



Reversing contactor assembly AC-3, 37 kW/400 V, 20-33 V AC/DC 3-pole, Size S2 screw terminal electrical and mechanical Interlock 2 NO integrated 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>  |   |
| <ul style="list-style-type: none"> <li>• 1 of the supplied contactor</li> <li>• 2 of the supplied contactor</li> <li>• of the supplied RS assembly kit</li> </ul> | <a href="#">3RT2038-1NB30-0CC0</a><br><a href="#">3RT2038-1NB30</a><br><a href="#">3RA2933-2AA1</a> |
| <b>General technical data</b>   |   |
| <b>size of contactor</b>  | S2  |
| 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>  | 7.7g / 5 ms, 4.5g / 10 ms<br>7.7g / 5 ms, 4.5g / 10 ms  |
| <b>shock resistance with sine pulse</b>   |   |
| <ul style="list-style-type: none"> <li>• at AC</li> <li>• at DC</li> </ul>  | 12g / 5 ms, 7g / 10 ms<br>12g / 5 ms, 7g / 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>  | 10/01/2014  |
| <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>  | 0   |
| <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>                          | 80 A<br>80 A<br>58 A  |
| <b>operating power</b>  |   |
| <ul style="list-style-type: none"> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> </ul> </li> </ul>                             | 37 kW   |

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|---|--|
| — at 500 V rated value  | 37 kW  |
| — at 690 V rated value  | 45 kW  |
| ● at AC-4 at 400 V rated value  | 30 kW  |
| operating frequency at AC-3 maximum   | 500 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  | 40 VA  |
| ● at 60 Hz  | 40 VA  |
| <b>inductive power factor with closing power of the coil</b>                          |  |
| ● at 50 Hz  | 0.64   |
| ● at 60 Hz  | 0.5  |
| <b>apparent holding power of magnet coil at AC</b>                                    |  |
| ● at 50 Hz  | 2 VA   |
| ● at 60 Hz  | 2 VA   |
| <b>inductive power factor with the holding power of the coil</b>                      |  |
| ● at 50 Hz  | 0.36   |
| ● at 60 Hz  | 0.39   |
| <b>closing power of magnet coil at DC</b>   | 23 W   |
| <b>holding power of magnet coil at DC</b>   | 1 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>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  | 65 A   |
| ● at 600 V rated value  | 62 A   |
| <b>yielded mechanical performance [hp] for 3-phase AC motor</b>                       |  |
| ● at 220/230 V rated value  | 20 hp  |
| ● at 460/480 V rated value  | 50 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: 250 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 standard mounting rail   |
| <b>height</b>   | 141 mm   |
| <b>width</b>  | 120 mm   |

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| <b>depth</b>  | 130 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 10 mm</li> <li>— backwards 0 mm</li> <li>— upwards 10 mm</li> <li>— downwards 10 mm</li> <li>— at the side 10 mm</li> </ul> </li> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards 10 mm</li> <li>— backwards 0 mm</li> <li>— upwards 10 mm</li> <li>— at the side 10 mm</li> <li>— downwards 10 mm</li> </ul> </li> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards 10 mm</li> <li>— backwards 0 mm</li> <li>— upwards 10 mm</li> <li>— downwards 10 mm</li> <li>— at the side 10 mm</li> </ul> </li> </ul> |  |
| <b>Connections/ Terminals</b>   |  |
| <b>type of electrical connection</b>  |  |
| <ul style="list-style-type: none"> <li>• for main current circuit screw-type terminals</li> <li>• for auxiliary and control circuit screw-type terminals</li> <li>• at contactor for auxiliary contacts Screw-type terminals</li> <li>• of magnet coil Screw-type terminals</li> </ul>  |  |
| <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 2x (1 ... 35 mm<sup>2</sup>), 1x (1 ... 50 mm<sup>2</sup>)</li> <li>— solid or stranded 2x (1 ... 35 mm<sup>2</sup>), 1x (1 ... 50 mm<sup>2</sup>)</li> <li>— finely stranded with core end processing 2x (1 ... 25 mm<sup>2</sup>), 1x (1 ... 35 mm<sup>2</sup>)</li> </ul> </li> <li>• at AWG cables for main contacts 2x (18 ... 2), 1x (18 ... 1)</li> </ul>  |  |
| <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 2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)</li> <li>— finely stranded with core end processing 2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)</li> </ul> </li> <li>• at AWG cables for auxiliary contacts 2x (20 ... 16), 2x (18 ... 14)</li> </ul>  |  |
| <b>Safety related data</b>  |  |
| 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 40 %</li> <li>• with high demand rate according to SN 31920 73 %</li> </ul>   |  |
| 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 |
| <b>Communication/ Protocol</b>  |  |
| <b>product function bus communication</b>   | Yes  |
| protocol is supported AS-Interface protocol   | No   |
| product function control circuit interface with IO link   | No   |
| <b>Certificates/ approvals</b>  |  |
| <b>General Product Approval</b>   | <b>Declaration of Conformity</b>                 |



[Confirmation](#)



**Test Certificates****Marine / Shipping**

[Type Test Certificates/Test Report](#)

**Marine / Shipping****other****Dangerous Good**

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**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=3RA2338-8XE30-1NB3>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2338-8XE30-1NB3>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2338-8XE30-1NB3>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2338-8XE30-1NB3&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2338-8XE30-1NB3&lang=en)

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2338-8XE30-1NB3/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2338-8XE30-1NB3&objecttype=14&gridview=view1>

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