

Reversing contactor assembly AC-3, 4 kW/400 V, 24 V DC 3-pole, Size S00 screw 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>	
• 1 of the supplied contactor	3RT2016-1BB42
• 2 of the supplied contactor	3RT2016-1BB42
• of the supplied RH assembly kit	3RA2913-2AA1
<b>General technical data</b>	
<b>size of contactor</b>	S00
product extension auxiliary switch	Yes
<b>shock resistance at rectangular impulse</b>	
• at AC	6,7g / 5 ms, 4,2g / 10 ms
• at DC	6,7g / 5 ms, 4,2g / 10 ms
<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 IEC 81346-2</b>	Q
Substance Prohibance (Date)	01.10.2009 00:00:00
<b>Ambient conditions</b>	
installation altitude at height above sea level maximum	2 000 m
• ambient temperature during operation	-25 ... +60 °C
• ambient temperature during storage	-55 ... +80 °C
<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
• operating voltage at AC-3 rated value maximum	690 V
operational current at AC-3	
• at 400 V rated value	9 A
<b>operating power</b>	
• at AC-3	
— at 400 V rated value	4 kW
— at 500 V rated value	4.5 kW

— at 690 V rated value	5.5 kW
• at AC-4 at 400 V rated value	4 kW
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>contact reliability of auxiliary contacts</b>	< 1 error per 100 million operating cycles
<b>UL/CSA ratings</b>	
<b>full-load current (FLA) for 3-phase AC motor</b>	
• at 480 V rated value	7.6 A
• at 600 V rated value	9 A
yielded mechanical performance [hp] for 3-phase AC motor	
• at 200/208 V rated value	2 hp
• at 220/230 V rated value	3 hp
• at 460/480 V rated value	5 hp
• at 575/600 V rated value	7.5 hp
<b>contact rating of auxiliary contacts according to UL</b>	A600 / Q600
<b>Short-circuit protection</b>	
<b>design of the fuse link</b>	
• for short-circuit protection of the main circuit	
— with type of coordination 1 required	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
— with type of assignment 2 required	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 20 A
• for short-circuit protection of the auxiliary switch required	fuse 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>fastening method</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
<b>Connections/ Terminals</b>	
<b>type of electrical connection for main current circuit</b>	screw-type terminals
<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>— solid</li> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• at AWG cables for main contacts</li> </ul>	2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup> 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> ) 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ) 2x (20 ... 16), 2x (18 ... 14)
<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>— solid or stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• at AWG cables for auxiliary contacts</li> </ul>	2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ) 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ) 2x (20 ... 16), 2x (18 ... 14)

Safety related data	
B10 value 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 %
failure rate [FIT] 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
<b>protection class IP on the front acc. to IEC 60529</b>	IP20
<b>touch protection on the front acc. to IEC 60529</b>	finger-safe, for vertical contact from the front

Communication/ Protocol	
<b>product function bus communication</b>	Yes
protocol is supported AS-Interface protocol	No
product function control circuit interface with IO link	No

#### Certificates/ approvals

General Product Approval	Declaration of Conformity	Test Certificates
--------------------------	---------------------------	-------------------



[Miscellaneous](#)

[Type Test  
Certificates/Test  
Report](#)

#### Test Certificates

Marine / Shipping

[Special Test  
Certificate](#)



#### Marine / Shipping

other

Railway



[Confirmation](#)

[Vibration and Shock](#)

#### 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=3RA2316-8XB30-1BB4>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2316-8XB30-1BB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2316-8XB30-1BB4>

