



LOAD FEEDER FUSELESS REVERSING DUTY,  
AC 400V, SZ S0, 5,5. . .8A,  
AC 230V SCREW CONNECTION FOR BUSBAR SYSTEMS  
60MM TYPE OF COORDINATION 2,  
IQ = 150KA (ALSO FULFILLS TYPE OF COORDINATION 1)  
1NO+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  |    | 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 <ul style="list-style-type: none"> <li>during transport</li> <li>during storage</li> <li>during operating</li> </ul>   | °C | -55 ... 80                  |
|  | °C | -55 ... 80                  |
|  | °C | -20 ... 60                  |
| Impulse voltage resistance / rated value   | kV | 6                           |
| Active power loss / per conductor / typical  | W  | 3.5                         |
| Item designation <ul style="list-style-type: none"> <li>according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> <li>according to DIN EN 61346-2</li> </ul> |    | Q                           |
|  |    | Q                           |
| Type of assignment   |    | 2                           |

|   |   |                               |
|---|---|-------------------------------|
| <b>Mechanical operating cycles as operating time / of the contactor</b> |   |                               |
| • typical   |   | 10,000,000                    |
| <b>Manufacturer article number</b>                                      |   |                               |
| • of the circuit-breakers included in the scope of supply               |   | <a href="#">3RV2011-1HA10</a> |
| • of the contactor included in the scope of supply                      |   | <a href="#">3RT2024-1AP00</a> |
| • of the RS applied assembly kit  |   | <a href="#">8US1250-5AT10</a> |
| • of the link module included in the scope of supply                    |   | <a href="#">3RA2921-1AA00</a> |
| • of the busbar adapter included in the scope of supply                 |   | <a href="#">8US1251-5NT10</a> |
| <b>Design of the switching contact</b>                                  |   | mechanical                    |
| <b>Type of the motor protection</b>                                     |   | bimetal                       |
| <b>Adjustable response current</b>                                      |   |                               |
| • of the current-dependent overload release                             | A | 5.5 ... 8                     |

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

|  |     |        |
|--|-----|--------|
| <b>Main circuit:</b>                                       |     |        |
| <b>Number of poles / for main current circuit</b>          |     | 3      |
| <b>Number of NC contacts / for main contacts</b>           |     | 0      |
| <b>Number of NO contacts / for main contacts</b>           |     | 3      |
| <b>Operating voltage / at AC-3 / rated value / maximum</b> | V   | 690    |
| <b>Operating current</b>                                   |     |        |
| • at AC-1 / at 400 V / rated value                         | A   | 8      |
| • at AC-2 / at 400 V / rated value                         | A   | 6.5    |
| • at AC-3 / at 400 V / rated value                         | A   | 6.5    |
| • at AC-4 / at 400 V / rated value                         | A   | 6.5    |
| <b>Service power</b>                                       |     |        |
| • at AC-2 / at 400 V / rated value                         | W   | 3,000  |
| • at AC-3  |     |        |
| • at 400 V / rated value                                   | W   | 3,000  |
| • at 500 V / rated value                                   | W   | 4,000  |
| • at 690 V / rated value                                   | W   | 5,500  |
| • at AC-4 / at 400 V / rated value                         | W   | 3,000  |
| <b>Off-load operating frequency</b>                        | 1/h | 10,000 |
| <b>Frequency of operation</b>                              |     |        |

- at AC-1 / according to IEC 60947-6-2 / maximum
- at AC-2 / according to IEC 60947-6-2 / maximum
- at AC-3 / according to IEC 60947-6-2 / maximum
- at AC-4 / according to IEC 60947-6-2 / maximum

|     |       |
|-----|-------|
| 1/h | 1,000 |
| 1/h | 1,000 |
| 1/h | 1,000 |
| 1/h | 300   |

#### Control circuit:

|   |     |      |
|---|-----|------|
| Type of voltage / of the controlled supply voltage          |     | AC   |
| Control supply voltage frequency                            |     |      |
| • 1 / rated value   | Hz  | 50   |
| Control supply voltage / 1                                  |     |      |
| • 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           | V·A | 8.5  |
| Inductive power factor / with the pull-in power of the coil |     | 0.25 |

