

STAR-DELTA COMB. WITH I/O-LINK AC3, 11KW/400V DC24V, 3-POLE SZ S0, SPRING-LOADED TERMINAL ELECTR. AND MECH. INTERLOCK 3NO+3NC INTEGR.



|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product brand name            | SIRIUS                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Product designation           | Contactor assembly for star-delta (wye-delta) start                                                                                                                                                                                                                                                                                                                                                                             |
| Product type designation      | 3RA24                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Manufacturer's article number | <ul style="list-style-type: none"> <li>• 1 of the supplied contactor <a href="#">3RT2024-2BB40-0CC0</a></li> <li>• 2 of the supplied contactor <a href="#">3RT2024-2BB40</a></li> <li>• 3 of the supplied contactor <a href="#">3RT2024-2BB40</a></li> <li>• of the supplied RS assembly kit <a href="#">3RA2923-2BB2</a></li> <li>• of the supplied function module for communication <a href="#">3RA2711-2CA00</a></li> </ul> |

| General technical data                                                                     |       |
|--------------------------------------------------------------------------------------------|-------|
| Size of contactor                                                                          | S0    |
| Product extension                                                                          | No    |
| <ul style="list-style-type: none"> <li>• Auxiliary switch</li> </ul>                       |       |
| Insulation voltage                                                                         |       |
| <ul style="list-style-type: none"> <li>• with degree of pollution 3 rated value</li> </ul> | 690 V |
| Degree of pollution                                                                        | 3     |
| Surge voltage resistance rated value                                                       | 6 kV  |
| Protection class IP                                                                        |       |

|                                                              |                            |
|--------------------------------------------------------------|----------------------------|
| • on the front                                               | IP20                       |
| <b>Shock resistance at rectangular impulse</b>               |                            |
| • at AC                                                      | 7,5g / 5 ms, 4,7g / 10 ms  |
| • at DC                                                      | 10g / 5 ms, 7,5g / 10 ms   |
| <b>Shock resistance with sine pulse</b>                      |                            |
| • at AC                                                      | 11,8g / 5 ms, 7,4g / 10 ms |
| • at DC                                                      | 15g / 5 ms, 10g / 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>Equipment marking</b>                                     |                            |
| • acc. to DIN EN 81346-2                                     | Q                          |

#### Ambient conditions

|                            |                |
|----------------------------|----------------|
| <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     |
| <b>Operating current</b>                        |           |
| • at AC-1 at 400 V                              |           |
| — at ambient temperature 40 °C rated value      | 40 A      |
| — at ambient temperature 60 °C rated value      | 35 A      |
| • at AC-2 at 400 V rated value                  | 25 A      |
| • at AC-3                                       |           |
| — at 400 V rated value                          | 25 A      |
| <b>No-load switching frequency</b>              | 1 500 1/h |
| <b>Operating frequency</b>                      |           |
| • at AC-1 maximum                               | 1 000 1/h |
| • at AC-2 maximum                               | 1 000 1/h |
| • at AC-3 maximum                               | 1 000 1/h |
| • at AC-4 maximum                               | 300 1/h   |

#### Control circuit/ Control

|                                                      |               |
|------------------------------------------------------|---------------|
| <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>                | with varistor |

