



Reversing contactor assembly for 3RA27 AC-3, 4 kW/400 V, 24 V DC 3-pole, Size S00 Spring-type terminal electrical and mechanical interlock with voltage tap

|                                      |                                    |
|--------------------------------------|------------------------------------|
| <b>product brand name</b>            | SIRIUS                             |
| <b>product designation</b>           | Reversing contactor assembly       |
| <b>product type designation</b>      | 3RA23                              |
| <b>manufacturer's article number</b> |                                    |
| • 1 of the supplied contactor        | <a href="#">3RT2016-2BB42-0CC0</a> |
| • 2 of the supplied contactor        | <a href="#">3RT2016-2BB42</a>      |
| • of the supplied RH assembly kit    | <a href="#">3RA2913-2AA2</a>       |

### General technical data

|                                                              |                            |
|--------------------------------------------------------------|----------------------------|
| <b>size of contactor</b>                                     | S00                        |
| product extension auxiliary switch                           | Yes                        |
| <b>shock resistance at rectangular impulse</b>               |                            |
| • at AC                                                      | 6,7g / 5 ms, 4,2g / 10 ms  |
| • at DC                                                      | 6,7g / 5 ms, 4,2g / 10 ms  |
| <b>shock resistance with sine pulse</b>                      |                            |
| • at AC                                                      | 10,5g / 5 ms, 6,6g / 10 ms |
| • at DC                                                      | 10,5g / 5 ms, 6,6g / 10 ms |
| <b>mechanical service life (switching cycles)</b>            |                            |
| • of contactor typical                                       | 10 000 000                 |
| • of the contactor with added auxiliary switch block typical | 10 000 000                 |
| <b>reference code according to IEC 81346-2</b>               | Q                          |
| <b>Substance Prohibittance (Date)</b>                        | 10/01/2009                 |

### Ambient conditions

|                                                         |                |
|---------------------------------------------------------|----------------|
| installation altitude at height above sea level maximum | 2 000 m        |
| <b>ambient temperature</b>                              |                |
| • during operation                                      | -25 ... +60 °C |
| • during storage                                        | -55 ... +80 °C |

### Main circuit

|                                                 |       |
|-------------------------------------------------|-------|
| <b>number of poles for main current circuit</b> | 3     |
| <b>number of NO contacts for main contacts</b>  | 3     |
| <b>number of NC contacts for main contacts</b>  | 0     |
| <b>operating voltage</b>                        |       |
| • at AC-3 rated value maximum                   | 690 V |
| • at AC-3e rated value maximum                  | 690 V |
| <b>operational current</b>                      |       |
| • at AC-3                                       |       |
| — at 400 V rated value                          | 9 A   |
| — at 500 V rated value                          | 7.7 A |
| — at 690 V rated value                          | 6.7 A |
| • at AC-3e                                      |       |
| — at 400 V rated value                          | 9 A   |
| — at 500 V rated value                          | 7.7 A |

