

REV. COMB., AC3, 18.5KW/ 400V DC24V 3-POLE, SZ  
S0 SPRING-LOADED TERMINAL ELECTR. AND  
MECH. INTERLOCK 2NO 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>• of the supplied RS assembly kit</li> </ul>		<a href="#">3RT2028-2BB40</a> <a href="#">3RT2028-2BB40</a> <a href="#">3RA2923-2AA2</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
<b>Number of NC contacts for main contacts</b>		0
<b>Number of NO contacts for main contacts</b>		3
<b>Operating voltage</b>		

<ul style="list-style-type: none"> <li>• at AC-3 Rated value maximum</li> </ul>	V	690
<b>Operating current</b>		
<ul style="list-style-type: none"> <li>• at AC-1 <ul style="list-style-type: none"> <li>— at 400 V at ambient temperature 40 °C Rated value</li> <li>— at 400 V at ambient temperature 60 °C Rated value</li> </ul> </li> <li>• at AC-2 at 400 V Rated value</li> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 400 V Rated value</li> </ul> </li> <li>• at AC-4 at 400 V Rated value</li> </ul>	A	50
	A	45
	A	38
	A	38
	A	22
<b>Operating current with 1 current path</b>		
<ul style="list-style-type: none"> <li>• at DC-1 <ul style="list-style-type: none"> <li>— at 24 V Rated value</li> <li>— at 110 V Rated value</li> </ul> </li> <li>• at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 24 V Rated value</li> <li>— at 110 V Rated value</li> </ul> </li> </ul>	A	35
	A	4.5
	A	20
	A	2.5
<b>Operating current with 2 current paths in series</b>		
<ul style="list-style-type: none"> <li>• at DC-1 <ul style="list-style-type: none"> <li>— at 24 V Rated value</li> <li>— at 110 V Rated value</li> </ul> </li> <li>• at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 110 V Rated value</li> <li>— at 24 V Rated value</li> </ul> </li> </ul>	A	35
	A	35
	A	15
	A	35
<b>Operating current with 3 current paths in series</b>		
<ul style="list-style-type: none"> <li>• at DC-1 <ul style="list-style-type: none"> <li>— at 24 V Rated value</li> <li>— at 110 V Rated value</li> </ul> </li> <li>• at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 110 V Rated value</li> <li>— at 24 V Rated value</li> </ul> </li> </ul>	A	35
	A	35
	A	35
	A	35
<b>Operating power</b>		
<ul style="list-style-type: none"> <li>• at AC-2 at 400 V Rated value</li> <li>• at AC-4 at 400 V Rated value</li> </ul>	kW	18.5
	kW	11
<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 500 V Rated value</li> <li>— at 690 V Rated value</li> </ul> </li> </ul>	kW	18.5
	kW	22
	kW	18.5
<b>Operating frequency</b>		
<ul style="list-style-type: none"> <li>• at AC-3 maximum</li> </ul>	1/h	1 000

No-load switching frequency	1/h	1 500
-----------------------------	-----	-------

### Control circuit/ Control:

Type of voltage of the control supply voltage		DC
Control supply voltage 1		
<ul style="list-style-type: none"> <li>• for DC Rated value</li> </ul>	V	24
Operating range factor control supply voltage rated value of the magnet coil for DC		0.8 ... 1.1
Closing power of the magnet coil for DC	W	5.9
Holding power of the magnet coil for DC	W	5.9

