SIEMENS

Data sheet

3RA2318-8XE30-2BB4

REV. COMB. FOR 3RA27, AC3, 7.5KW/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	
 1 of the supplied contactor 	3RT2018-2BB42-0CC0
 2 of the supplied contactor 	3RT2018-2BB42
 of the supplied RH assembly kit 	3RA2913-2AA2
 of the supplied function module for communication 	3RA2711-2BA00

General technical data	
Size of contactor	S00
Product extension	
Auxiliary switch	Yes
Insulation voltage	
 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	IP20

Shock resistance at rectangular impulse	
• 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	22 A
— at ambient temperature 60 °C rated value	20 A
• at AC-2 at 400 V rated value	7 A
• at AC-3	
— at 400 V rated value	16 A
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	20 A
— at 110 V rated value	2.1 A
 with 2 current paths in series at DC-1 	
— at 24 V rated value	20 A
— at 110 V rated value	12 A
 with 3 current paths in series at DC-1 	
— at 24 V rated value	20 A
— at 110 V rated value	20 A
Operating current	
• at 1 current path at DC-3 at DC-5	

— at 24 V rated value	20 A
— at 110 V rated value	0.15 A
• with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value	20 A
— at 110 V rated value	0.35 A
• with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value	20 A
— at 110 V rated value	20 A
No-load switching frequency	1 500 1/h
Operating frequency	
• at AC-1 maximum	1 000 1/h
• at AC-2 maximum	1 000 1/h
• at AC-3 maximum	1 000 1/h
• at AC-4 maximum	300 1/h
Control circuit/ Control	DC.
Type of voltage of the control supply voltage Control supply voltage 1	DC
	24 V
at DC rated value Posign of the surge suppresser	with varistor
Design of the surge suppressor	4 W
Closing power of magnet coil at DC Holding power of magnet coil at DC	4 W
Holding power of magnet con at DC	4 VV
Auxiliary circuit	
Operating current of auxiliary contacts at AC-12	10 A
maximum	
Operating current of auxiliary contacts at AC-15	6.4
• at 230 V	6 A
• at 400 V	3 A
Operating current of auxiliary contacts at DC-13	40.0
• at 24 V	10 A
• at 60 V	2 A
● at 110 V	1 A
● at 220 V	1 A 0.3 A
	1 A
● at 220 V	1 A 0.3 A
at 220 V Contact reliability of auxiliary contacts	1 A 0.3 A
at 220 V Contact reliability of auxiliary contacts UL/CSA ratings	1 A 0.3 A
at 220 V Contact reliability of auxiliary contacts UL/CSA ratings Full-load current (FLA) for three-phase AC motor	1 A 0.3 A < 1 error per 100 million operating cycles
at 220 V Contact reliability of auxiliary contacts UL/CSA ratings Full-load current (FLA) for three-phase AC motor at 480 V rated value	1 A 0.3 A < 1 error per 100 million operating cycles 14 A
at 220 V Contact reliability of auxiliary contacts UL/CSA ratings Full-load current (FLA) for three-phase AC motor at 480 V rated value at 600 V rated value	1 A 0.3 A < 1 error per 100 million operating cycles 14 A
at 220 V Contact reliability of auxiliary contacts UL/CSA ratings Full-load current (FLA) for three-phase AC motor at 480 V rated value at 600 V rated value Yielded mechanical performance [hp]	1 A 0.3 A < 1 error per 100 million operating cycles 14 A
at 220 V Contact reliability of auxiliary contacts UL/CSA ratings Full-load current (FLA) for three-phase AC motor at 480 V rated value at 600 V rated value Yielded mechanical performance [hp] for single-phase AC motor	1 A 0.3 A < 1 error per 100 million operating cycles 14 A 11 A

 for three-phase AC motor 	
— at 200/208 V rated value	3 hp
— at 220/230 V rated value	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

