

star-delta (weye-delta) combination with IO-Link, AC-3, 75 kW/400 V 20-33 V  
AC/DC Size S3, screw terminal electrical and mechanical interlock 3 NO+3 NC,  
varistor integrated



|                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| product brand name                                      | SIRIUS                                                                                                                                                                                                                                                                                                                                                                                                                        |
| product designation                                     | Contactor assembly for star-delta (weye-delta) start                                                                                                                                                                                                                                                                                                                                                                          |
| product type designation                                | 3RA24                                                                                                                                                                                                                                                                                                                                                                                                                         |
| manufacturer's article number                           | <ul style="list-style-type: none"> <li>• 1 of the supplied contactor <a href="#">3RT2045-1NB30-0CC0</a></li> <li>• 2 of the supplied contactor <a href="#">3RT2045-1NB30</a></li> <li>• 3 of the supplied contactor <a href="#">3RT2036-1NB30</a></li> <li>• of the supplied RS assembly kit <a href="#">3RA2943-2C</a></li> <li>• of the supplied function module for communication <a href="#">3RA2711-1CA00</a></li> </ul> |
| <b>General technical data</b>                           |                                                                                                                                                                                                                                                                                                                                                                                                                               |
| size of contactor                                       | S3                                                                                                                                                                                                                                                                                                                                                                                                                            |
| product extension auxiliary switch                      | No                                                                                                                                                                                                                                                                                                                                                                                                                            |
| shock resistance at rectangular impulse                 | <ul style="list-style-type: none"> <li>• at AC 6.7 g / 5 ms, 4.0 g / 10 ms</li> <li>• at DC 6.7 g / 5 ms, 4g / 10 ms</li> </ul>                                                                                                                                                                                                                                                                                               |
| shock resistance with sine pulse                        | <ul style="list-style-type: none"> <li>• at AC 10.6 g / 5 ms, 6.3 g / 10 ms</li> <li>• at DC 10.6 g / 5 ms, 6.3 g / 10 ms</li> </ul>                                                                                                                                                                                                                                                                                          |
| mechanical service life (operating cycles)              | <ul style="list-style-type: none"> <li>• of contactor typical 10 000 000</li> <li>• of the contactor with added auxiliary switch block typical 10 000 000</li> </ul>                                                                                                                                                                                                                                                          |
| reference code according to IEC 81346-2                 | Q                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Substance Prohibitance (Date)                           | 03/01/2017                                                                                                                                                                                                                                                                                                                                                                                                                    |
| SVHC substance name                                     | Lead - 7439-92-1<br>Lead monoxide (lead oxide) - 1317-36-8<br>2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7<br>2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5<br>Melamine - 108-78-1                                                                                                                                                                                                      |
| Weight                                                  | 5.841 kg                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Ambient conditions</b>                               |                                                                                                                                                                                                                                                                                                                                                                                                                               |
| installation altitude at height above sea level maximum | 2 000 m                                                                                                                                                                                                                                                                                                                                                                                                                       |
| ambient temperature                                     | <ul style="list-style-type: none"> <li>• during operation -25 ... +60 °C</li> <li>• during storage -55 ... +80 °C</li> </ul>                                                                                                                                                                                                                                                                                                  |
| <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                                       | <ul style="list-style-type: none"> <li>• at AC-3 rated value maximum 690 V</li> </ul>                                                                                                                                                                                                                                                                                                                                         |
| operational current                                     |                                                                                                                                                                                                                                                                                                                                                                                                                               |

