



reversing contactor assembly, AC-3e/AC-3, 80 A, 37 kW / 400 V, 3-pole, 20-33 V AC/DC, 50/60 Hz, screw terminal, electrical and mechanical interlock, auxiliary contacts: 2 x 1 NO, with voltage tap for 3RA27

|                                                              |                                    |
|--------------------------------------------------------------|------------------------------------|
| product brand name                                           | SIRIUS                             |
| product designation                                          | Reversing contactor assembly       |
| product type designation                                     | 3RA23                              |
| manufacturer's article number                                |                                    |
| • 1 of the supplied contactor                                | <a href="#">3RT2045-1NB30-0CC0</a> |
| • 2 of the supplied contactor                                | <a href="#">3RT2045-1NB30</a>      |
| • of the supplied RS assembly kit                            | <a href="#">3RA2943-2AA1</a>       |
| <b>General technical data</b>                                |                                    |
| size of contactor                                            | S3                                 |
| product extension auxiliary switch                           | Yes                                |
| shock resistance at rectangular impulse                      |                                    |
| • at AC                                                      | 6.7 g / 5 ms, 4.0 g / 10 ms        |
| • at DC                                                      | 6.7 g / 5 ms, 4g / 10 ms           |
| shock resistance with sine pulse                             |                                    |
| • at AC                                                      | 10.6 g / 5 ms, 6.3 g / 10 ms       |
| • at DC                                                      | 10.6 g / 5 ms, 6.3 g / 10 ms       |
| mechanical service life (operating cycles)                   |                                    |
| • of contactor typical                                       | 10 000 000                         |
| • of the contactor with added auxiliary switch block typical | 10 000 000                         |
| reference code according to IEC 81346-2                      | Q                                  |
| Substance Prohibitance (Date)                                | 03/01/2017                         |
| <b>Ambient conditions</b>                                    |                                    |
| installation altitude at height above sea level maximum      | 2 000 m                            |
| ambient temperature                                          |                                    |
| • during operation                                           | -25 ... +60 °C                     |
| • during storage                                             | -55 ... +80 °C                     |
| <b>Main circuit</b>                                          |                                    |
| number of poles for main current circuit                     | 3                                  |
| number of NO contacts for main contacts                      | 0                                  |
| number of NC contacts for main contacts                      | 0                                  |
| operating voltage                                            |                                    |
| • at AC-3 rated value maximum                                | 1 000 V                            |
| • at AC-3e rated value maximum                               | 1 000 V                            |
| operational current                                          |                                    |
| • at AC-3                                                    |                                    |
| — at 400 V rated value                                       | 80 A                               |
| — at 500 V rated value                                       | 80 A                               |
| — at 690 V rated value                                       | 58 A                               |
| • at AC-3e                                                   |                                    |
| — at 400 V rated value                                       | 80 A                               |

