

REV. COMB., AC3, 7.5KW/ 400V AC110V 50HZ/120V 60HZ 3-POLE, SZ S00 SCREW TERMINAL ELECTR. AND MECH. INTERLOCK



<b>product brand name</b>	SIRIUS
<b>Product designation</b>	reversing contactor assembly 3RA23
<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 RH assembly kit</li> </ul>	<a href="#">3RT2018-1AK62</a> <a href="#">3RT2018-1AK62</a> <a href="#">3RA2913-2AA1</a>

General technical data:	
<b>Size of contactor</b>	S00
<b>Product expansion</b>	
<ul style="list-style-type: none"> <li>• Auxiliary switch</li> </ul>	Yes
<b>Insulation voltage</b>	
<ul style="list-style-type: none"> <li>• with degree of pollution 3 Rated value</li> </ul>	690 V
<b>Surge voltage resistance Rated value</b>	6 kV
<b>Protection class IP</b>	
<ul style="list-style-type: none"> <li>• on the front</li> </ul>	IP20
<b>Degree of pollution</b>	3
<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>Equipment marking</b>	
<ul style="list-style-type: none"> <li>• acc. to DIN EN 81346-2</li> </ul>	Q

Ambient conditions:	
<b>Installation altitude at height above sea level maximum</b>	2 000 m

<b>Ambient temperature</b>	
<ul style="list-style-type: none"> <li>during operation</li> <li>during storage</li> </ul>	<p>-25 ... +60 °C</p> <p>-55 ... +80 °C</p>
<b>Main circuit:</b>	
<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>	
<ul style="list-style-type: none"> <li>at AC-3 Rated value maximum</li> </ul>	690 V
<b>Operating current</b>	
<ul style="list-style-type: none"> <li>at AC-1 at 400 V <ul style="list-style-type: none"> <li>at ambient temperature 40 °C Rated value</li> <li>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> </ul>	<p>22 A</p> <p>20 A</p> <p>7 A</p> <p>16 A</p>
<b>Operating current</b>	
<ul style="list-style-type: none"> <li>with 1 current path 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>with 2 current paths in series 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>with 3 current paths in series 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> </ul>	<p>20 A</p> <p>2.1 A</p> <p>20 A</p> <p>12 A</p> <p>20 A</p> <p>20 A</p>
<b>Operating current</b>	
<ul style="list-style-type: none"> <li>with 1 current path 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> <li>with 2 current paths in series 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> <li>with 3 current paths in series 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>	<p>20 A</p> <p>0.15 A</p> <p>0.35 A</p> <p>20 A</p> <p>20 A</p> <p>20 A</p>
<b>No-load switching frequency</b>	1 500 1/h
<b>Operating frequency</b>	
<ul style="list-style-type: none"> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> </ul>	<p>1 000 1/h</p> <p>1 000 1/h</p> <p>1 000 1/h</p>

- at AC-4 maximum

300 1/h

#### Control circuit/ Control:

<b>Type of voltage of the control supply voltage</b>	AC
<b>Control supply voltage 1 at AC</b>	
• at 50 Hz Rated value	110 V
• at 60 Hz Rated value	120 V
<b>Operating range factor control supply voltage rated value of the magnet coil at AC</b>	
• at 50 Hz	0.8 ... 1.1
• at 60 Hz	0.85 ... 1.1
<b>Apparent pick-up power of the magnet coil at AC</b>	
• at 50 Hz	37 V·A
<b>Inductive power factor with closing power of the coil</b>	
• at 50 Hz	0.8
<b>Apparent holding power of the magnet coil at AC</b>	
• at 50 Hz	5.7 V·A
<b>Inductive power factor with the holding power of the coil</b>	
• at 50 Hz	0.28

#### Auxiliary circuit:

<b>Number of NC contacts</b>	
• for auxiliary contacts	
— per direction of rotation	0
— instantaneous contact	0
— lagging switching	0
<b>Number of NO contacts</b>	
• for auxiliary contacts	
— per direction of rotation	0
— instantaneous contact	0
— leading contact	0
<b>Operating current of the auxiliary contacts at AC-12 maximum</b>	10 A
<b>Operating current of the auxiliary contacts at AC-15</b>	
• at 230 V	6 A
• at 400 V	3 A
<b>Operating current of the auxiliary contacts at DC-13</b>	
• at 24 V	10 A
• at 60 V	2 A
• at 110 V	1 A
• at 220 V	0.3 A
<b>Contact reliability of the auxiliary contacts</b>	< 1 error per 100 million operating cycles

