

STAR-DELTA CONT. ASSY. AC3:90KW/400V 24 V AC 50/60HZ  
 SIZE S3, SCREW TERMINALS ELEC. AND MECH. INTERLO.  
 3NO+3NC



Figure similar

<b>Product brand name</b>	SIRIUS
<b>Product designation</b>	Contacteur assembly for star-delta (wye-delta) start
<b>Product type designation</b>	3RA24
<b>Manufacturer's article number</b>	<ul style="list-style-type: none"> <li>• 1 of the supplied contactor <a href="#">3RT2046-1AC20</a></li> <li>• 2 of the supplied contactor <a href="#">3RT2046-1AC20</a></li> <li>• 3 of the supplied contactor <a href="#">3RT2037-1AC20</a></li> <li>• of the supplied RS assembly kit <a href="#">3RA2943-2C</a></li> <li>• of the supplied function module for wye-delta circuits <a href="#">3RA2816-0EW20</a></li> </ul>

General technical data	
<b>Size of contactor</b>	S3
<b>Product extension</b>	No
<ul style="list-style-type: none"> <li>• Auxiliary switch</li> </ul>	
<b>Insulation voltage</b>	690 V
<ul style="list-style-type: none"> <li>• with degree of pollution 3 rated value</li> </ul>	
<b>Degree of pollution</b>	3

<b>Surge voltage resistance rated value</b>	6 kV
<b>Protection class IP</b>	IP20
<ul style="list-style-type: none"> <li>• on the front</li> </ul>	
<b>Shock resistance at rectangular impulse</b>	6.7 g / 5 ms, 4.0 g / 10 ms
<ul style="list-style-type: none"> <li>• at AC</li> </ul>	
<b>Shock resistance with sine pulse</b>	10.6 g / 5 ms, 6.3 g / 10 ms
<ul style="list-style-type: none"> <li>• at AC</li> </ul>	
<b>Mechanical service life (switching cycles)</b>	
<ul style="list-style-type: none"> <li>• of contactor typical</li> </ul>	10 000 000
<ul style="list-style-type: none"> <li>• of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
<b>Equipment marking</b>	Q
<ul style="list-style-type: none"> <li>• acc. to DIN EN 81346-2</li> </ul>	

#### Ambient conditions

<b>Installation altitude at height above sea level</b>	2 000 m
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	
<b>Ambient temperature</b>	-25 ... +60 °C
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-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>	690 V
<ul style="list-style-type: none"> <li>• at AC-3 rated value maximum</li> </ul>	
<b>Operating current</b>	130 A
<ul style="list-style-type: none"> <li>• at AC-1 at 400 V</li> </ul>	
<ul style="list-style-type: none"> <li>— at ambient temperature 40 °C rated value</li> </ul>	110 A
<ul style="list-style-type: none"> <li>— at ambient temperature 60 °C rated value</li> </ul>	
<b>Operating frequency</b>	900 1/h
<ul style="list-style-type: none"> <li>• at AC-1 maximum</li> </ul>	
<ul style="list-style-type: none"> <li>• at AC-2 maximum</li> </ul>	350 1/h
<ul style="list-style-type: none"> <li>• at AC-3 maximum</li> </ul>	850 1/h
<ul style="list-style-type: none"> <li>• at AC-4 maximum</li> </ul>	200 1/h

#### Control circuit/ Control

<b>Type of voltage of the control supply voltage</b>	AC
<b>Control supply voltage 1 at AC</b>	24 V
<ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> </ul>	
<ul style="list-style-type: none"> <li>• at 60 Hz rated value</li> </ul>	24 V
<b>Operating range factor control supply voltage rated value of magnet coil at AC</b>	

<ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>	<p>0.8 ... 1.1</p> <p>0.85 ... 1.1</p>
<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>	<p>348 V·A</p> <p>296 V·A</p>
<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>	<p>0.62</p> <p>0.55</p>
<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>	<p>25 V·A</p> <p>18 V·A</p>
<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>	<p>0.35</p> <p>0.41</p>

### Auxiliary circuit

<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>	<p>3</p>
<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>	<p>3</p>
<b>Operating current of auxiliary contacts at AC-12 maximum</b>	<p>10 A</p>
<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>	<p>6 A</p> <p>3 A</p>
<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>	<p>10 A</p> <p>2 A</p> <p>1 A</p> <p>0.3 A</p>

### UL/CSA ratings

<b>Contact rating of auxiliary contacts according to UL</b>	<p>A600 / Q600</p>
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### Short-circuit protection

<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>	<p>gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A</p> <p>gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A</p> <p>fuse gG: 10 A</p>
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## Installation/ mounting/ dimensions

<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>	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 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>	