### Auxiliary circuit:

Number of NC contacts		
<ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>		
<ul style="list-style-type: none"> <li>— per direction of rotation</li> </ul>		0
<ul style="list-style-type: none"> <li>— instantaneous contact</li> </ul>		0
<ul style="list-style-type: none"> <li>— lagging switching</li> </ul>		0
Number of NO contacts		
<ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>		
<ul style="list-style-type: none"> <li>— per direction of rotation</li> </ul>		0
<ul style="list-style-type: none"> <li>— instantaneous contact</li> </ul>		0
<ul style="list-style-type: none"> <li>— leading contact</li> </ul>		0
Product expansion Auxiliary switch		Yes
Operating current of the auxiliary contacts at AC-12 maximum	A	10
Operating current of the auxiliary contacts at AC-15		
<ul style="list-style-type: none"> <li>• at 230 V</li> </ul>	A	6
<ul style="list-style-type: none"> <li>• at 400 V</li> </ul>	A	3
Operating current of the auxiliary contacts at DC-13		
<ul style="list-style-type: none"> <li>• at 24 V</li> </ul>	A	10
<ul style="list-style-type: none"> <li>• at 60 V</li> </ul>	A	2
<ul style="list-style-type: none"> <li>• at 110 V</li> </ul>	A	1
<ul style="list-style-type: none"> <li>• at 220 V</li> </ul>	A	0.3
Contact reliability of the auxiliary contacts		< 1 error per 100 million operating cycles

### UL/CSA ratings:

Full-load current (FLA) for three-phase AC motor		
<ul style="list-style-type: none"> <li>• at 480 V Rated value</li> </ul>	A	34
<ul style="list-style-type: none"> <li>• at 600 V Rated value</li> </ul>	A	27
yielded mechanical performance [hp]		
<ul style="list-style-type: none"> <li>• for single-phase AC motor at 110/120 V Rated value</li> </ul>	metric hp	3
<ul style="list-style-type: none"> <li>• for single-phase AC motor at 230 V Rated value</li> </ul>	metric hp	5

<ul style="list-style-type: none"> <li>• for three-phase AC motor at 220/230 V Rated value</li> </ul>	metric hp	10
<ul style="list-style-type: none"> <li>• for three-phase AC motor at 460/480 V Rated value</li> </ul>	metric hp	25
<ul style="list-style-type: none"> <li>• for three-phase AC motor at 575/600 V Rated value</li> </ul>	metric hp	25
<b>Contact rating of the auxiliary contacts acc. to UL</b>		A600 / Q600

#### Short-circuit:

<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 assignment 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 NH 3NA, DIAZED 5SB, NEOZED 5SE: 125 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 50 A fuse gL/gG: 10 A
--	--	---

#### 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>	mm	114
<b>Width</b>	mm	90
<b>Depth</b>	mm	107
<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> <li>— at the side</li> <li>— downwards</li> </ul> </li> <li>• for live parts <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> </ul>	mm	6 0 6 6 6  6 0 6 6 6  6 0 6 6 6

### 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>		spring-loaded terminals spring-loaded terminals
<b>Type of connectable conductor cross-section</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>• for AWG conductors for main contacts</li> <li>• for auxiliary 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>• for AWG conductors for auxiliary contacts</li> </ul>		2x (1 ... 10 mm <sup>2</sup> ) 2x (1 ... 6 mm <sup>2</sup> ) 2x (1 ... 6 mm <sup>2</sup> )  1x (18 ... 8)  2x (0,5 ... 2,5 mm <sup>2</sup> ) 2x (0.5 ... 1.5 mm <sup>2</sup> ) 2x (0.5 ... 1.5 mm <sup>2</sup> )  2x (20 ... 14)

### Safety related data:

<b>B10 value with high demand rate acc. to SN 31920</b>		1 000 000
<b>Proportion of dangerous failures</b>		
<ul style="list-style-type: none"> <li>• with low demand rate acc. to SN 31920</li> <li>• with high demand rate acc. to SN 31920</li> </ul>	% %	40 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>		S0
--------------------------	--	----






### Communication/ Protocol:

<b>Product function Bus communication</b>		No
<b>Protocol is supported</b>		
<ul style="list-style-type: none"> <li>• AS-interface protocol</li> </ul>		No
<b>Product function Control circuit interface with IO link</b>		No


### Ambient conditions:

<b>Installation altitude at height above sea level maximum</b>	m	2 000
<b>Ambient temperature</b>		
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> </ul>	°C °C	-25 ... +60 -55 ... +80

