

Reversing contactor assembly AC-3, 4 kW/400 V, 24 V DC 3-pole, Size S00 screw terminal electrical and mechanical interlock



product brand name	SIRIUS
product designation	Reversing contactor assembly
product type designation	3RA23
manufacturer's article number	
• 1 of the supplied contactor	3RT2016-1BB42
• 2 of the supplied contactor	3RT2016-1BB42
• of the supplied RH assembly kit	3RA2913-2AA1
General technical data	
size of contactor	S00
product extension auxiliary switch	Yes
shock resistance at rectangular impulse	
• at AC	6,7g / 5 ms, 4,2g / 10 ms
• at DC	6,7g / 5 ms, 4,2g / 10 ms
shock resistance with sine pulse	
• at AC	10,5g / 5 ms, 6,6g / 10 ms
• at DC	10,5g / 5 ms, 6,6g / 10 ms
mechanical service life (switching cycles)	
• of contactor typical	10 000 000
• of the contactor with added auxiliary switch block typical	10 000 000
reference code acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	01.10.2009 00:00:00
Ambient conditions	
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
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
number of NC contacts for main contacts	0
• operating voltage at AC-3 rated value maximum	690 V
operational current at AC-3	
• at 400 V rated value	9 A
operating power	
• 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
Control circuit/ Control	
type of voltage of the control supply voltage	DC
control supply voltage 1	
• at DC rated value	24 V
closing power of magnet coil at DC	4 W
holding power of magnet coil at DC	4 W
Auxiliary circuit	
contact reliability of auxiliary contacts	< 1 error per 100 million operating cycles
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• 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
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	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
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
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail
height	68 mm
width	90 mm
depth	73 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	screw-type terminals
type of connectable conductor cross-sections	

<ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts 	2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²), 2x 4 mm ² 2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²), 2x (0,5 ... 4 mm ²) 2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²) 2x (20 ... 16), 2x (18 ... 14)
type of connectable conductor cross-sections <ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts 	2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²) 2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²) 2x (20 ... 16), 2x (18 ... 14)

Safety related data	
B10 value with high demand rate acc. to SN 31920	1 000 000
proportion of dangerous failures	
• 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
T1 value for proof test interval or service life acc. to IEC 61508	20 y
protection class IP on the front acc. to IEC 60529	IP20
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front

Communication/ Protocol	
product function bus communication	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


[Miscellaneous](#)
[Type Test Certificates/Test Report](#)

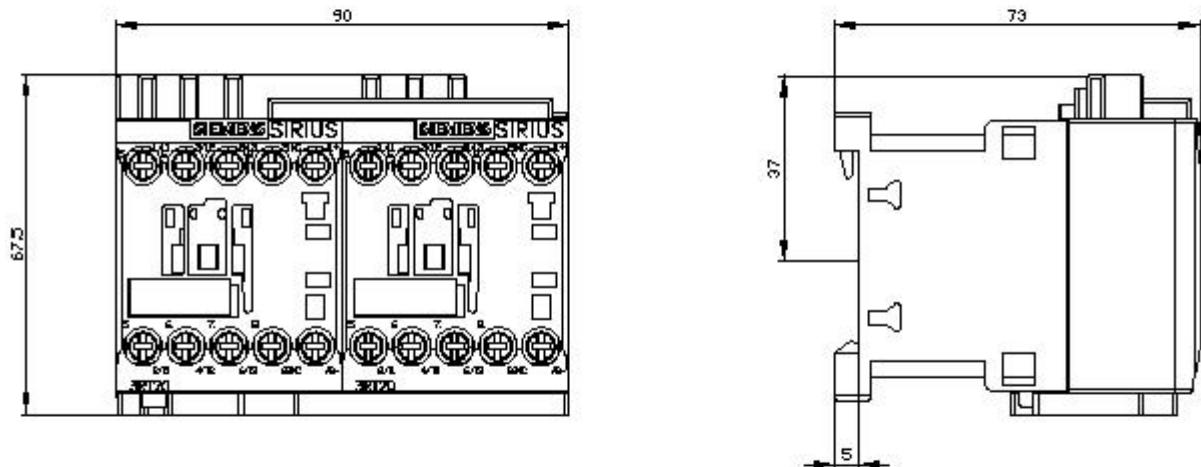
Test Certificates	Marine / Shipping
Special Test Certificate	    

