

STAR-DELTA COMB. AC3, 11KW/400V AC230V, 50/60HZ, 3-POLE SZ S00, SCREW TERMINAL ELECTR. AND MECH. INTERLOCK 3NO INTEGR.



product brand name		SIRIUS
Product designation		star-delta (wye-delta) contactor assembly 3RA24
<b>Manufacturer article number</b>		
<ul style="list-style-type: none"> <li>• 1 of the supplied contactor</li> <li>• 2 of the supplied contactor</li> <li>• 3 of the supplied contactor</li> <li>• of the supplied RS assembly kit</li> <li>• of the supplied function module for wye-delta circuits</li> </ul>		<a href="#">3RT2018-1AP01</a> <a href="#">3RT2018-1AP01</a> <a href="#">3RT2016-1AP01</a> <a href="#">3RA2913-2BB1</a> <a href="#">3RA2816-0EW20</a>

### General technical data:

<b>Insulation voltage</b>		
<ul style="list-style-type: none"> <li>• with degree of pollution 3 Rated value</li> </ul>	V	690
<b>Degree of pollution</b>		3
<b>Shock resistance</b>		9.8g / 5 ms and 5.9g / 10 ms
<b>Surge voltage resistance Rated value</b>	kV	6
<b>Mechanical service life (switching cycles)</b>		
<ul style="list-style-type: none"> <li>• of the contactor typical</li> <li>• of the contactor with added auxiliary switch block typical</li> </ul>		10 000 000 10 000 000
<b>Protection class IP</b>		
<ul style="list-style-type: none"> <li>• on the front</li> </ul>		IP20
<b>Equipment marking</b>		
<ul style="list-style-type: none"> <li>• acc. to DIN EN 81346-2</li> </ul>		Q

### Main circuit:

<b>Number of poles for main current circuit</b>		3
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<b>Number of NC contacts for main contacts</b>		0
<b>Number of NO contacts for main contacts</b>		3
<b>Operating voltage</b>		
• at AC-3 Rated value maximum	V	690
<b>Operating current</b>		
• at AC-1		
— at 400 V at ambient temperature 40 °C Rated value	A	22
— at 400 V at ambient temperature 60 °C Rated value	A	20
• at AC-2 at 400 V Rated value	A	25
• at AC-3		
— at 400 V Rated value	A	25
<b>Operating power</b>		
• at AC-2 at 400 V Rated value	kW	11
<b>Operating power</b>		
• at AC-3		
— at 400 V Rated value	kW	11
— at 500 V Rated value	kW	11
— at 690 V Rated value	kW	11
<b>Operating frequency</b>		
• at AC-3 maximum	1/h	1 000
<b>No-load switching frequency</b>	1/h	1 500

#### Control circuit/ Control:

<b>Type of voltage of the control supply voltage</b>		AC
<b>Control supply voltage 1 with AC</b>		
• at 50 Hz Rated value	V	230
<b>Operating range factor control supply voltage rated value of the magnet coil with AC</b>		
• at 50 Hz		0.8 ... 1.1
• at 60 Hz		0.85 ... 1.1

#### Auxiliary circuit:

<b>Number of NC contacts</b>		
• for auxiliary contacts		
— instantaneous contact		0
— lagging switching		0
<b>Number of NO contacts</b>		
• for auxiliary contacts		
— instantaneous contact		3
— leading contact		0
<b>Product expansion Auxiliary switch</b>		No

<b>Operating current of the auxiliary contacts at AC-12 maximum</b>	A	10
<b>Operating current of the auxiliary contacts at AC-15</b>	A	6
• at 230 V	A	3
• at 400 V	A	3
<b>Operating current of the auxiliary contacts at DC-13</b>	A	10
• at 24 V	A	2
• at 60 V	A	1
• at 110 V	A	0.3
• at 220 V	A	0.3
<b>Contact reliability of the auxiliary contacts</b>		< 1 error per 100 million operating cycles

<b>UL/CSA ratings:</b>		
<b>Contact rating of the auxiliary contacts acc. to UL</b>		A600 / Q600

<b>Short-circuit:</b>		
<b>Design of the fuse link</b>		
• for short-circuit protection of the main circuit		
— with type of assignment 1 required		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
— with type of assignment 2 required		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20 A
• for short-circuit protection of the auxiliary switch required		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>	mm	68
<b>Width</b>	mm	135
<b>Depth</b>	mm	145
<b>Required spacing</b>		
• with side-by-side mounting		
— forwards	mm	6
— Backwards	mm	0
— upwards	mm	6
— downwards	mm	6
— at the side	mm	6
• for grounded parts		
— forwards	mm	6
— Backwards	mm	0
— upwards	mm	6