|                                                                 |                                                                                                                                      |
|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| — at 690 V rated value                                          | 6.7 A                                                                                                                                |
| <b>operating power</b>                                          |                                                                                                                                      |
| • at AC-3                                                       |                                                                                                                                      |
| — at 400 V rated value                                          | 4 kW                                                                                                                                 |
| — at 500 V rated value                                          | 4 kW                                                                                                                                 |
| — at 690 V rated value                                          | 5.5 kW                                                                                                                               |
| • at AC-3e                                                      |                                                                                                                                      |
| — at 400 V rated value                                          | 4 kW                                                                                                                                 |
| — at 690 V rated value                                          | 5.5 kW                                                                                                                               |
| • at AC-4 at 400 V rated value                                  | 4 kW                                                                                                                                 |
| <b>operating frequency</b>                                      |                                                                                                                                      |
| • at AC-3 maximum                                               | 750 1/h                                                                                                                              |
| • at AC-3e maximum                                              | 750 1/h                                                                                                                              |
| <b>Control circuit/ Control</b>                                 |                                                                                                                                      |
| <b>type of voltage of the control supply voltage</b>            | DC                                                                                                                                   |
| <b>control supply voltage 1</b>                                 |                                                                                                                                      |
| • at DC rated value                                             | 24 V                                                                                                                                 |
| <b>closing power of magnet coil at DC</b>                       | 4 W                                                                                                                                  |
| <b>holding power of magnet coil at DC</b>                       | 4 W                                                                                                                                  |
| <b>Auxiliary circuit</b>                                        |                                                                                                                                      |
| <b>number of NC contacts for auxiliary contacts</b>             |                                                                                                                                      |
| • per direction of rotation                                     | 1                                                                                                                                    |
| <b>number of NO contacts for auxiliary contacts</b>             |                                                                                                                                      |
| • per direction of rotation                                     | 0                                                                                                                                    |
| <b>contact reliability of auxiliary contacts</b>                | < 1 error per 100 million operating cycles                                                                                           |
| <b>UL/CSA ratings</b>                                           |                                                                                                                                      |
| <b>full-load current (FLA) for 3-phase AC motor</b>             |                                                                                                                                      |
| • at 480 V rated value                                          | 7.6 A                                                                                                                                |
| • at 600 V rated value                                          | 9 A                                                                                                                                  |
| <b>yielded mechanical performance [hp] for 3-phase AC motor</b> |                                                                                                                                      |
| • at 200/208 V rated value                                      | 2 hp                                                                                                                                 |
| • at 220/230 V rated value                                      | 3 hp                                                                                                                                 |
| • at 460/480 V rated value                                      | 5 hp                                                                                                                                 |
| • at 575/600 V rated value                                      | 7.5 hp                                                                                                                               |
| <b>contact rating of auxiliary contacts according to UL</b>     | A600 / Q600                                                                                                                          |
| <b>Short-circuit protection</b>                                 |                                                                                                                                      |
| <b>design of the fuse link</b>                                  |                                                                                                                                      |
| • for short-circuit protection of the main circuit              |                                                                                                                                      |
| — with type of coordination 1 required                          | gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A                                                                                              |
| — with type of assignment 2 required                            | gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 20 A                                                                                              |
| • for short-circuit protection of the auxiliary switch required | fuse gG: 10 A                                                                                                                        |
| <b>Installation/ mounting/ dimensions</b>                       |                                                                                                                                      |
| <b>mounting position</b>                                        | +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface |
| <b>fastening method</b>                                         | screw and snap-on mounting onto 35 mm DIN rail                                                                                       |
| <b>height</b>                                                   | 84 mm                                                                                                                                |
| <b>width</b>                                                    | 90 mm                                                                                                                                |
| <b>depth</b>                                                    | 83 mm                                                                                                                                |
| <b>required spacing</b>                                         |                                                                                                                                      |
| • with side-by-side mounting                                    |                                                                                                                                      |
| — forwards                                                      | 6 mm                                                                                                                                 |
| — backwards                                                     | 0 mm                                                                                                                                 |
| — upwards                                                       | 6 mm                                                                                                                                 |
| — downwards                                                     | 6 mm                                                                                                                                 |
| — at the side                                                   | 6 mm                                                                                                                                 |
| • for grounded parts                                            |                                                                                                                                      |
| — forwards                                                      | 6 mm                                                                                                                                 |
| — backwards                                                     | 0 mm                                                                                                                                 |
| — upwards                                                       | 6 mm                                                                                                                                 |
| — at the side                                                   | 6 mm                                                                                                                                 |
| — downwards                                                     | 6 mm                                                                                                                                 |

|                  |      |
|------------------|------|
| • for live parts |      |
| — forwards       | 6 mm |
| — backwards      | 0 mm |
| — upwards        | 6 mm |
| — downwards      | 6 mm |
| — at the side    | 6 mm |

## Connections/ Terminals

### type of electrical connection

|                                       |                         |
|---------------------------------------|-------------------------|
| • for main current circuit            | spring-loaded terminals |
| • for auxiliary and control circuit   | spring-loaded terminals |
| • at contactor for auxiliary contacts | Spring-type terminals   |
| • of magnet coil                      | Spring-type terminals   |

### type of connectable conductor cross-sections

|                                               |                                   |
|-----------------------------------------------|-----------------------------------|
| • for main contacts                           |                                   |
| — solid                                       | 2x (0.5 ... 4 mm <sup>2</sup> )   |
| — solid or stranded                           | 2x (0.5 ... 4 mm <sup>2</sup> )   |
| — finely stranded with core end processing    | 2x (0.5 ... 2.5 mm <sup>2</sup> ) |
| — finely stranded without core end processing | 2x (0.5 ... 2.5 mm <sup>2</sup> ) |
| • at AWG cables for main contacts             | 1x (20 ... 12)                    |

### type of connectable conductor cross-sections

|                                               |                                   |
|-----------------------------------------------|-----------------------------------|
| • for auxiliary contacts                      |                                   |
| — solid or stranded                           | 2x (0.5 ... 2.5 mm <sup>2</sup> ) |
| — finely stranded with core end processing    | 2x (0.5 ... 1.5 mm <sup>2</sup> ) |
| — finely stranded without core end processing | 2x (0.5 ... 1.5 mm <sup>2</sup> ) |
| • at AWG cables for auxiliary contacts        | 2x (20 ... 14)                    |