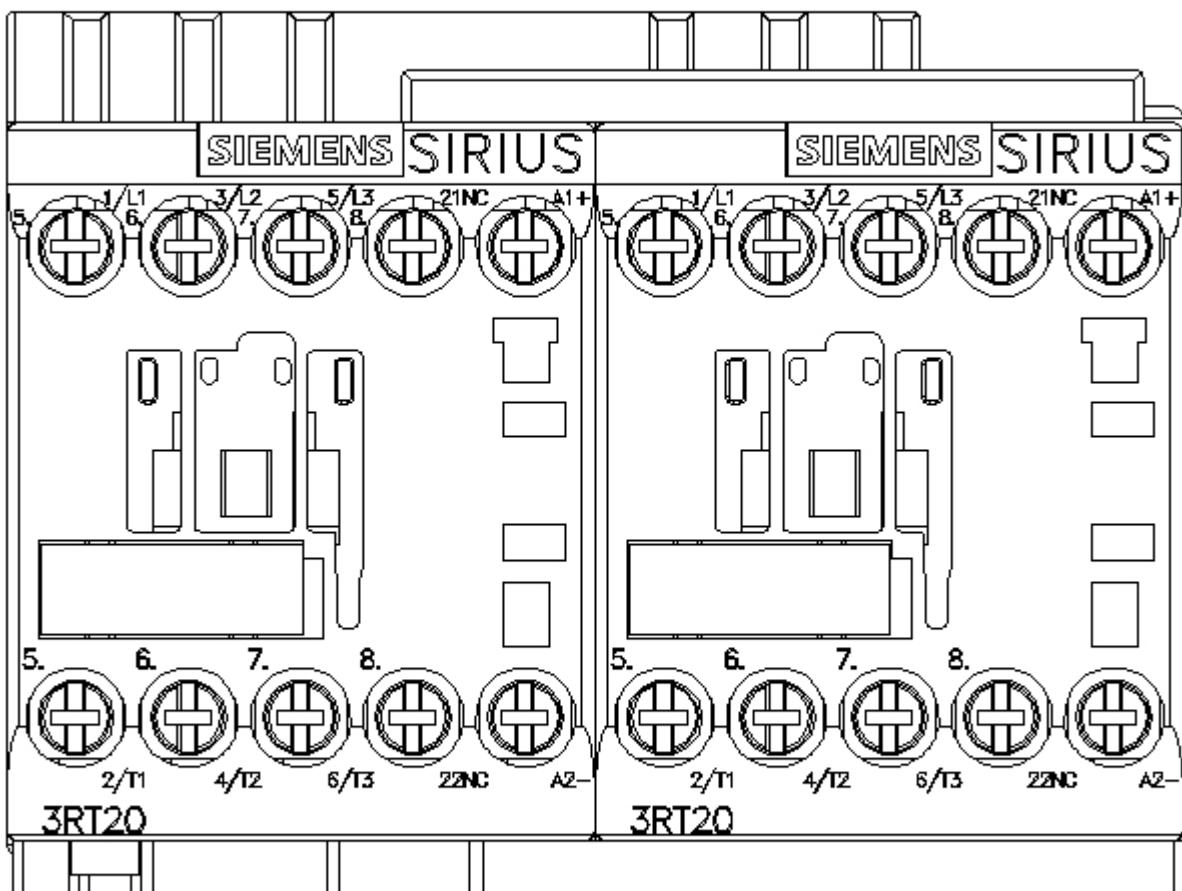
Marine / Shipping	other	Railway
		Confirmation Vibration and Shock

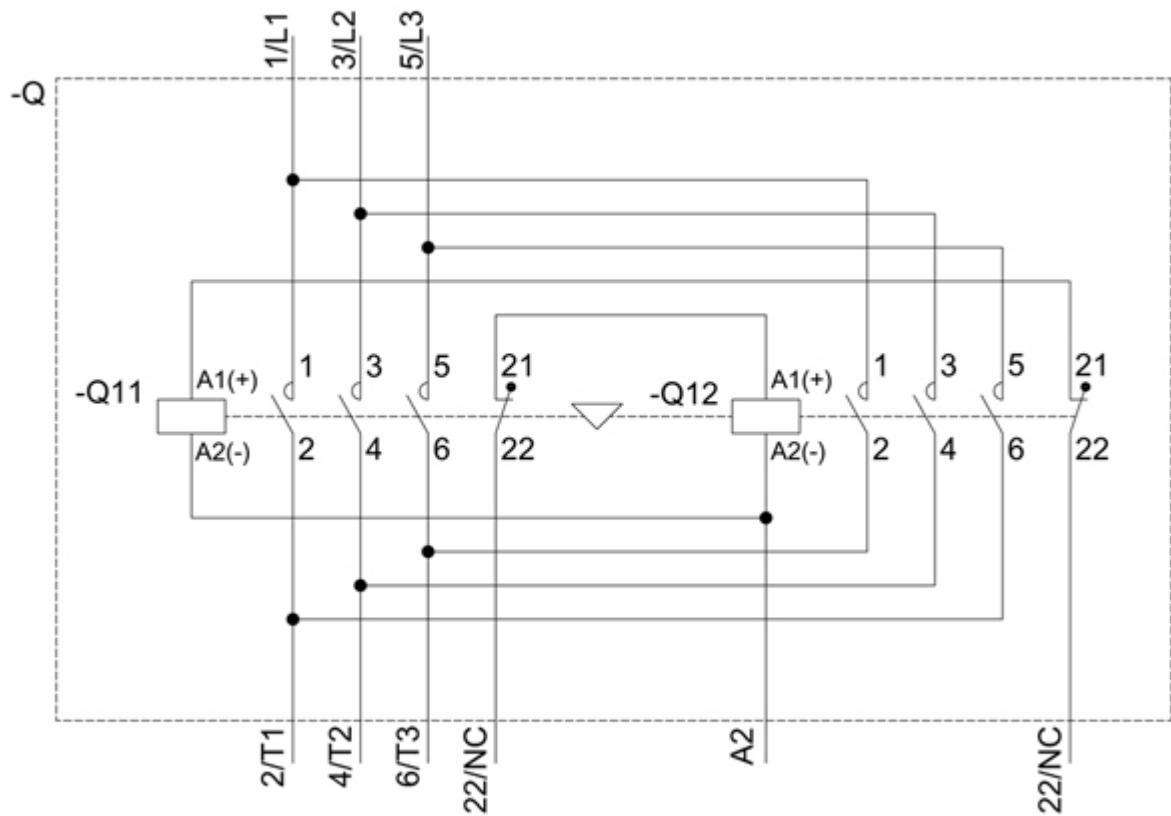
Further information	
Information- and Downloadcenter (Catalogs, Brochures,...)	https://www.siemens.com/ic10
Industry Mall (Online ordering system)	https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2316-8XB30-1BB4
Cax online generator	http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2316-8XB30-1BB4
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

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&mifb=3RA2316-8XB30-1BB4&objecttype=14&gridview=view1>







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12/15/2020 