



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

|   |  |
|---|--|
| <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>  |  |
| <ul style="list-style-type: none"> <li>• 1 of the supplied contactor</li> <li>• 2 of the supplied contactor</li> <li>• of the supplied RH assembly kit</li> </ul> | <a href="#">3RT2016-2FB42</a><br><a href="#">3RT2016-2FB42</a><br><a href="#">3RA2913-2AA2</a> |
| <b>General technical data</b>   |  |
| <b>size of contactor</b>  | S00  |
| product extension auxiliary switch  | Yes  |
| <b>shock resistance at rectangular impulse</b>  |  |
| <ul style="list-style-type: none"> <li>• at AC</li> <li>• at DC</li> </ul>  | 6,7g / 5 ms, 4,2g / 10 ms<br>6,7g / 5 ms, 4,2g / 10 ms   |
| <b>shock resistance with sine pulse</b>   |  |
| <ul style="list-style-type: none"> <li>• at AC</li> <li>• at DC</li> </ul>  | 10,5g / 5 ms, 6,6g / 10 ms<br>10,5g / 5 ms, 6,6g / 10 ms                                       |
| <b>mechanical service life (switching cycles)</b>   |  |
| <ul style="list-style-type: none"> <li>• of contactor typical</li> <li>• of the contactor with added auxiliary switch block typical</li> </ul>                    | 10 000 000<br>10 000 000   |
| <b>reference code according to IEC 81346-2</b>  | Q  |
| <b>Substance Prohibitance (Date)</b>  | 10/01/2009   |
| <b>Ambient conditions</b>   |  |
| installation altitude at height above sea level maximum   | 2 000 m  |
| <b>ambient temperature</b>  |  |
| <ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> </ul>  | -25 ... +60 °C<br>-55 ... +80 °C   |
| <b>Main circuit</b>   |  |
| <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  |
| operating voltage at AC-3 rated value maximum   | 690 V  |
| operational current at AC-3   |  |
| <ul style="list-style-type: none"> <li>• at 400 V rated value</li> <li>• at 500 V rated value</li> <li>• at 690 V rated value</li> </ul>                          | 9 A<br>7.7 A<br>6.7 A  |
| <b>operating power</b>  |  |
| <ul style="list-style-type: none"> <li>• at AC-3</li> <li>— at 400 V rated value</li> </ul>   | 4 kW   |

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| — at 500 V rated value  | 4 kW   |
| — at 690 V rated value  | 5.5 kW   |
| ● at AC-4 at 400 V rated value                                  | 4 kW   |
| operating frequency at AC-3 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>design of the surge suppressor</b>                           | diode  |
| <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>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  |
| yielded mechanical performance [hp] for 3-phase AC motor        |  |
| ● 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 standard mounting 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   |
| <b>Connections/ Terminals</b>                                   |  |
| <b>type of electrical connection</b>                            |  |
| ● for main current circuit                                      | spring-loaded terminals  |

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|---|--|
| <ul style="list-style-type: none"> <li>• for auxiliary and control circuit</li> <li>• at contactor for auxiliary contacts</li> <li>• of magnet coil</li> </ul>  | spring-loaded terminals<br>Spring-type terminals<br>Spring-type terminals  |
| <b>type of connectable conductor cross-sections</b> <ul style="list-style-type: none"> <li>• for main contacts             <ul style="list-style-type: none"> <li>— solid</li> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> <li>— finely stranded without core end processing</li> </ul> </li> <li>• at AWG cables for main contacts</li> </ul> | 2x (0.5 ... 4 mm <sup>2</sup> )<br>2x (0,5 ... 4 mm <sup>2</sup> )<br>2x (0.5 ... 2.5 mm <sup>2</sup> )<br>2x (0.5 ... 2.5 mm <sup>2</sup> )<br>1x (20 ... 12) |
| <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> <li>— finely stranded without core end processing</li> </ul> </li> <li>• at AWG cables for auxiliary contacts</li> </ul>        | 2x (0.5 ... 2.5 mm <sup>2</sup> )<br>2x (0.5 ... 1.5 mm <sup>2</sup> )<br>2x (0.5 ... 1.5 mm <sup>2</sup> )<br>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> <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>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 | Dangerous Good |
|-------------------|-------|----------------|
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[Confirmation](#)

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| Further information |
|---------------------|
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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=3RA2316-8XB30-2FB4>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2316-8XB30-2FB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2316-8XB30-2FB4>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2316-8XB30-2FB4&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2316-8XB30-2FB4&lang=en)

**Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current**

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2316-8XB30-2FB4/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2316-8XB30-2FB4&objecttype=14&gridview=view1>

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