|                                                                                       |                                                                                                                                      |
|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| — at 500 V rated value                                                                | 80 A                                                                                                                                 |
| — at 690 V rated value                                                                | 58 A                                                                                                                                 |
| <b>operating power</b>                                                                |                                                                                                                                      |
| • at AC-3                                                                             |                                                                                                                                      |
| — at 400 V rated value                                                                | 37 kW                                                                                                                                |
| — at 500 V rated value                                                                | 45 kW                                                                                                                                |
| — at 690 V rated value                                                                | 55 kW                                                                                                                                |
| • at AC-3e                                                                            |                                                                                                                                      |
| — at 400 V rated value                                                                | 37 kW                                                                                                                                |
| — at 690 V rated value                                                                | 55 kW                                                                                                                                |
| • at AC-4 at 400 V rated value                                                        | 37 kW                                                                                                                                |
| <b>operating frequency</b>                                                            |                                                                                                                                      |
| • at AC-3 maximum                                                                     | 1 000 1/h                                                                                                                            |
| • at AC-3e maximum                                                                    | 1 000 1/h                                                                                                                            |
| <b>Control circuit/ Control</b>                                                       |                                                                                                                                      |
| <b>type of voltage of the control supply voltage</b>                                  | AC/DC                                                                                                                                |
| <b>control supply voltage 1 at AC</b>                                                 |                                                                                                                                      |
| • at 50 Hz                                                                            | 20 ... 33 V                                                                                                                          |
| • at 60 Hz                                                                            | 20 ... 33 V                                                                                                                          |
| <b>control supply voltage 1</b>                                                       |                                                                                                                                      |
| • at DC                                                                               | 20 ... 33 V                                                                                                                          |
| <b>operating range factor control supply voltage rated value of magnet coil at AC</b> |                                                                                                                                      |
| • at 50 Hz                                                                            | 0.8 ... 1.1                                                                                                                          |
| • at 60 Hz                                                                            | 0.8 ... 1.1                                                                                                                          |
| <b>design of the surge suppressor</b>                                                 | with varistor                                                                                                                        |
| <b>apparent pick-up power of magnet coil at AC</b>                                    |                                                                                                                                      |
| • at 50 Hz                                                                            | 163 VA                                                                                                                               |
| • at 60 Hz                                                                            | 163 VA                                                                                                                               |
| <b>apparent holding power of magnet coil at AC</b>                                    |                                                                                                                                      |
| • at 50 Hz                                                                            | 3.1 VA                                                                                                                               |
| • at 60 Hz                                                                            | 3.1 VA                                                                                                                               |
| <b>closing power of magnet coil at DC</b>                                             | 76 W                                                                                                                                 |
| <b>holding power of magnet coil at DC</b>                                             | 1.8 W                                                                                                                                |
| <b>Auxiliary circuit</b>                                                              |                                                                                                                                      |
| <b>number of NC contacts for auxiliary contacts</b>                                   |                                                                                                                                      |
| • per direction of rotation                                                           | 0                                                                                                                                    |
| <b>number of NO contacts for auxiliary contacts</b>                                   |                                                                                                                                      |
| • per direction of rotation                                                           | 1                                                                                                                                    |
| • instantaneous contact                                                               | 2                                                                                                                                    |
| <b>UL/CSA ratings</b>                                                                 |                                                                                                                                      |
| <b>full-load current (FLA) for 3-phase AC motor</b>                                   |                                                                                                                                      |
| • at 480 V rated value                                                                | 77 A                                                                                                                                 |
| • at 600 V rated value                                                                | 62 A                                                                                                                                 |
| <b>yielded mechanical performance [hp] for 3-phase AC motor</b>                       |                                                                                                                                      |
| • at 200/208 V rated value                                                            | 25 hp                                                                                                                                |
| • at 220/230 V rated value                                                            | 30 hp                                                                                                                                |
| • at 460/480 V rated value                                                            | 60 hp                                                                                                                                |
| • at 575/600 V rated value                                                            | 60 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: 355 A                                                                                             |
| — with type of assignment 2 required                                                  | gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 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>                                                                         | 160 mm                                                                                                                               |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <b>width</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 150 mm                                                                                                                                   |
| <b>depth</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 152 mm                                                                                                                                   |
| <b>required spacing</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                          |
| <ul style="list-style-type: none"> <li>• with side-by-side mounting <ul style="list-style-type: none"> <li>— forwards</li> <li>— backwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— backwards</li> <li>— upwards</li> <li>— at the side</li> <li>— downwards</li> </ul> </li> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— backwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> </ul> | 10 mm<br>0 mm<br>10 mm<br>10 mm<br>10 mm<br><br>10 mm<br>0 mm<br>10 mm<br>10 mm<br>10 mm<br><br>10 mm<br>0 mm<br>10 mm<br>10 mm<br>10 mm |

#### Connections/ Terminals

|                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>type of electrical connection</b>                                                                                                                                                                                                                   |                                                                                                                                                                                                                                              |
| <ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary and control circuit</li> <li>• at contactor for auxiliary contacts</li> <li>• of magnet coil</li> </ul>                                                     | screw-type terminals<br>screw-type terminals<br>Screw-type terminals<br>Screw-type terminals                                                                                                                                                 |
| <b>type of connectable conductor cross-sections for main contacts</b>                                                                                                                                                                                  |                                                                                                                                                                                                                                              |
| <ul style="list-style-type: none"> <li>• solid or stranded</li> <li>• finely stranded with core end processing</li> <li>• finely stranded without core end processing</li> </ul>                                                                       | 2x (2.5 ... 16 mm <sup>2</sup> ), 2x (10 ... 50 mm <sup>2</sup> ), 1x (10 ... 70 mm <sup>2</sup> )<br>2x (2.5 ... 35 mm <sup>2</sup> ), 1x (2.5 ... 50 mm <sup>2</sup> )<br>2x (10 ... 35 mm <sup>2</sup> ), 1x (10 ... 50 mm <sup>2</sup> ) |
| <b>type of connectable conductor cross-sections</b>                                                                                                                                                                                                    |                                                                                                                                                                                                                                              |
| <ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• for AWG cables for auxiliary contacts</li> </ul> | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )<br>2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )<br>2x (20 ... 16), 2x (18 ... 14)                                                             |