## Safety related data

|                                                                         |                                                  |
|-------------------------------------------------------------------------|--------------------------------------------------|
| B10 value with high demand rate according to SN 31920                   | 1 000 000                                        |
| <b>proportion of dangerous failures</b>                                 |                                                  |
| • with low demand rate according to SN 31920                            | 40 %                                             |
| • with high demand rate according to SN 31920                           | 75 %                                             |
| failure rate [FIT] with low demand rate according to SN 31920           | 100 FIT                                          |
| T1 value for proof test interval or service life according to IEC 61508 | 20 y                                             |
| <b>protection class IP on the front according to IEC 60529</b>          | IP20                                             |
| <b>touch protection on the front according to IEC 60529</b>             | finger-safe, for vertical contact from the front |

## Communication/ Protocol

|                                                         |     |
|---------------------------------------------------------|-----|
| <b>product function bus communication</b>               | Yes |
| protocol is supported AS-Interface protocol             | No  |
| product function control circuit interface with IO link | No  |

## Certificates/ approvals

### General Product Approval

### Declaration of Conformity



[Confirmation](#)



### Test Certificates

### Marine / Shipping

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



### Marine / Shipping

### other

### Railway

### Dangerous Good



[Confirmation](#)

[Vibration and Shock](#)

[Transport Information](#)

#### Further information

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

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2316-8XE30-2BB4>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2316-8XE30-2BB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2316-8XE30-2BB4>

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

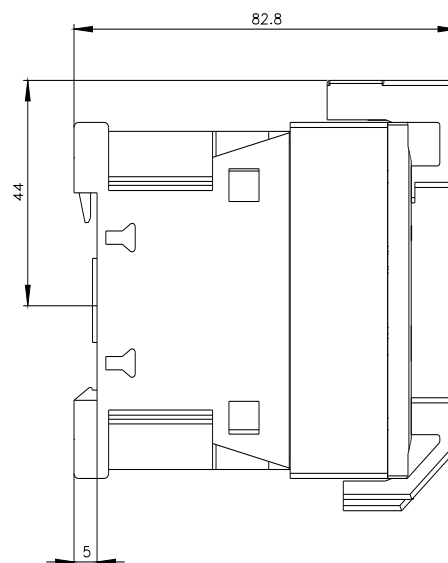
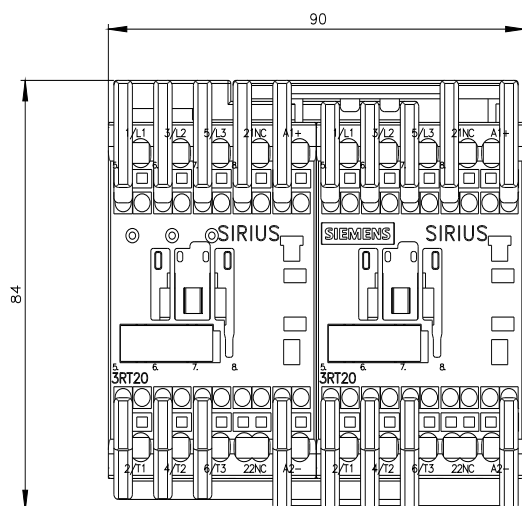
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2316-8XE30-2BB4&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2316-8XE30-2BB4&lang=en)