|                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Closing power of magnet coil at DC                                                                                                                                                                                                                                                                                                                   | 5.9 W                                                                                                                                |
| Holding power of magnet coil at DC                                                                                                                                                                                                                                                                                                                   | 5.9 W                                                                                                                                |
| <b>Auxiliary circuit</b>                                                                                                                                                                                                                                                                                                                             |                                                                                                                                      |
| <b>Number of NC contacts</b> <ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— instantaneous contact</li> </ul> </li> </ul>                                                                                                                                                                   | 3                                                                                                                                    |
| <b>Number of NO contacts</b> <ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— instantaneous contact</li> </ul> </li> </ul>                                                                                                                                                                   | 3                                                                                                                                    |
| <b>Operating current of auxiliary contacts at AC-12 maximum</b>                                                                                                                                                                                                                                                                                      | 10 A                                                                                                                                 |
| <b>Operating current of auxiliary contacts at AC-15</b> <ul style="list-style-type: none"> <li>• at 230 V</li> <li>• at 400 V</li> </ul>                                                                                                                                                                                                             | 6 A<br>3 A                                                                                                                           |
| <b>Operating current of auxiliary contacts at DC-13</b> <ul style="list-style-type: none"> <li>• at 24 V</li> <li>• at 60 V</li> <li>• at 110 V</li> <li>• at 220 V</li> </ul>                                                                                                                                                                       | 10 A<br>2 A<br>1 A<br>0.3 A                                                                                                          |
| <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 assignment 2 required</li> </ul> </li> <li>• for short-circuit protection of the auxiliary switch required</li> </ul> | gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 63 A<br>gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25 A<br>fuse gL/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>Mounting type</b>                                                                                                                                                                                                                                                                                                                                 | screw and snap-on mounting onto 35 mm standard mounting rail                                                                         |
| <b>Height</b>                                                                                                                                                                                                                                                                                                                                        | 114 mm                                                                                                                               |
| <b>Width</b>                                                                                                                                                                                                                                                                                                                                         | 135 mm                                                                                                                               |
| <b>Depth</b>                                                                                                                                                                                                                                                                                                                                         | 181 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> </ul> </li> </ul>                                                                                                                                                            | 6 mm<br>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

|                                                     |                                   |
|-----------------------------------------------------|-----------------------------------|
| <b>Type of electrical connection</b>                |                                   |
| • for main current circuit                          | spring-loaded terminals           |
| • for auxiliary and control current circuit         | spring-loaded terminals           |
| <b>Type of connectable conductor cross-sections</b> |                                   |
| • for main contacts                                 |                                   |
| — solid                                             | 2x (1 ... 10 mm <sup>2</sup> )    |
| — single or multi-stranded                          | 2x (1 ... 10 mm <sup>2</sup> )    |
| — finely stranded with core end processing          | 2x (1 ... 6 mm <sup>2</sup> )     |
| — finely stranded without core end processing       | 2x (1 ... 6 mm <sup>2</sup> )     |
| • at AWG conductors for main contacts               | 1x (18 ... 8)                     |
| <b>Type of connectable conductor cross-sections</b> |                                   |
| • for auxiliary contacts                            |                                   |
| — single or multi-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 conductors for auxiliary contacts          | 2x (20 ... 14)                    |

## Safety related data

|                                          |           |
|------------------------------------------|-----------|
| <b>B10 value</b>                         |           |
| • with high demand rate acc. to SN 31920 | 1 000 000 |
| <b>Proportion of dangerous failures</b>  |           |
| • with low demand rate acc. to SN 31920  | 40 %      |
| • with high demand rate acc. to SN 31920 | 75 %      |
| <b>Failure rate [FIT]</b>                |           |

- with low demand rate acc. to SN 31920

100 FIT

T1 value for proof test interval or service life acc. to IEC 61508

20 y

#### Communication/ Protocol

Product function Bus communication

Yes

Protocol is supported

- AS-interface protocol

No

#### Certificates/approvals

| General Product Approval | Declaration of Conformity | Test Certificates | Marine / Shipping |
|--------------------------|---------------------------|-------------------|-------------------|
|--------------------------|---------------------------|-------------------|-------------------|



[Special Test Certificate](#)



GL

#### Marine / Shipping

other



LRS



PRS



RINA



RMRS



DNVGL.COM/AF

[Environmental Confirmations](#)

other

Railway

[Confirmation](#)

[Vibration and Shock](#)

