

Reversing contactor assembly AC-3, 3 kW/400 V, 24 V DC 3-pole,  
Size S00 Spring-type terminal electrical and mechanical interlock



<b>product brand name</b>	SIRIUS
<b>product designation</b>	Reversing contactor assembly
<b>product type designation</b>	3RA23
<b>manufacturer's article number</b>	<ul style="list-style-type: none"> <li>• 1 of the supplied contactor <a href="#">3RT2015-2BB42</a></li> <li>• 2 of the supplied contactor <a href="#">3RT2015-2BB42</a></li> <li>• of the supplied RH assembly kit <a href="#">3RA2913-2AA2</a></li> </ul>

General technical data	
<b>size of contactor</b>	S00
<b>product extension</b>	<ul style="list-style-type: none"> <li>• auxiliary switch Yes</li> </ul>
<b>insulation voltage</b>	<ul style="list-style-type: none"> <li>• with degree of pollution 3 at AC rated value 690 V</li> </ul>
<b>surge voltage resistance rated value</b>	6 kV
<b>protection class IP</b>	<ul style="list-style-type: none"> <li>• on the front IP20</li> </ul>
<b>shock resistance at rectangular impulse</b>	<ul style="list-style-type: none"> <li>• at AC 6,7g / 5 ms, 4,2g / 10 ms</li> <li>• at DC 6,7g / 5 ms, 4,2g / 10 ms</li> </ul>

<b>shock resistance with sine pulse</b>	
• at AC	10,5g / 5 ms, 6,6g / 10 ms
• at DC	10,5g / 5 ms, 6,6g / 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>reference code acc. to DIN EN 81346-2</b>	Q

#### Ambient conditions

• installation altitude at height above sea level maximum	2 000 m
<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-3	
— at 400 V rated value	7 A
<b>operating current</b>	
• at 1 current path at DC-1	
— at 24 V rated value	15 A
— at 110 V rated value	1.5 A
• with 2 current paths in series at DC-1	
— at 24 V rated value	15 A
— at 110 V rated value	8.4 A
• with 3 current paths in series at DC-1	
— at 24 V rated value	15 A
— at 110 V rated value	15 A
<b>operating current</b>	
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	15 A
— at 110 V rated value	0.1 A
• with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value	15 A
— at 110 V rated value	0.25 A
• with 3 current paths in series at DC-3 at DC-5	

— at 24 V rated value	15 A
— at 110 V rated value	15 A
<b>operating power</b>	
• at AC-3	
— at 400 V rated value	3 kW
— at 500 V rated value	3.5 kW
— at 690 V rated value	4 kW
• at AC-4 at 400 V rated value	3 kW
<b>no-load switching frequency</b>	1 500 1/h
operating frequency at AC-3 maximum	750 1/h

<b>Control circuit/ Control</b>	
<b>type of voltage of the control supply voltage</b>	DC
<b>control supply voltage 1</b>	
• at DC rated value	24 V
<b>closing power of magnet coil at DC</b>	4 W
<b>holding power of magnet coil at DC</b>	4 W

<b>Auxiliary circuit</b>	
<b>operating current of auxiliary contacts at AC-12 maximum</b>	10 A
<b>operating current of auxiliary contacts at AC-15</b>	
• at 230 V	6 A
• at 400 V	3 A
<b>operating current of 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 auxiliary contacts</b>	< 1 error per 100 million operating cycles

<b>UL/CSA ratings</b>	
<b>full-load current (FLA) for three-phase AC motor</b>	
• at 480 V rated value	4.8 A
• at 600 V rated value	6.1 A
<b>yielded mechanical performance [hp]</b>	
• for single-phase AC motor	
— at 110/120 V rated value	0.25 hp
— at 230 V rated value	0.75 hp
• for three-phase AC motor	
— at 200/208 V rated value	1.5 hp
— at 220/230 V rated value	2 hp
— at 460/480 V rated value	3 hp
— at 575/600 V rated value	5 hp

contact rating of auxiliary contacts according to UL

A600 / Q600

### Short-circuit protection

#### design of the fuse link

- for short-circuit protection of the main circuit
  - with type of coordination 1 required
  - with type of assignment 2 required
- for short-circuit protection of the auxiliary switch required

gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A  
gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 20 A  
fuse gG: 10 A