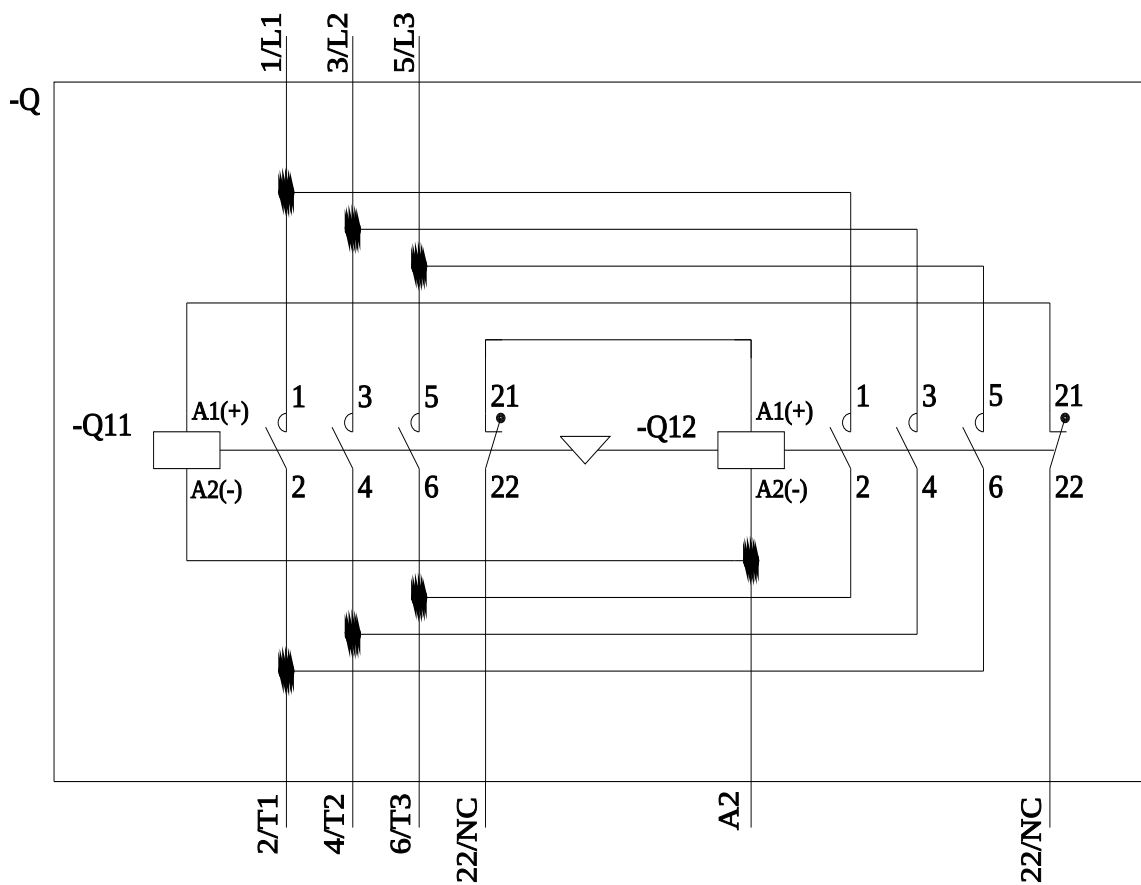
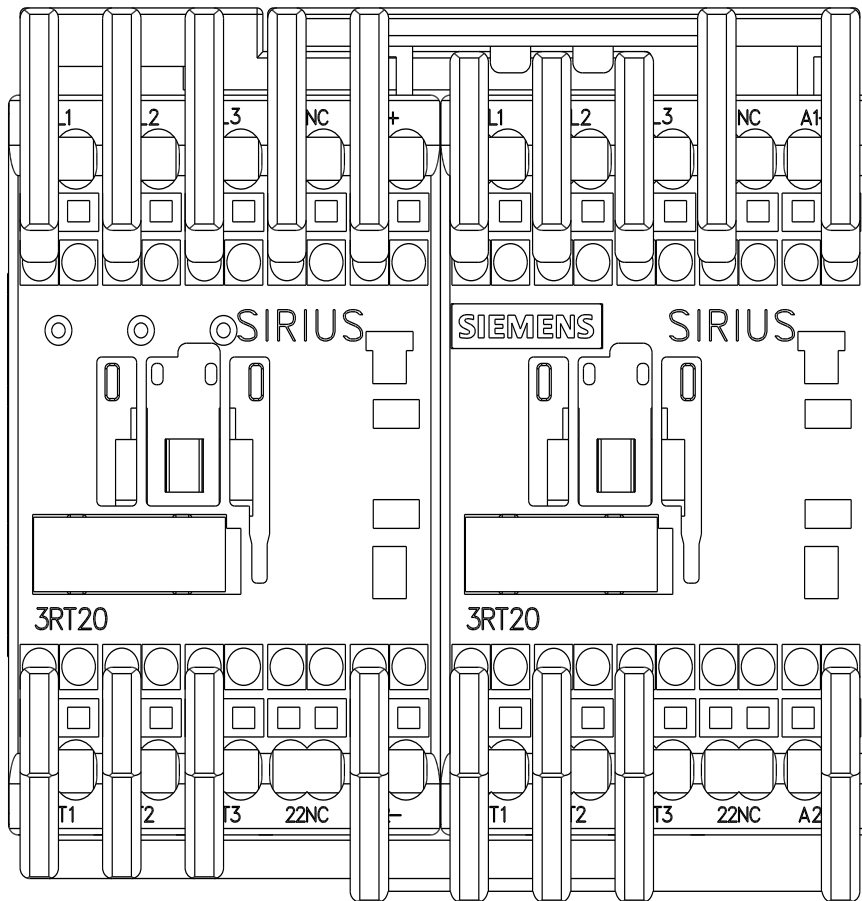
Characteristic: Tripping characteristics, I<sub>t</sub>, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2316-8XE30-2BB4/char>

Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2316-8XE30-2BB4&objecttype=14&gridview=view1>





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