

REV. COMB., AC3, 7.5KW/ 400V DC24V 3-POLE, SZ S00 SCREW
TERMINAL ELECTR. AND MECH. INTERLOCK



Product brand name	SIRIUS
Product designation	Reversing contactor assembly
Product type designation	3RA23
Manufacturer's article number	• 1 of the supplied contactor • 2 of the supplied contactor • of the supplied RH assembly kit
3RT2018-1BB42 3RT2018-1BB42 3RA2913-2AA1	
General technical data	
Size of contactor	S00
Product extension	• Auxiliary switch
Insulation voltage	Yes
with degree of pollution 3 rated value	690 V
Degree of pollution	3
Surge voltage resistance rated value	6 kV
Protection class IP	• on the front
Shock resistance at rectangular impulse	IP20
at AC	7,3g / 5 ms, 4,7g / 10 ms

• at DC	7.3g / 5 ms, 4.7g / 10 ms
Shock resistance with sine pulse	
• at AC	11,4g / 5 ms, 7,3g / 10 ms
• at DC	11,4g / 5 ms, 7,3g / 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
Equipment marking	
• acc. to DIN EN 81346-2	Q

Ambient conditions

Ambient temperature	
• during operation	-25 ... +60 °C
• 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
Operating current	
• at AC-1 at 400 V — at ambient temperature 40 °C rated value — at ambient temperature 60 °C rated value • at AC-2 at 400 V rated value • at AC-3 — at 400 V rated value	22 A 20 A 7 A 16 A
Operating current	
• at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value • with 3 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value	20 A 2.1 A 20 A 12 A 20 A 20 A
Operating current	
• at 1 current path at DC-3 at DC-5 — at 24 V rated value — at 110 V rated value	20 A 0.15 A

• with 2 current paths in series at DC-3 at DC-5 — at 24 V rated value — at 110 V rated value • with 3 current paths in series at DC-3 at DC-5 — 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 • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-4 maximum	1 000 1/h 1 000 1/h 1 000 1/h 300 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	
Operating current of auxiliary contacts at AC-12 maximum	10 A
Operating current of auxiliary contacts at AC-15 • at 230 V • at 400 V	6 A 3 A
Operating current of auxiliary contacts at DC-13 • 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 • at 480 V rated value • at 600 V rated value	14 A 11 A
Yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for three-phase AC motor — at 200/208 V rated value — at 220/230 V rated value	1 hp 2 hp 3 hp 5 hp

— at 460/480 V rated value	10 hp
— at 575/600 V rated value	10 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	gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 50 A gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25 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	68 mm
Width	90 mm
Depth	73 mm
Required spacing	
• with side-by-side mounting — forwards — Backwards — upwards — downwards — at the side • for grounded parts — forwards — Backwards — upwards — at the side — downwards • for live parts — 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	
• for main current circuit • for auxiliary and control current circuit	screw-type terminals screw-type terminals

Type of connectable conductor cross-sections	
• for main contacts — solid — single or multi-stranded — finely stranded with core end processing • at AWG conductors 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	
• for auxiliary contacts — single or multi-stranded — finely stranded with core end processing • at AWG conductors 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 • with high demand rate acc. to SN 31920	40 % 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
Communication/ Protocol	
Product function Bus communication	No
Protocol is supported	
• AS-interface protocol	No
Certificates/approvals	

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

Marine / Shipping					
					
ABS		GL	LRS	PRS	RMRS

Marine / Shipping	other	Railway	
	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=3RA2318-8XB30-1BB4>

Cax online generator

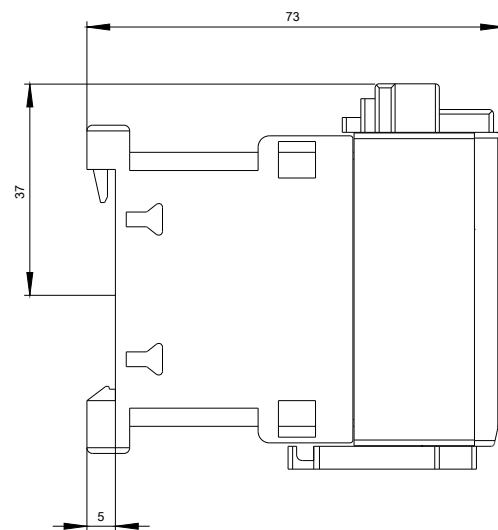
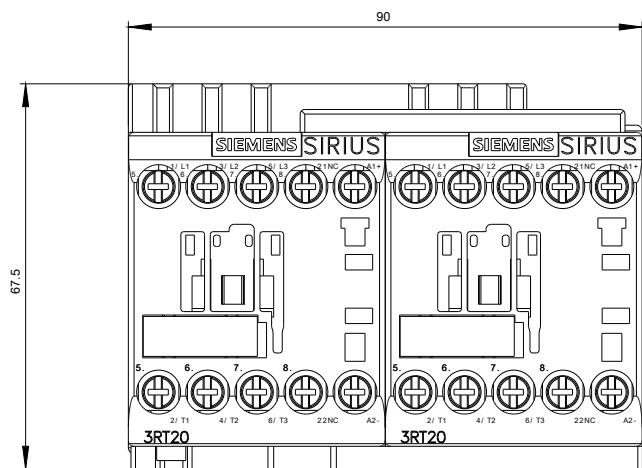
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2318-8XB30-1BB4>

