

REV. COMB., AC3, 4KW/400V DC24V 3-POLE, SZ S00 SPRING-LOADED TERMINAL ELECTR. AND MECH. INTERLOCK



Product brand name	SIRIUS
Product designation	Reversing contactor assembly
Product type designation	3RA23
Manufacturer's article number	<ul style="list-style-type: none"> • 1 of the supplied contactor 3RT2016-2BB42 • 2 of the supplied contactor 3RT2016-2BB42 • of the supplied RH assembly kit 3RA2913-2AA2

General technical data	
Size of contactor	S00
Product extension	<ul style="list-style-type: none"> • Auxiliary switch Yes
Insulation voltage	<ul style="list-style-type: none"> • with degree of pollution 3 rated value 690 V
Degree of pollution	3
Surge voltage resistance rated value	6 kV
Protection class IP	<ul style="list-style-type: none"> • on the front IP20
Shock resistance at rectangular impulse	<ul style="list-style-type: none"> • at AC 6,7g / 5 ms, 4,2g / 10 ms

<ul style="list-style-type: none"> • at DC 	6,7g / 5 ms, 4,2g / 10 ms
Shock resistance with sine pulse	
<ul style="list-style-type: none"> • at AC 	10,5g / 5 ms, 6,6g / 10 ms
<ul style="list-style-type: none"> • at DC 	10,5g / 5 ms, 6,6g / 10 ms
Mechanical service life (switching cycles)	
<ul style="list-style-type: none"> • of contactor typical 	10 000 000
<ul style="list-style-type: none"> • of the contactor with added auxiliary switch block typical 	10 000 000
Equipment marking	
<ul style="list-style-type: none"> • acc. to DIN EN 81346-2 	Q

Ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> • during operation 	-25 ... +60 °C
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • at AC-3 rated value maximum 	690 V
Operating current	
<ul style="list-style-type: none"> • at AC-1 at 400 V <ul style="list-style-type: none"> — at ambient temperature 40 °C rated value — at ambient temperature 60 °C rated value 	18 A 16 A
<ul style="list-style-type: none"> • at AC-2 at 400 V rated value 	7 A
<ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> — at 400 V rated value 	9 A
Operating current	
<ul style="list-style-type: none"> • at 1 current path at DC-1 <ul style="list-style-type: none"> — at 24 V rated value — at 110 V rated value 	20 A 2.1 A
<ul style="list-style-type: none"> • with 2 current paths in series at DC-1 <ul style="list-style-type: none"> — at 24 V rated value — at 110 V rated value 	20 A 12 A
<ul style="list-style-type: none"> • with 3 current paths in series at DC-1 <ul style="list-style-type: none"> — at 24 V rated value — at 110 V rated value 	20 A 20 A
Operating current	
<ul style="list-style-type: none"> • at 1 current path at DC-3 at DC-5 <ul style="list-style-type: none"> — at 24 V rated value — at 110 V rated value 	20 A 0.15 A

<ul style="list-style-type: none"> with 2 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> at 24 V rated value at 110 V rated value with 3 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> at 24 V rated value at 110 V rated value 	20 A 0.35 A 20 A 20 A
No-load switching frequency	1 500 1/h
Operating frequency <ul style="list-style-type: none"> at AC-1 maximum at AC-2 maximum at AC-3 maximum at AC-4 maximum 	1 000 1/h 750 1/h 750 1/h 250 1/h

Control circuit/ Control	
Type of voltage of the control supply voltage	DC
Control supply voltage 1 <ul style="list-style-type: none"> 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	
Operating current of auxiliary contacts at AC-12 maximum	10 A
Operating current of auxiliary contacts at AC-15 <ul style="list-style-type: none"> at 230 V at 400 V 	6 A 3 A
Operating current of auxiliary contacts at DC-13 <ul style="list-style-type: none"> at 24 V at 60 V at 110 V at 220 V 	10 A 2 A 1 A 0.3 A
Contact reliability of 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"> at 480 V rated value at 600 V rated value 	7.6 A 9 A
Yielded mechanical performance [hp] <ul style="list-style-type: none"> for single-phase AC motor <ul style="list-style-type: none"> at 110/120 V rated value at 230 V rated value for three-phase AC motor <ul style="list-style-type: none"> at 200/208 V rated value at 220/230 V rated value 	0.33 hp 1 hp 2 hp 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	
<ul style="list-style-type: none"> • for short-circuit protection of the main circuit <ul style="list-style-type: none"> — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required 	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20 A fuse gL/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	
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side 	6 mm 0 mm 6 mm 6 mm 6 mm 6 mm 0 mm 6 mm 6 mm 6 mm 6 mm 0 mm 6 mm 6 mm 6 mm