#### 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                            | A | 100,000          |
| • at 500 V / rated value                            | A | 42,000           |
| • at 690 V / rated value                            | A | 4,000            |

#### Installation/mounting/dimensions:

|   |    |  |
|---|----|--|
| Built in orientation                              |    | vertical                               |
| Type of mounting                                  |    | for snapping onto 60 mm busbar systems |
| Width   | mm | 90                                     |
| Height  | mm | 260                                    |
| Depth   | mm | 155.1                                  |
| Center line spacing                               | mm | 60                                     |
| Distance, to be maintained, to the ranks assembly |    |  |
| • forwards  | mm | 10                                     |
| • backwards                                       | mm | 0                                      |

|  |    |    |
|--|----|----|
| • upwards  | mm | 30 |
| • downwards  | mm | 30 |
| • sideways   | mm | 0  |
| <b>Distance, to be maintained, to earthed part</b>     |    |    |
| • forwards   | mm | 10 |
| • backwards  | mm | 0  |
| • upwards  | mm | 30 |
| • downwards  | mm | 10 |
| • sideways   | mm | 9  |
| <b>Distance, to be maintained, conductive elements</b> |    |    |
| • forwards   | mm | 10 |
| • backwards  | mm | 0  |
| • upwards  | mm | 30 |
| • downwards  | mm | 10 |
| • sideways   | mm | 9  |

#### Connections:

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

#### Certificates/approvals:

|   |  |                     |
|---|--|---------------------|
| <b>Verification of suitability</b>        |  | CE / UL / CSA / CCC |
| <b>Varification of suitability / ATEX</b> |  | No                  |

|                                 |                                       |                          |
|---------------------------------|---------------------------------------|--------------------------|
| <b>General Product Approval</b> | <b>For use in hazardous locations</b> | <b>Test Certificates</b> |
|---------------------------------|---------------------------------------|--------------------------|

[ROSTEST](#)



[DEKRA EXAM,](#)  
[DMT](#)

[Manufacturer](#)

#### Shipping Approval

**other**



ABS



PRS



RINA

[Manufacturer](#)

[other](#)

#### UL/CSA ratings

##### yielded mechanical performance (hp)

- for single-phase squirrel cage motors
  - at 110/120 V / rated value
- for three-phase squirrel cage motors
  - at 220/230 V / rated value
  - at 460/480 V / rated value
  - at 575/600 V / rated value

|    |       |
|----|-------|
| hp | 0.333 |
| hp | 2     |
| hp | 5     |
| hp | 5     |

##### Operating current (FLA) / for three-phase squirrel cage motors

- at 480 V / rated value
- at 600 V / rated value

|   |   |
|---|---|
| A | 8 |
| A | 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 250

##### Proportion of dangerous failures

- with low demand rate / according to SN 31920
- with high demand rate / according to SN 31920