|                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <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>                                                                                                                                                                                                                                                        | 150 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> <li>— at 690 V rated value</li> </ul> </li> </ul>                                                                                                                                                                                                 | 75 kW<br>110 kW                                                                                                                      |
| <b>operating frequency</b> <ul style="list-style-type: none"> <li>• at AC-3 maximum</li> </ul>                                                                                                                                                                                                                                                                                               | 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> <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>                                                                                                                                                                                                                                                                       | 20 ... 33 V<br>20 ... 33 V                                                                                                           |
| <b>control supply voltage 1 at DC</b>                                                                                                                                                                                                                                                                                                                                                        | 20 ... 33 V                                                                                                                          |
| <b>design of the surge suppressor</b>                                                                                                                                                                                                                                                                                                                                                        | with varistor                                                                                                                        |
| <b>apparent pick-up power of magnet coil at AC</b> <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>                                                                                                                                                                                                                                                          | 328 VA<br>328 VA                                                                                                                     |
| <b>inductive power factor with closing power of the coil</b> <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>                                                                                                                                                                                                                                                | 0.95<br>0.95                                                                                                                         |
| <b>apparent holding power of magnet coil at AC</b> <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>                                                                                                                                                                                                                                                          | 8.2 VA<br>8.2 VA                                                                                                                     |
| <b>inductive power factor with the holding power of the coil</b> <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>                                                                                                                                                                                                                                            | 0.95<br>0.95                                                                                                                         |
| <b>closing power of magnet coil at DC</b>                                                                                                                                                                                                                                                                                                                                                    | 154 W                                                                                                                                |
| <b>holding power of magnet coil at DC</b>                                                                                                                                                                                                                                                                                                                                                    | 5.6 W                                                                                                                                |
| <b>Auxiliary circuit</b>                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                      |
| <b>number of NC contacts for auxiliary contacts</b> <ul style="list-style-type: none"> <li>• instantaneous contact</li> </ul>                                                                                                                                                                                                                                                                | 3                                                                                                                                    |
| <b>number of NO contacts for auxiliary contacts</b> <ul style="list-style-type: none"> <li>• instantaneous contact</li> </ul>                                                                                                                                                                                                                                                                | 3                                                                                                                                    |
| <b>contact reliability of auxiliary contacts</b>                                                                                                                                                                                                                                                                                                                                             | < 1 error per 100 million operating cycles                                                                                           |
| <b>UL/CSA ratings</b>                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                      |
| <b>contact rating of auxiliary contacts according to UL</b>                                                                                                                                                                                                                                                                                                                                  | A600 / Q600                                                                                                                          |
| <b>Short-circuit protection</b>                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                      |
| <b>design of the fuse link</b> <ul style="list-style-type: none"> <li>• for short-circuit protection of the main circuit <ul style="list-style-type: none"> <li>— with type of coordination 1 required</li> <li>— with type of coordination 2 required</li> </ul> </li> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>                                       | gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A<br>gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A<br>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>                                                                                                                                                                                                                                                                                                                                                                                | 180 mm                                                                                                                               |
| <b>width</b>                                                                                                                                                                                                                                                                                                                                                                                 | 220 mm                                                                                                                               |
| <b>depth</b>                                                                                                                                                                                                                                                                                                                                                                                 | 244 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> </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                                                               |

|                  |       |
|------------------|-------|
| — at the side    | 10 mm |
| — downwards      | 10 mm |
| • for live parts |       |
| — forwards       | 10 mm |
| — backwards      | 0 mm  |
| — upwards        | 10 mm |
| — downwards      | 10 mm |
| — at the side    | 10 mm |

#### Connections/ Terminals

|                                                                |                                                                                                    |
|----------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| <b>type of electrical connection</b>                           |                                                                                                    |
| • for main current circuit                                     | screw-type terminals                                                                               |
| • for auxiliary and control circuit                            | screw-type terminals                                                                               |
| • at contactor for auxiliary contacts                          | Screw-type terminals                                                                               |
| • of magnet coil                                               | Screw-type terminals                                                                               |
| type of connectable conductor cross-sections for main contacts |                                                                                                    |
| • solid or stranded                                            | 2x (2.5 ... 16 mm <sup>2</sup> ), 2x (10 ... 50 mm <sup>2</sup> ), 1x (10 ... 70 mm <sup>2</sup> ) |
| • finely stranded with core end processing                     | 2x (2.5 ... 35 mm <sup>2</sup> ), 1x (2.5 ... 50 mm <sup>2</sup> )                                 |
| • finely stranded without core end processing                  | 2x (10 ... 35 mm <sup>2</sup> ), 1x (10 ... 50 mm <sup>2</sup> )                                   |
| <b>type of connectable conductor cross-sections</b>            |                                                                                                    |
| • for auxiliary contacts                                       |                                                                                                    |
| — solid or stranded                                            | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )                              |
| — finely stranded with core end processing                     | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )                              |
| • for AWG cables for auxiliary contacts                        | 2x (20 ... 16), 2x (18 ... 14)                                                                     |

#### Safety related data

|                                                                |                                                  |
|----------------------------------------------------------------|--------------------------------------------------|
| product function suitable for safety function                  | Yes                                              |
| Electrical Safety                                              |                                                  |
| <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>               | No  |
| protocol is supported AS-Interface protocol             | No  |
| product function control circuit interface with IO link | Yes |

#### Approvals Certificates

|                          |       |                 |
|--------------------------|-------|-----------------|
| General Product Approval | other | Dangerous goods |
|--------------------------|-------|-----------------|



[Confirmation](#)

[Transport Information](#)

#### Environment

[Environmental Confirmations](#)

#### Further information

##### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

##### Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

##### 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=3RA2445-8XE32-1NB3>

##### Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2445-8XE32-1NB3>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2445-8XE32-1NB3>

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

[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2445-8XE32-1NB3&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2445-8XE32-1NB3&lang=en)

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2445-8XE32-1NB3/char>