#### Further information

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

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2423-8XE32-2BB4>

Cax online generator

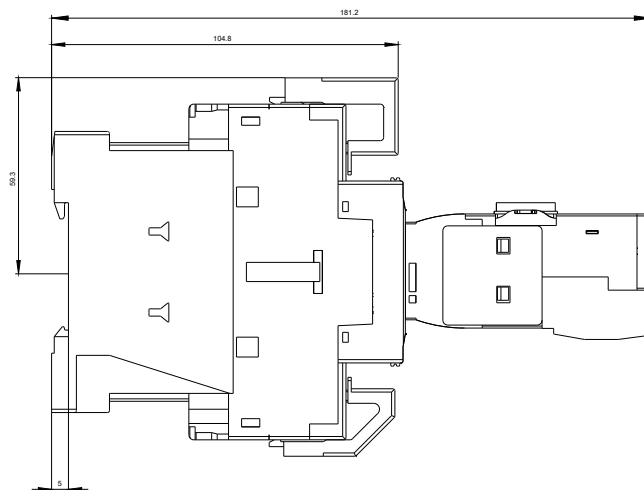
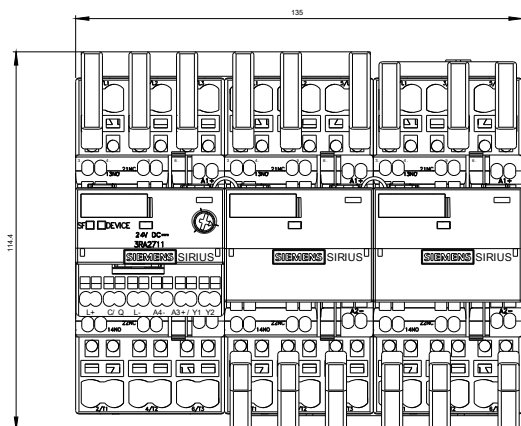
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2423-8XE32-2BB4>

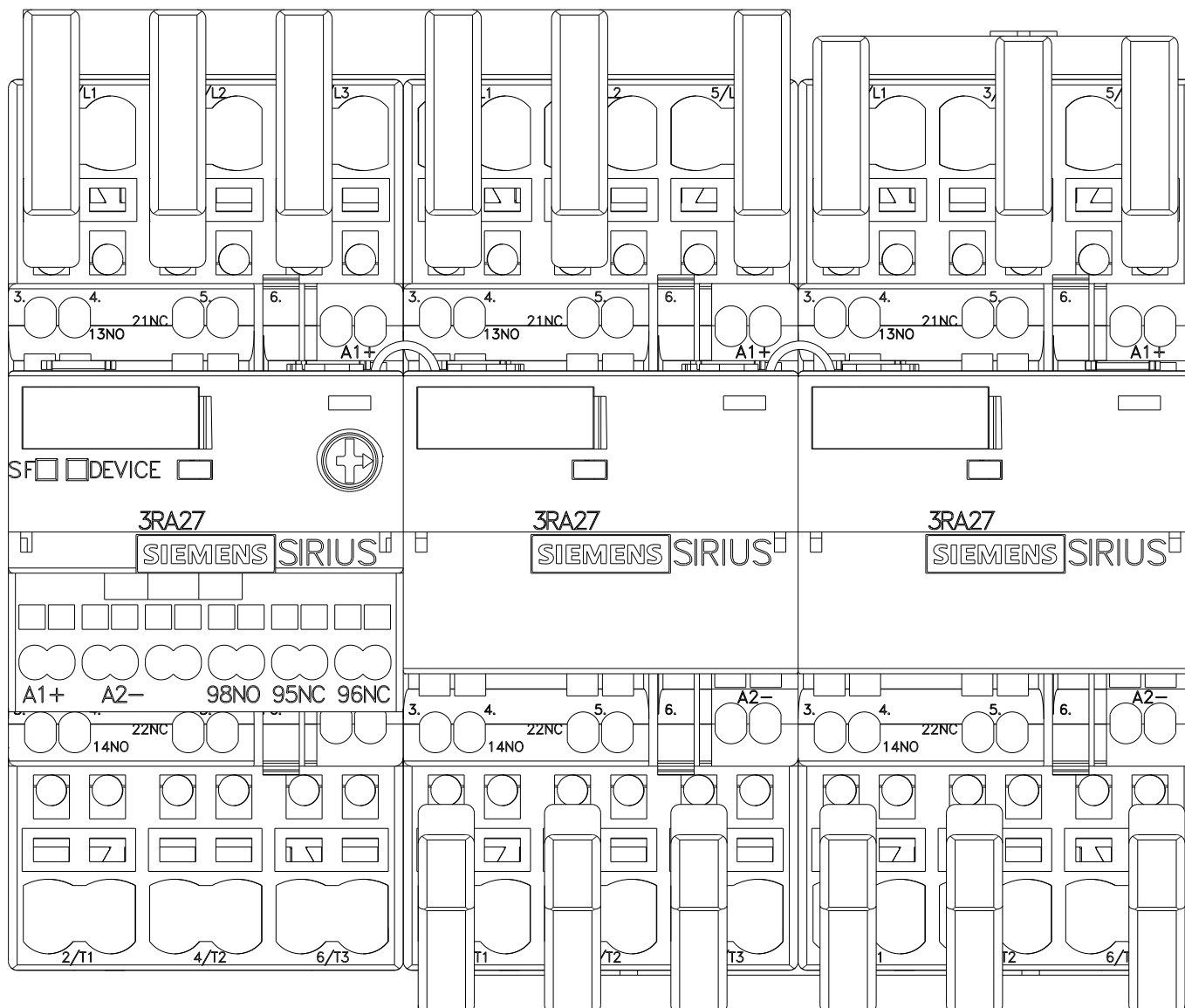
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2423-8XE32-2BB4>