## 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 current circuit</li> </ul>	<p>screw-type terminals</p> <p>screw-type terminals</p>
<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>— single or multi-stranded</li> <li>— finely stranded with core end processing</li> <li>— finely stranded without core end processing</li> </ul> </li> <li>• at AWG conductors for main contacts</li> </ul>	<p>2x (2.5 ... 16 mm<sup>2</sup>), 2x (10 ... 50 mm<sup>2</sup>), 1x (10 ... 70 mm<sup>2</sup>)</p> <p>2x (2.5 ... 35 mm<sup>2</sup>), 1x (2.5 ... 50 mm<sup>2</sup>)</p> <p>2x (10 ... 35 mm<sup>2</sup>), 1x (10 ... 50 mm<sup>2</sup>)</p> <p>2x (10 ... 1/0), 1x (10 ... 2/0)</p>
<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>— single or multi-stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> </ul>	<p>2x (0,5 ... 1,5 mm<sup>2</sup>), 2x (0,75 ... 2,5 mm<sup>2</sup>)</p> <p>2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)</p>

- at AWG conductors for auxiliary contacts

2x (20 ... 16), 2x (18 ... 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	73 %
<b>Failure rate [FIT]</b>	
• with low demand rate acc. to SN 31920	100 FIT
<b>T1 value for proof test interval or service life acc. to IEC 61508</b>	20 y

### Communication/ Protocol

<b>Product function Bus communication</b>	No
<b>Protocol is supported</b>	
• AS-interface protocol	No
<b>Product function Control circuit interface with IO link</b>	No

### Certificates/approvals

General Product Approval	Declaration of Conformity	Marine / Shipping			
	 EG-Konf.				
		BUREAU VERITAS	GL	LRS	RMRS
<b>Marine / Shipping</b>	<b>other</b>				



[Confirmation](#)

### 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=3RA2446-8XF32-1AC2>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2446-8XF32-1AC2>

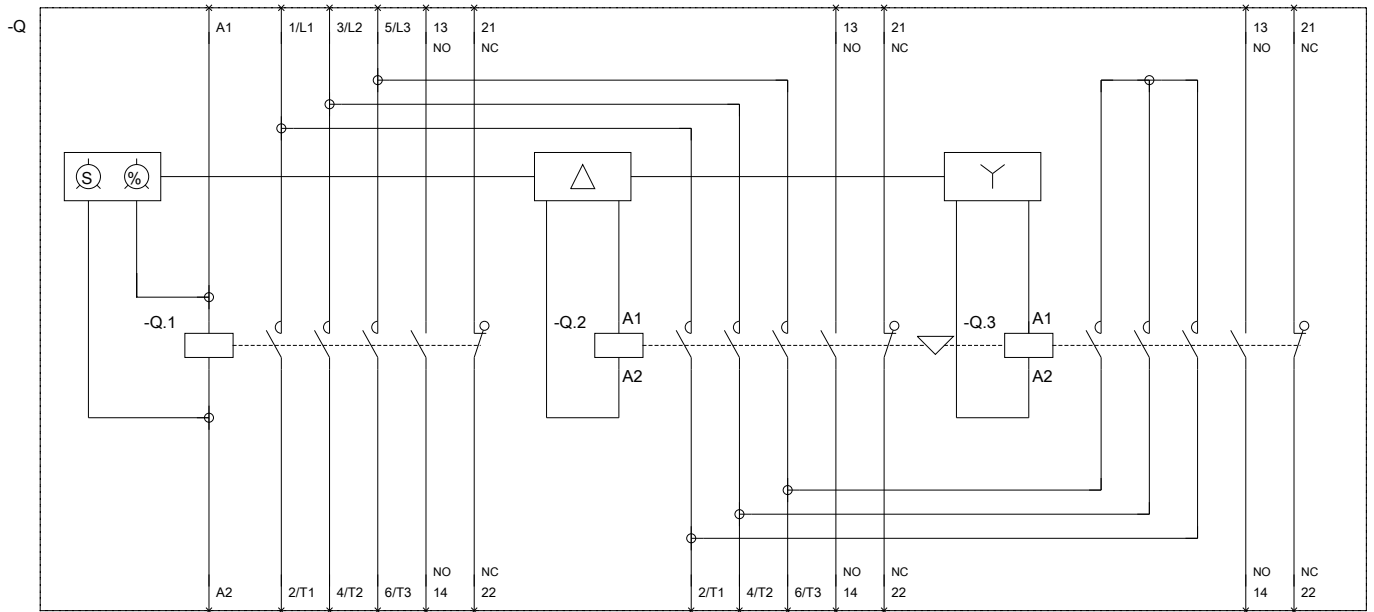
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2446-8XF32-1AC2>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2446-8XF32-1AC2&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2446-8XF32-1AC2&lang=en)





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