**UL/CSA ratings:**

<b>Full-load current (FLA) for three-phase AC motor</b>	
• at 480 V Rated value	14 A
• at 600 V Rated value	11 A
<b>yielded mechanical performance [hp]</b>	
• for single-phase AC motor	
— at 110/120 V Rated value	1 hp
— at 230 V Rated value	2 hp
• for three-phase AC motor	
— at 200/208 V Rated value	3 hp
— at 220/230 V Rated value	5 hp
— at 460/480 V Rated value	10 hp
— at 575/600 V Rated value	10 hp
<b>Contact rating of the auxiliary contacts acc. to UL</b>	A600 / Q600

**Short-circuit:**

<b>Design of the fuse link</b>	
• for short-circuit protection of the main circuit	
— with type of assignment 1 required	gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 50 A
— with type of assignment 2 required	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25 A
• for short-circuit protection of the auxiliary switch required	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>	68 mm
<b>Width</b>	90 mm
<b>Depth</b>	73 mm
<b>Required spacing</b>	
• with side-by-side mounting	
— forwards	6 mm
— Backwards	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	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)
<b>Type of connectable conductor cross-section</b>	
• 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)



#### 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>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

#### Certificates/ approvals:

General Product Approval			Declaration of Conformity	Test Certificates	
 CSA	 UL		 EG-Konf.	<a href="#">Typprüfbescheinigung/Werkszeugnis</a>	<a href="#">spezielle Prüfbescheinigungen</a>

Shipping Approval					
 ABS	 BUREAU VERITAS	 DNV	 GL	 LRS	 PRS

Shipping Approval	other
 RINA	 RMRS
	<a href="#">Umweltbestätigung</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**

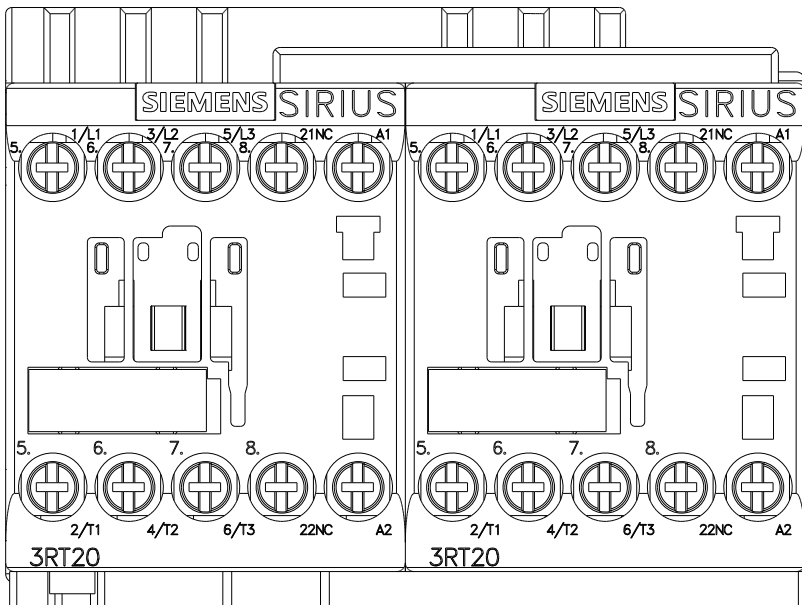
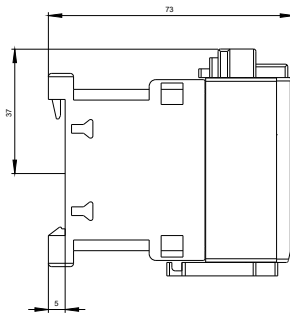
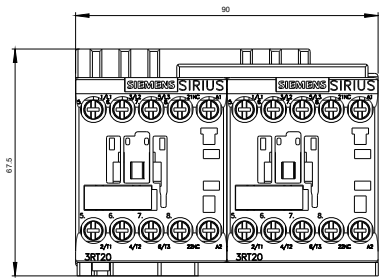
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA23188XB301AK6>

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

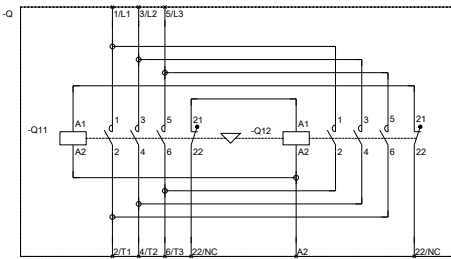
<https://support.industry.siemens.com/cs/ww/en/ps/3RA23188XB301AK6>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA23188XB301AK6&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA23188XB301AK6&lang=en)



WENDEKOMBINATION BGR. S00



REVERSING COMB. SZ S00

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29.06.2015