Connections/Terminals

Type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit 	spring-loaded terminals spring-loaded terminals

Type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — solid — single or multi-stranded — finely stranded with core end processing — finely stranded without core end processing • at AWG conductors for main contacts 	<p>2x (0.5 ... 4 mm²)</p> <p>2x (0,5 ... 4 mm²)</p> <p>2x (0.5 ... 2.5 mm²)</p> <p>2x (0.5 ... 2.5 mm²)</p> <p>1x (20 ... 12)</p>
Type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — single or multi-stranded — finely stranded with core end processing — finely stranded without core end processing • at AWG conductors for auxiliary contacts 	<p>2x (0,5 ... 2,5 mm²)</p> <p>2x (0.5 ... 1.5 mm²)</p> <p>2x (0.5 ... 1.5 mm²)</p> <p>2x (20 ... 14)</p>
Safety related data	
B10 value	
<ul style="list-style-type: none"> • with high demand rate acc. to SN 31920 	1 000 000
Proportion of dangerous failures	
<ul style="list-style-type: none"> • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 	<p>40 %</p> <p>75 %</p>
Failure rate [FIT]	
<ul style="list-style-type: none"> • 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	
Communication/ Protocol	
Product function Bus communication	No
Protocol is supported	
<ul style="list-style-type: none"> • AS-interface protocol 	No
Certificates/approvals	

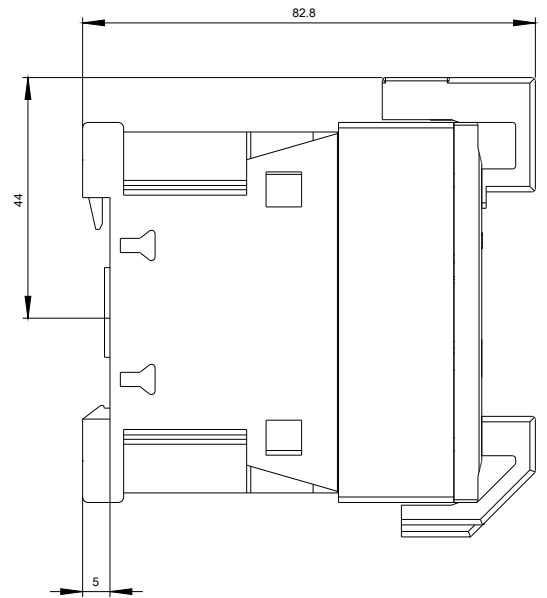
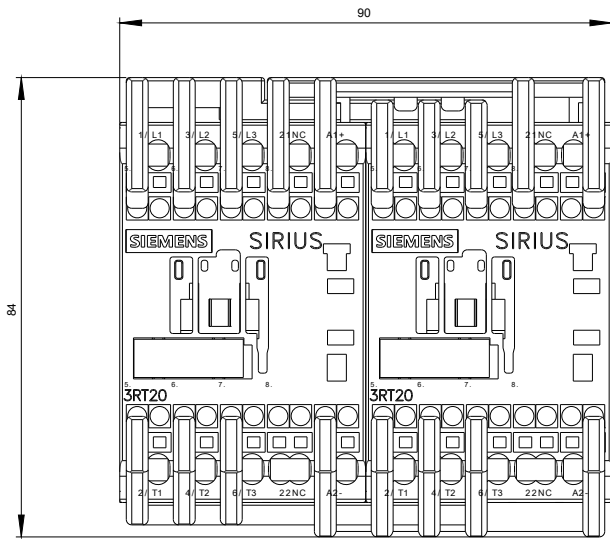
General Product Approval			Declaration of Conformity	Test Certificates	
 CSA	 UL		 EG-Konf.	Special Test Certificate	Type Test Certificates/Test Report