|   |    |
|---|----|
| % | 40 |
| % | 75 |

##### T1 value / for proof test interval or service life

- according to IEC 61508

a 10

##### Protection against electrical shock

finger-safe

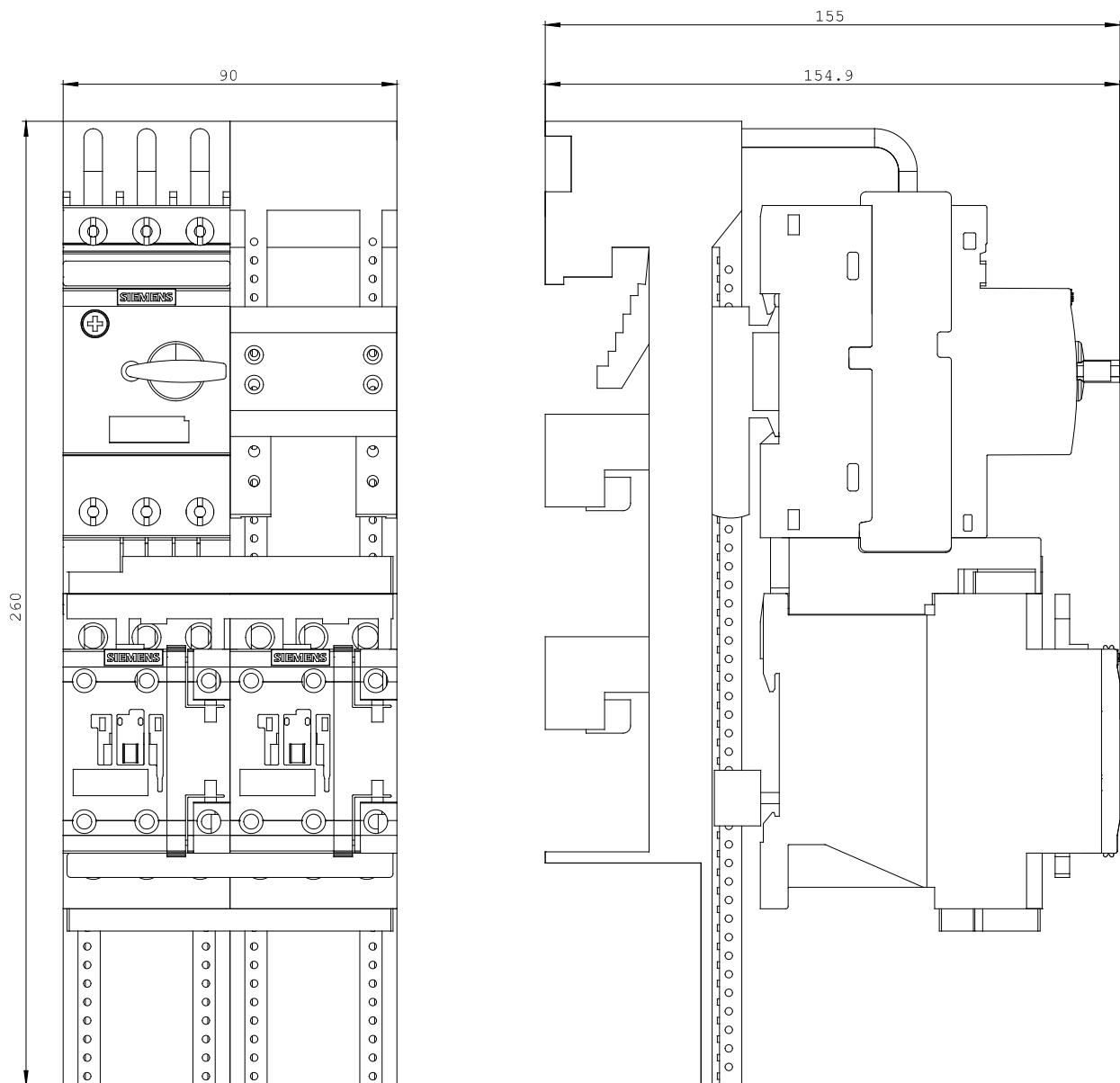
#### Further information:

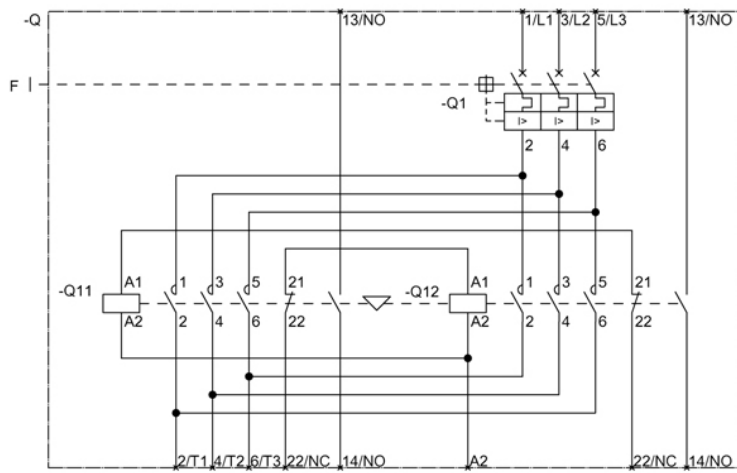
##### Information- and Downloadcenter (Catalogs, Brochures,...)

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

##### Industry Mall (Online ordering system)

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





last change:

Oct 24, 2011