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

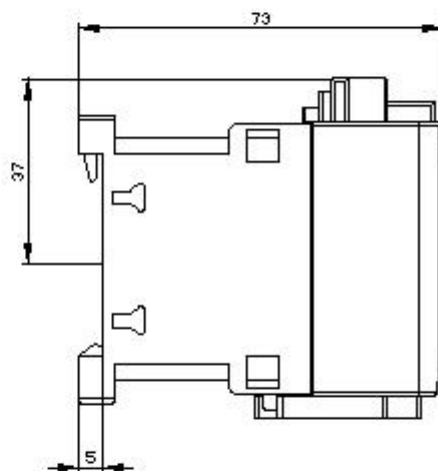
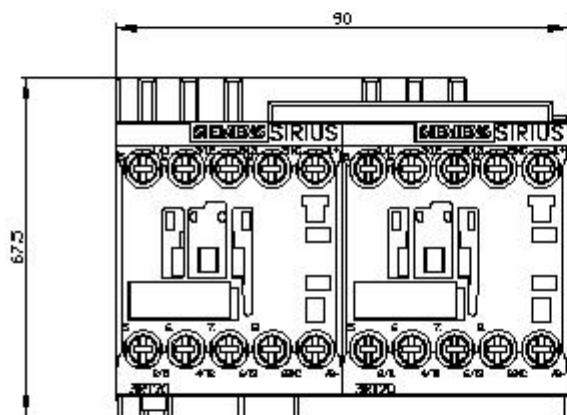
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2316-8XB30-1BB4&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2316-8XB30-1BB4&lang=en)

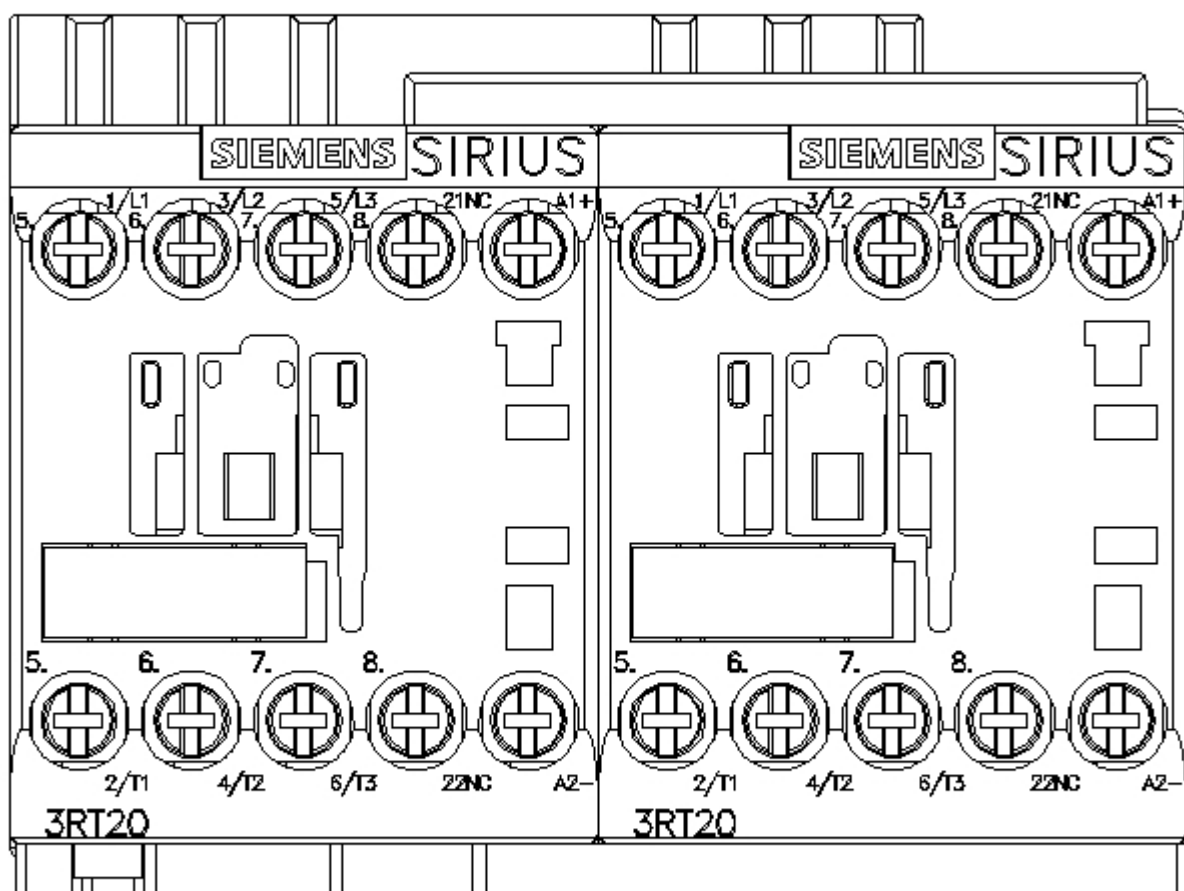
Characteristic: Tripping characteristics,  $I^2t$ , Let-through current