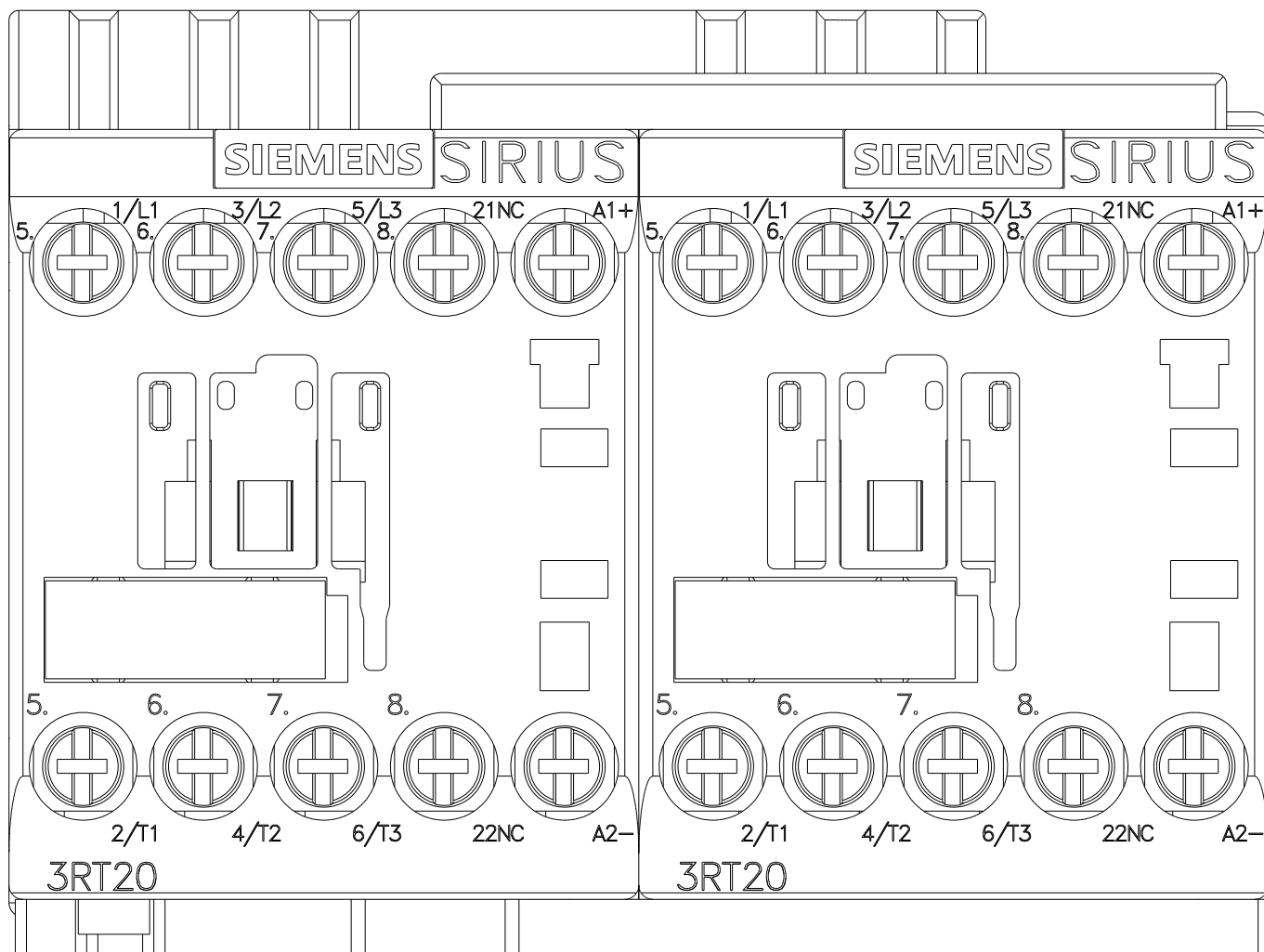
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2318-8XB30-1BB4>

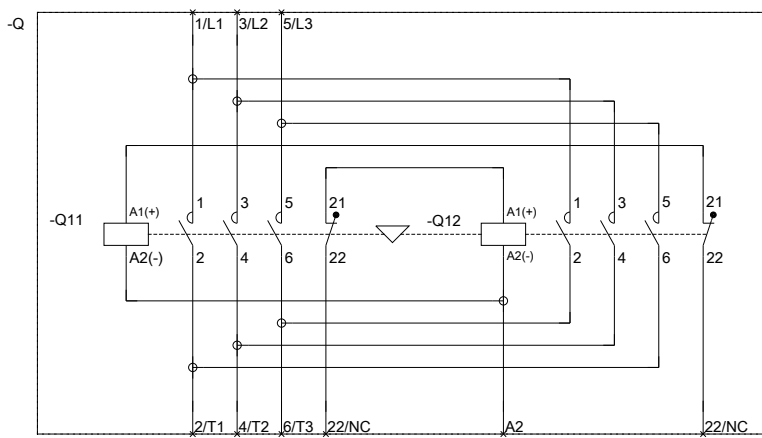
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2318-8XB30-1BB4&lang=en





WENDEKOMBINATION BGR. S00



REVERSING COMB. SZ S00

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07/14/2017