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

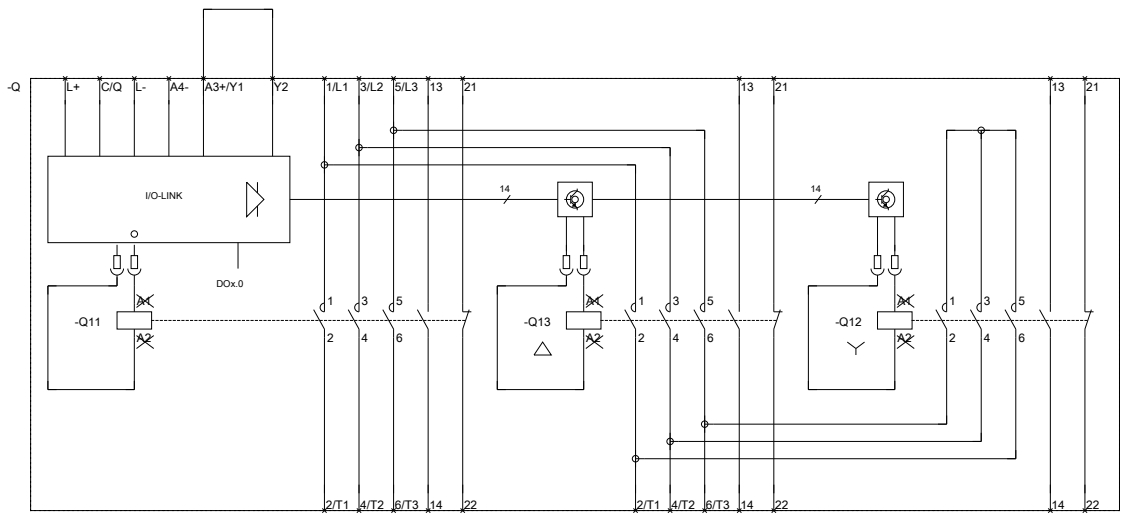
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2423-8XE32-2BB4&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2423-8XE32-2BB4&lang=en)





SITEKONDRÖJEDOKK

DREHMOTOREN 1



STAR-DELTASCHW.

ROTATION DIRECTION

last modified:

07/14/2017