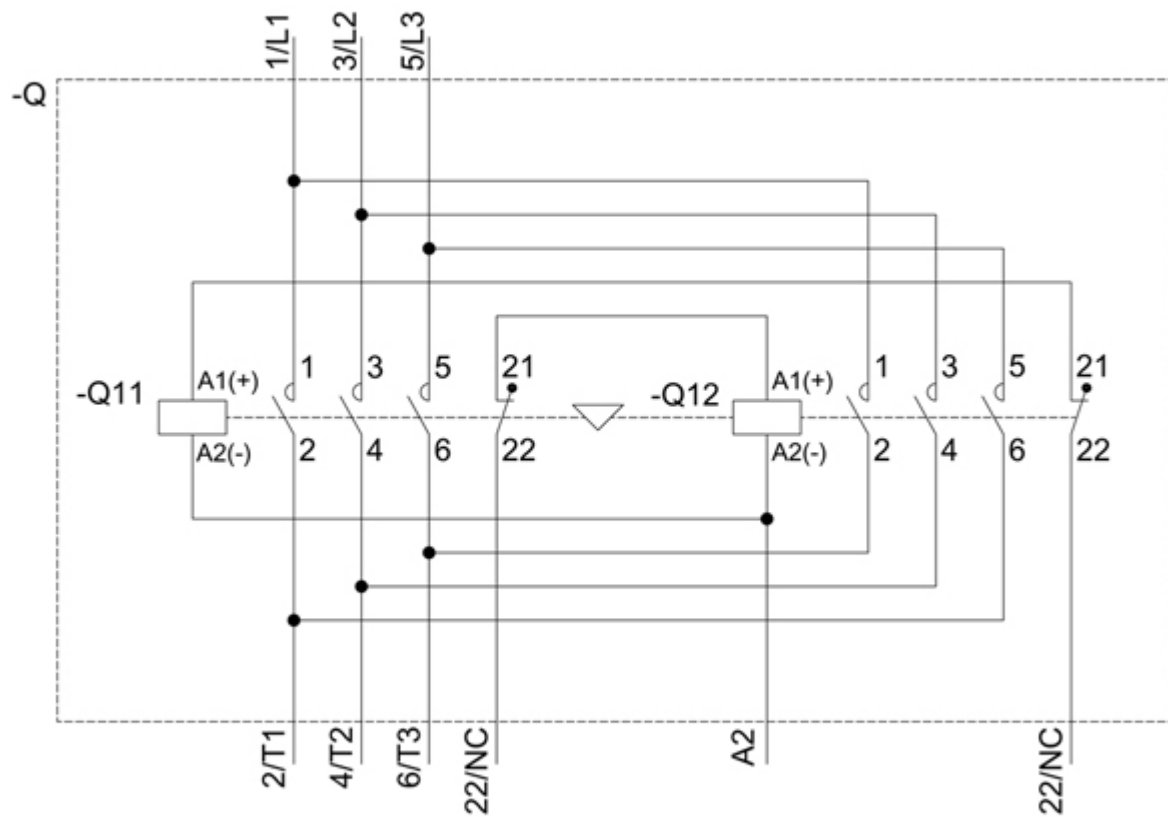
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2316-8XB30-1BB4/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2316-8XB30-1BB4&objecttype=14&gridview=view1>







last modified:

12/15/2020