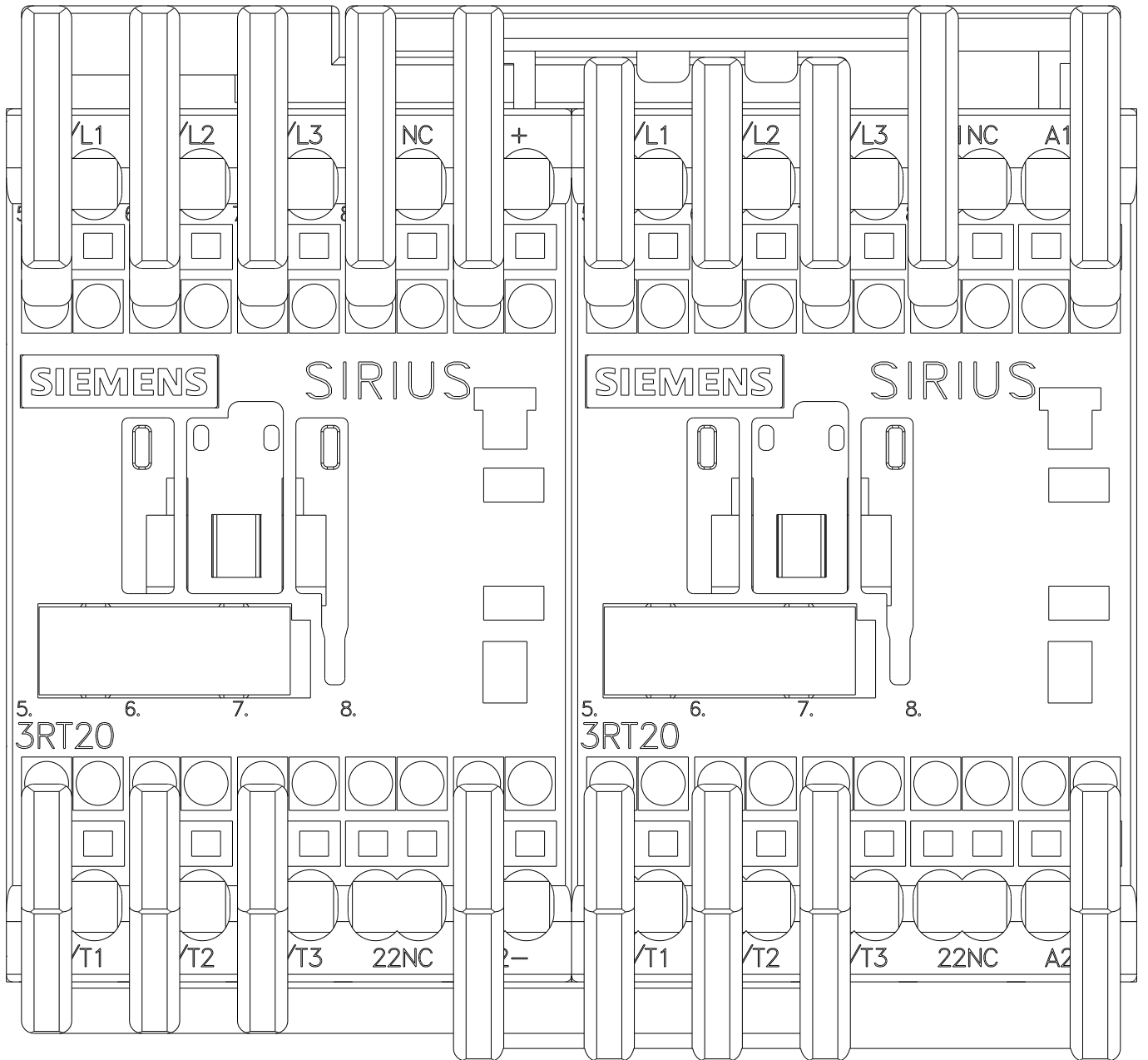
Marine / Shipping					
 ABS	 BUREAU VERITAS	 GL	 LRS	 PRS	 RMRS

Marine / Shipping	other	Railway	
 DNV-GL DNVGL.COM/AF	Environmental Confirmations	Confirmation	Vibration and Shock

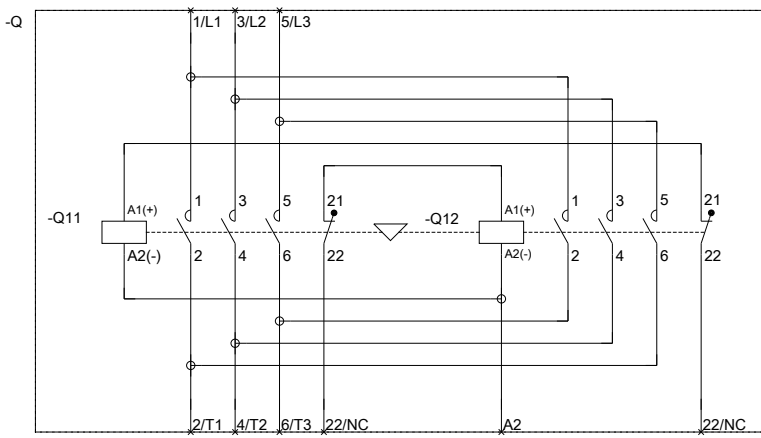
Further information

- Information- and Downloadcenter (Catalogs, Brochures,...)**
<http://www.siemens.com/industrial-controls/catalogs>
- Industry Mall (Online ordering system)**
<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2316-8XB30-2BB4>
- Cax online generator**
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2316-8XB30-2BB4>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2316-8XB30-2BB4>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2316-8XB30-2BB4&lang=en





WENDEKOMBINATION BGR. S00



REVERSING COMB. SZ S00

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