### Installation/ mounting/ dimensions

#### mounting position

+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface

#### mounting type

screw and snap-on mounting onto 35 mm standard mounting rail

#### height

84 mm

#### width

90 mm

#### depth

83 mm

#### required spacing

- 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

#### type of electrical connection

- for main current circuit
- for auxiliary and control current circuit

spring-loaded terminals  
spring-loaded terminals

#### type of connectable conductor cross-sections

- for main contacts

— solid	2x (0.5 ... 4 mm <sup>2</sup> )
— single or multi-stranded	2x (0,5 ... 4 mm <sup>2</sup> )
— finely stranded with core end processing	2x (0.5 ... 2.5 mm <sup>2</sup> )
— finely stranded without core end processing	2x (0.5 ... 2.5 mm <sup>2</sup> )
• at AWG conductors for main contacts	1x (20 ... 12)
• type of connectable conductor cross-sections 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> )
• type of connectable conductor cross-sections 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
<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>	Yes
<b>protocol is supported</b>	
• AS-Interface protocol	No
product function control circuit interface with IO link	No

### Certificates/ approvals

General Product Approval			Declaration of Conformity	Test Certificates
				<a href="#">Miscellaneous</a> <a href="#">Type Test Certificates/Test Report</a>

Test Certificates	Marine / Shipping				
<a href="#">Special Test Certificate</a>					

Marine / Shipping	other	Railway
	<a href="#">Confirmation</a>	<a href="#">Vibration and Shock</a>
		

#### Further information

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

<https://www.siemens.com/ic10>

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2315-8XB30-2BB4>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2315-8XB30-2BB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2315-8XB30-2BB4>

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

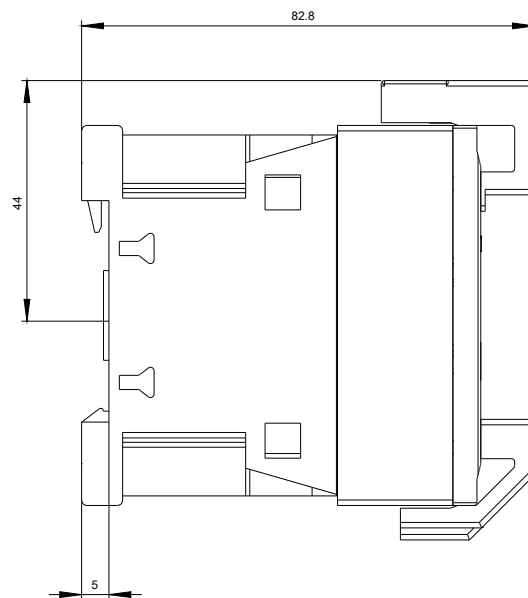
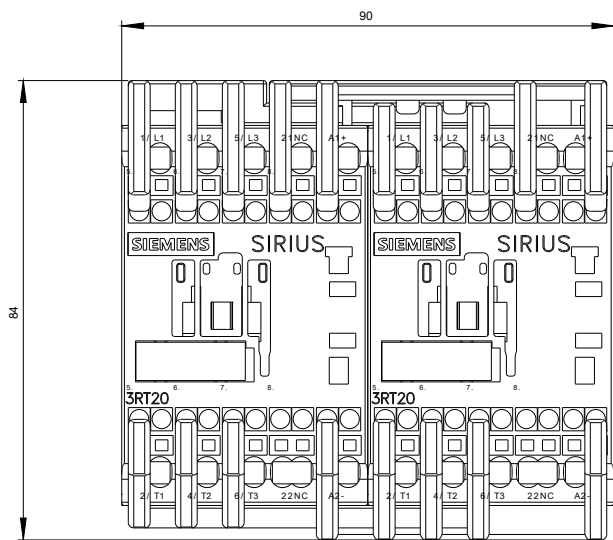
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2315-8XB30-2BB4&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2315-8XB30-2BB4&lang=en)