### Certificates/ approvals:

General Product Approval			Declaration of Conformity	Test Certificates	Shipping Approval
 CSA	 UL		 EG-Konf.	<a href="#">Special Test Certificate</a>	 ABS

Shipping Approval					
 BUREAU VERITAS	 DNV	 GL	 LRS	 PRS	 RINA

Shipping Approval	other	
 RMRS	<a href="#">Environmental Confirmations</a>	<a href="#">other</a>

#### 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

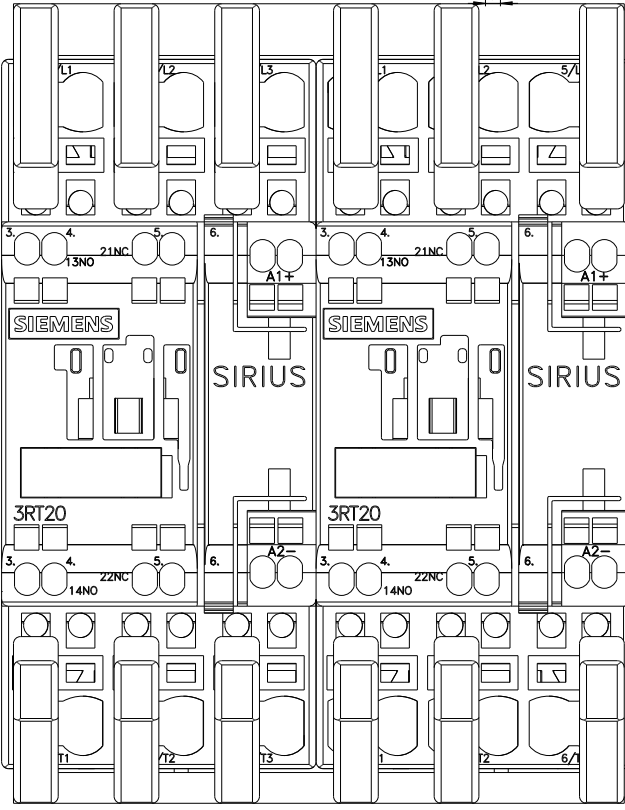
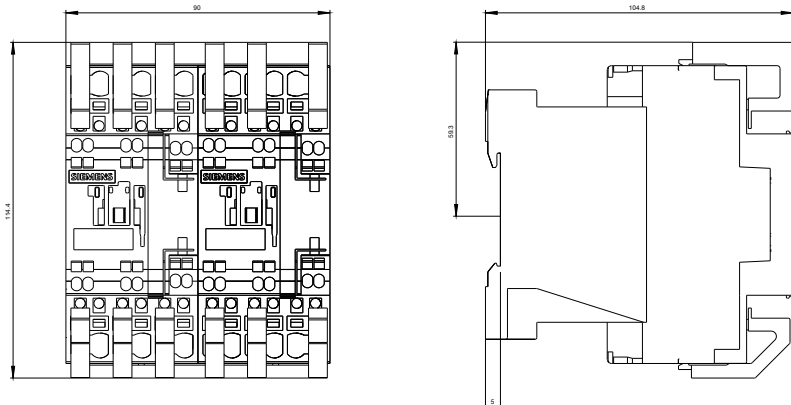
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RA23288XB302BB4>

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

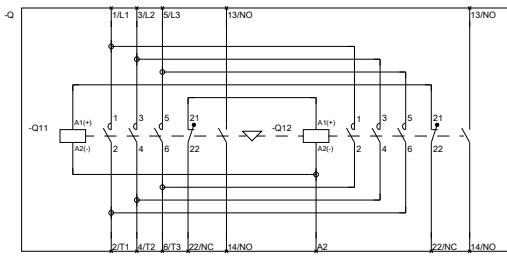
<http://support.automation.siemens.com/WW/view/en/3RA23288XB302BB4/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mfb=3RA23288XB302BB4&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RA23288XB302BB4&lang=en)



WENDEKOMBINATION BGR. 50



REVERSING COMB. SZ 50

last modified:

11.03.2015