— at the side	mm	6
— downwards	mm	6
• for live parts		
— forwards	mm	6
— Backwards	mm	0
— upwards	mm	6
— downwards	mm	6
— at the side	mm	6

**Connections/ Terminals:**

<b>Type of electrical connection</b>		
• for main current circuit		screw-type terminals
• for auxiliary and control current circuit		screw-type terminals
<b>Type of connectable conductor cross-section</b>		
• for main contacts		
— single or multi-stranded		2x (0,5 ... 1,5 mm <sup>2</sup> ), 2x (0,75 ... 2,5 mm <sup>2</sup> ), 2x (0,5 ... 4 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 conductors for main contacts		2x (20 ... 16), 2x (18 ... 14)
• for auxiliary contacts		
— single or multi-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 conductors for auxiliary contacts		2x (20 ... 16), 2x (18 ... 14)
<b>Apparent pick-up power of the magnet coil with AC</b>		
• at 50 Hz	V·A	37

**Safety related data:**

<b>B10 value with high demand rate acc. to SN 31920</b>		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] with low demand rate acc. to SN 31920</b>	FIT	100
<b>T1 value for proof test interval or service life acc. to IEC 61508</b>	y	20
<b>Protection against electrical shock</b>		finger-safe

**Mechanical data:**

<b>Size of contactor</b>		S00
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**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

## Ambient conditions:

Installation altitude at height above sea level maximum	m	2 000
Ambient temperature		
• during operation	°C	-25 ... +60
• during storage	°C	-55 ... +80

## Certificates/ approvals:

General Product Approval	Declaration of Conformity	Test Certificates	Shipping Approval
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[Special Test Certificate](#)



Shipping Approval	other
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[Environmental Confirmations](#)

other
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[other](#)

## Further information

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

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

Industry Mall (Online ordering system)

<http://www.siemens.com/industrymall>

Cax online generator

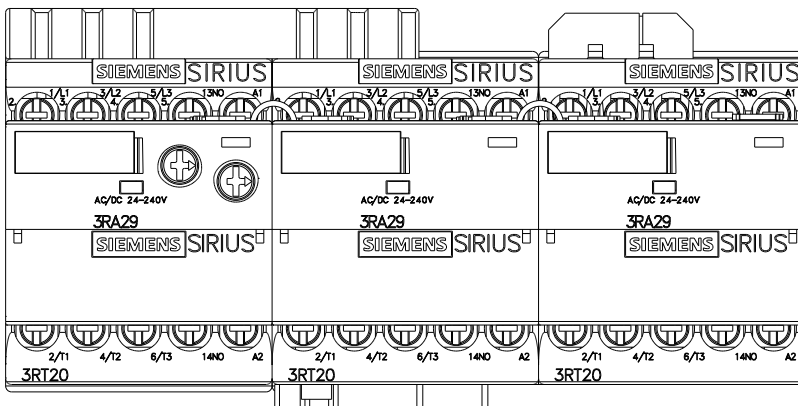
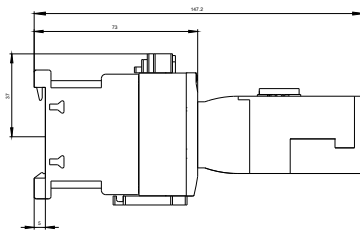
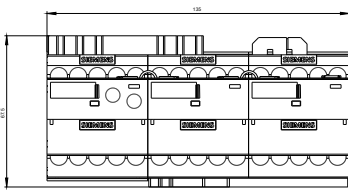
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA24178XF311AP0>

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

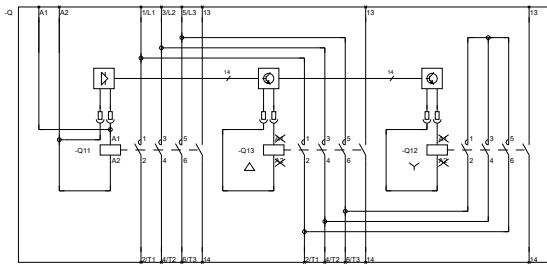
<http://support.automation.siemens.com/WW/view/en/3RA24178XF311AP0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA24178XF311AP0&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA24178XF311AP0&lang=en)



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