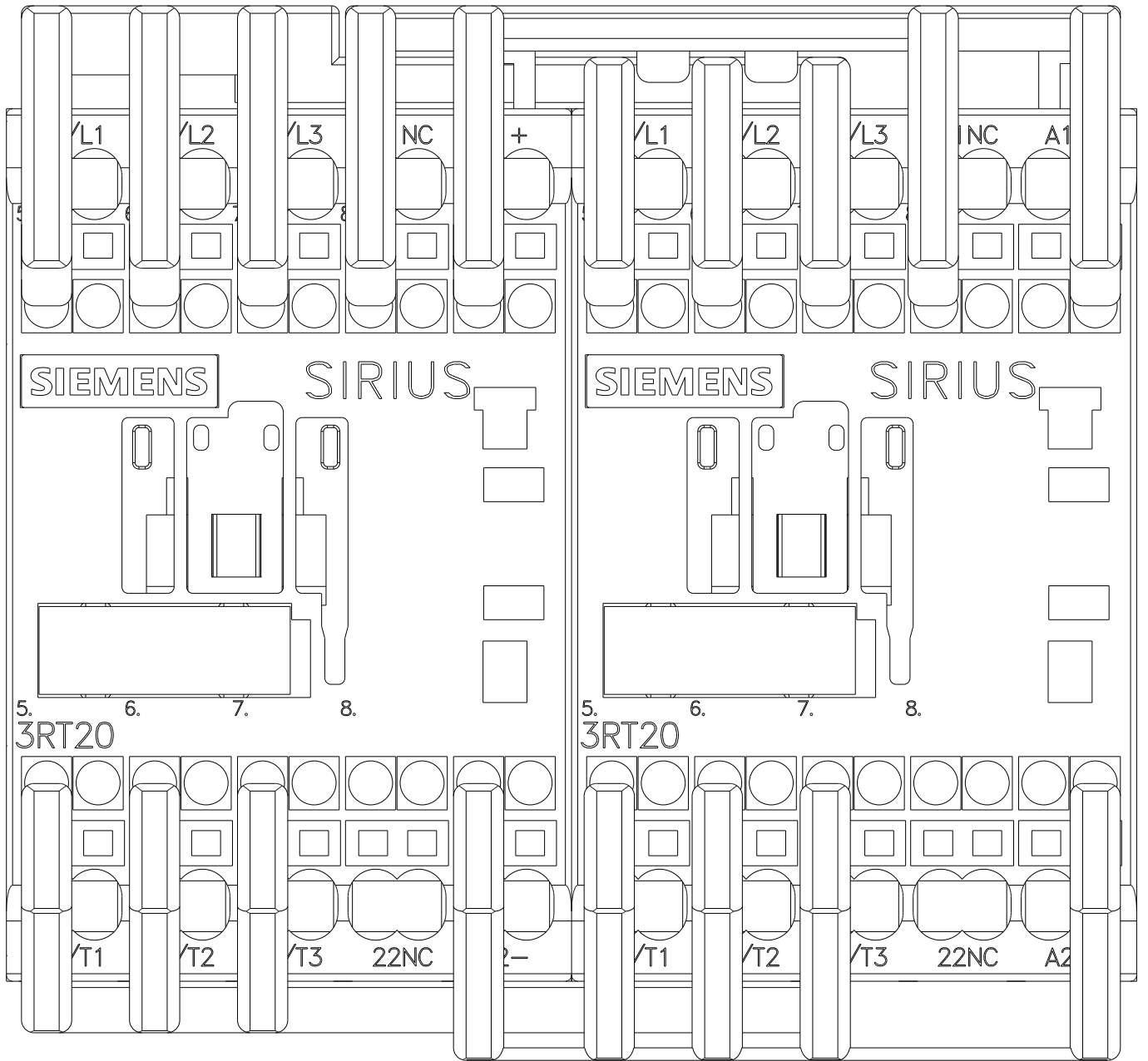
**Characteristic: Tripping characteristics, I<sub>t</sub>, Let-through current**