#### Safety related data

|                                                                                                                                                       |                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| <b>proportion of dangerous failures</b>                                                                                                               |                                                  |
| <ul style="list-style-type: none"> <li>• with low demand rate according to SN 31920</li> <li>• with high demand rate according to SN 31920</li> </ul> | 40 %<br>73 %                                     |
| T1 value for proof test interval or service life according to IEC 61508                                                                               | 20 a                                             |
| <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

|                                 |                                  |                          |
|---------------------------------|----------------------------------|--------------------------|
| <b>General Product Approval</b> | <b>Declaration of Conformity</b> | <b>Test Certificates</b> |
|---------------------------------|----------------------------------|--------------------------|

[Confirmation](#)



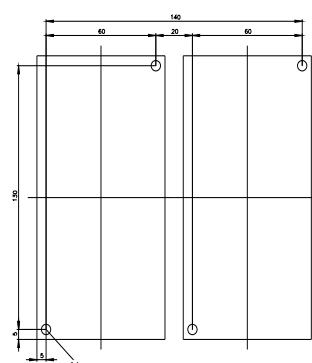
[Type Test Certificates/Test Report](#)

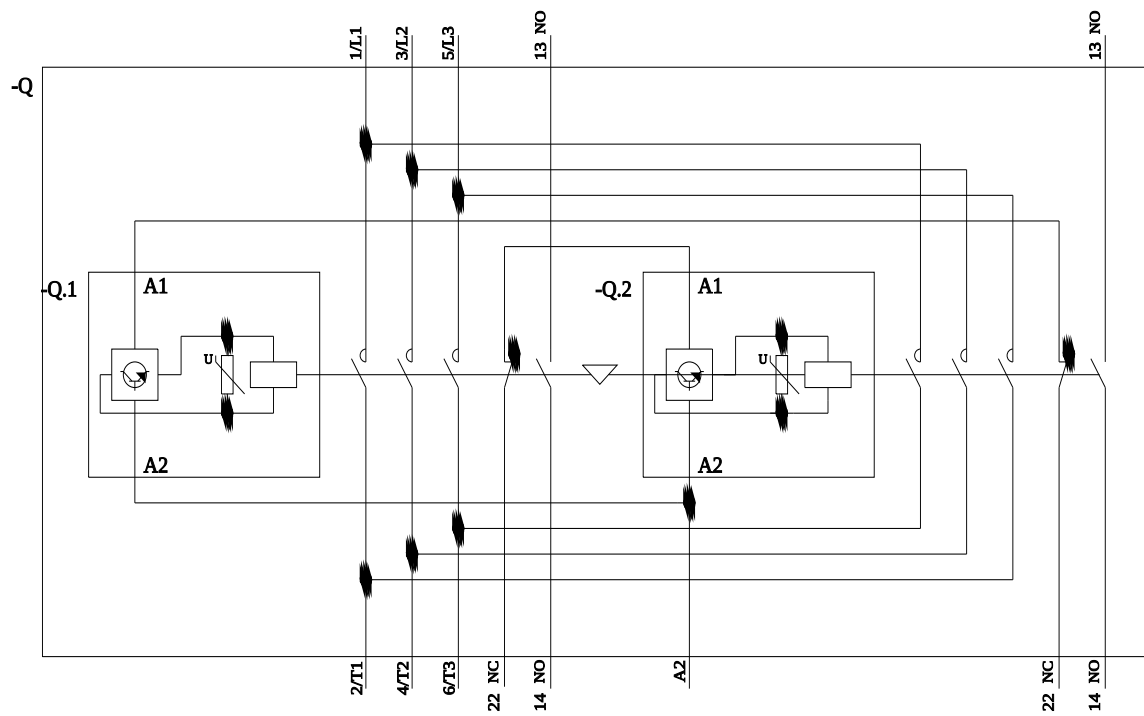
#### Marine / Shipping



### Transport Information

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2345-8XE30-1NB3&objecttype=14&gridview=view1>





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