensions:  Built in orientation  | Α        | 100,000  10,000  vertical screw and snap-on mounting onto 35 mm standard                       |
| • at 690 V / rated value  Installation/mounting/dimensions:  Built in orientation  Type of mounting  | A<br>A   | 100,000  10,000  vertical screw and snap-on mounting onto 35 mm standard mounting rail         |
| • at 690 V / rated value  Installation/mounting/dimensions:  Built in orientation  Type of mounting  Width   | A<br>A   | 100,000  10,000  vertical screw and snap-on mounting onto 35 mm standard mounting rail  90     |
| • at 690 V / rated value  Installation/mounting/dimensions:  Built in orientation  Type of mounting  Width  Height   | A<br>A   | 100,000  10,000  vertical screw and snap-on mounting onto 35 mm standard mounting rail  90 204 |
| • at 690 V / rated value  Installation/mounting/dimensions:  Built in orientation  Type of mounting  Width  Height  Depth  | A<br>A   | 100,000  10,000  vertical screw and snap-on mounting onto 35 mm standard mounting rail  90 204 |
| • at 690 V / rated value  Installation/mounting/dimensions:  Built in orientation  Type of mounting  Width  Height  Depth  Distance, to be maintained, to the ranks assembly             | A A      | vertical screw and snap-on mounting onto 35 mm standard mounting rail 90 204 97.1              |
| • at 690 V / rated value  Installation/mounting/dimensions:  Built in orientation  Type of mounting  Width  Height  Depth  Distance, to be maintained, to the ranks assembly  • forwards | MM mm mm | 100,000  vertical screw and snap-on mounting onto 35 mm standard mounting rail  90  204  97.1  |

| • 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                                      | spring-loaded terminals |
| <ul> <li>for auxiliary and control current circuit</li> </ul> | spring-loaded terminals |
| Type of the connectable conductor cross-section               |                         |
| • for main contacts   |                         |
| • solid   | 2x (0.5 4 mm²)          |
| • stranded  | 2x (0.5 4 mm2)          |
| • finely stranded   |                         |
| <ul> <li>with conductor end processing</li> </ul>             | 2x (0.5 2.5 mm²)        |
| <ul> <li>without conductor final cutting</li> </ul>           | 2x (0.5 2.5 mm²)        |
| • for AWG conductors / for main contacts                      | 2x (20 12)              |
| for auxiliary contacts  |                         |
| • solid   | 2x (0.5 4 mm²)          |
| • finely stranded   |                         |
| <ul> <li>with conductor end processing</li> </ul>             | 2x (0.5 2.5 mm²)        |
| <ul> <li>without conductor final cutting</li> </ul>           | 2x (0.5 2.5 mm²)        |
| • for AWG conductors / for auxiliary contacts                 | 2x (20 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  |    |             |
|---|----|-------------|
| yielded mechanical performance (hp)                                   |    |             |
| <ul> <li>for single-phase squirrel cage motors</li> </ul>             |    |             |
| at 230 V / rated value  | hp | 0.125       |
| for three-phase squirrel cage motors                                  |    |             |
| • at 460/480 V / rated value  | hp | 0.75        |
| • at 575/600 V / rated value  | hp | 1           |
| Operating current (FLA) / for three-phase squirrel cage motors        |    |             |
| • at 480 V / rated value  | Α  | 2           |
| at 600 V / rated value  | Α  | 2           |
| 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          |
| <ul> <li>with high demand rate / according to SN 31920</li> </ul> | %   | 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,...)

 $\underline{\text{http://www.siemens.com/industrial-controls/catalogs}}$ 

Industry Mall (Online ordering system)

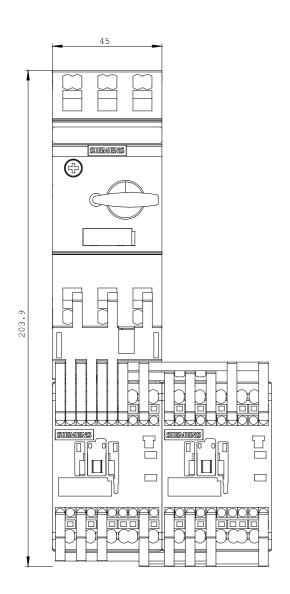
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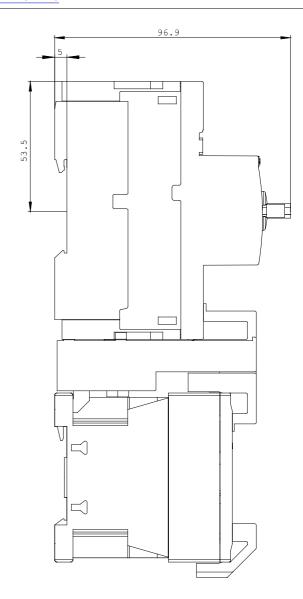
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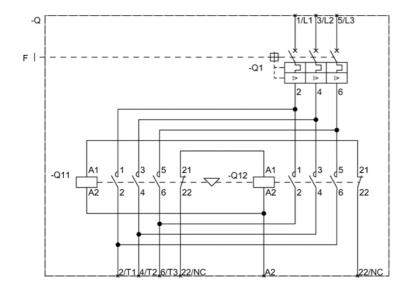
http://www.siemens.com/cax

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RA2210-1BE15-2AP0







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