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2315-8XB30-2BB4/char>

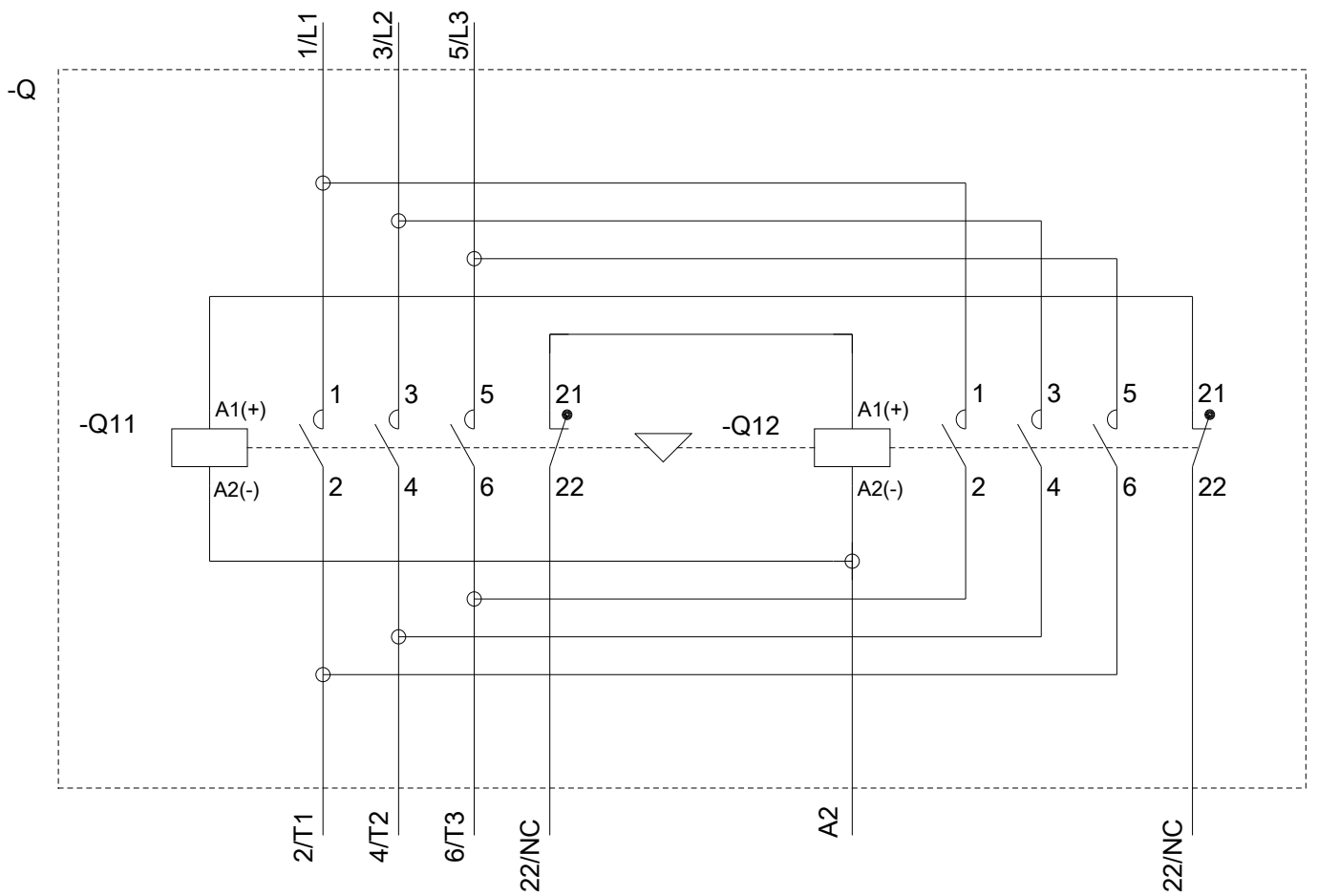
**Further characteristics (e.g. electrical endurance, switching frequency)**

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2315-8XB30-2BB4&objecttype=14&gridview=view1>









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