Mounting position	+/-180° rotation possible on vertical mounting surface; can be
<u>.</u>	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	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	spring-loaded terminals
• for auxiliary and control current circuit	spring-loaded terminals
Type of connectable conductor cross-sections	
• for main contacts	
— solid	2x (0.5 4 mm²)
 single or multi-stranded 	2x (0,5 4 mm²)
 finely stranded with core end processing 	2x (0.5 2.5 mm²)
 finely stranded without core end processing 	2x (0.5 2.5 mm²)
• 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 mm²)
 finely stranded with core end processing 	2x (0.5 1.5 mm²)
 finely stranded without core end processing 	2x (0.5 1.5 mm²)
 at AWG conductors for auxiliary contacts 	2x (20 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

Communication/ Protocol	
Product function Bus communication	Yes
Protocol is supported	
AS-interface protocol	No

Certificates/approvals

General Product Approval

Declaration of Conformity

Test Certificates









Type Test Certificates/Test Report

Special Test Certificate

Marine / Shipping













Marine /	other	Railway
Shipping		



Environmental Confirmations

Confirmation

Vibration and Shock

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=3RA2318-8XE30-2BB4

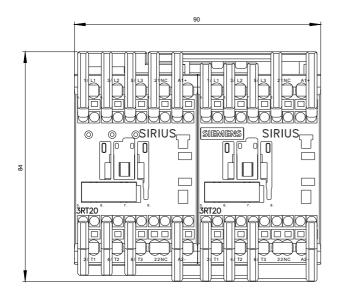
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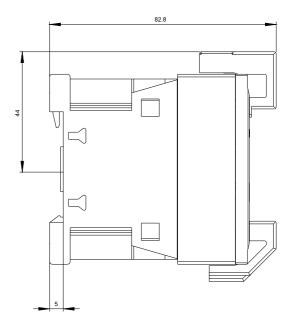
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2318-8XE30-2BB4

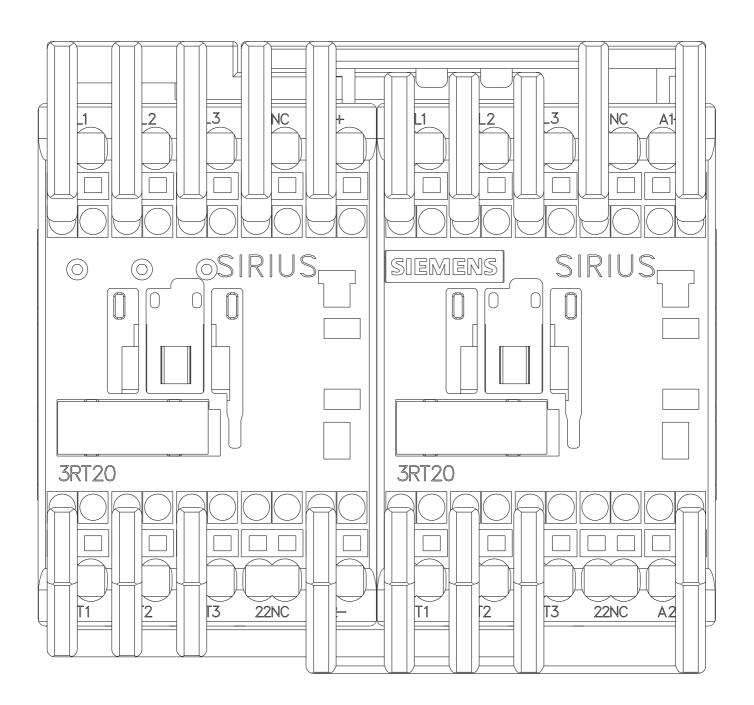
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

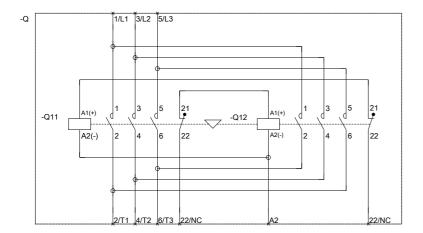
https://support.industry.siemens.com/cs/ww/en/ps/3RA2318-8XE30-2BB4

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2318-8XE30-2BB4&lang=en









REVERSING COMB. SZ S00

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