

REV. COMB. FOR 3RA27, AC3, 7.5KW/400V, DC24V
3-POLE, SZ S00 SCREW TERMINAL ELECTR. AND
MECH. INTERLOCK



product brand name		SIRIUS
Product designation		reversing contactor assembly 3RA23
Manufacturer article number		
<ul style="list-style-type: none"> • 1 of the supplied contactor • 2 of the supplied contactor • of the supplied RH assembly kit • of the supplied function module for communication 		3RT2018-1BB42-0CC0 3RT2018-1BB42 3RA2913-2AA1 3RA2711-1BA00

General technical data:

Insulation voltage		
<ul style="list-style-type: none"> • with degree of pollution 3 Rated value 	V	690
Degree of pollution		3
Shock resistance		9.8g / 5 ms and 5.9g / 10 ms
Surge voltage resistance Rated value	kV	6
Mechanical service life (switching cycles)		
<ul style="list-style-type: none"> • of the contactor typical • of the contactor with added auxiliary switch block typical 		10 000 000 10 000 000
Protection class IP		
<ul style="list-style-type: none"> • on the front 		IP20
Equipment marking		
<ul style="list-style-type: none"> • acc. to DIN EN 81346-2 		Q

Main circuit:

Number of poles for main current circuit		3
Number of NC contacts for main contacts		0

Number of NO contacts for main contacts		3
Operating voltage		
• at AC-3 Rated value maximum	V	690
Operating current		
• at AC-1		
— at 400 V at ambient temperature 40 °C Rated value	A	22
— at 400 V at ambient temperature 60 °C Rated value	A	20
• at AC-2 at 400 V Rated value	A	7
• at AC-3		
— at 400 V Rated value	A	16
• at AC-4 at 400 V Rated value	A	11.5
Operating current with 1 current path		
• at DC-1		
— at 24 V Rated value	A	20
— at 110 V Rated value	A	2.1
• at DC-3 at DC-5		
— at 24 V Rated value	A	20
— at 110 V Rated value	A	0.15
Operating current with 2 current paths in series		
• at DC-1		
— at 24 V Rated value	A	20
— at 110 V Rated value	A	12
• at DC-3 at DC-5		
— at 110 V Rated value	A	0.35
— at 24 V Rated value	A	20
Operating current with 3 current paths in series		
• at DC-1		
— at 24 V Rated value	A	20
— at 110 V Rated value	A	20
• at DC-3 at DC-5		
— at 110 V Rated value	A	20
— at 24 V Rated value	A	20
Operating power		
• at AC-2 at 400 V Rated value	kW	7.5
• at AC-4 at 400 V Rated value	kW	5.5
Operating power		
• at AC-3		
— at 400 V Rated value	kW	7.5
— at 500 V Rated value	kW	7.5
— at 690 V Rated value	kW	7.5

Operating frequency • at AC-3 maximum	1/h	1 000
No-load switching frequency	1/h	1 500

Control circuit/ Control:

Type of voltage of the control supply voltage		DC
Control supply voltage 1 • for DC Rated value	V	24
Operating range factor control supply voltage rated value of the magnet coil for DC		0.85 ... 1.1
Design of the surge suppressor		with varistor
Closing power of the magnet coil for DC	W	4
Holding power of the magnet coil for DC	W	4

Auxiliary circuit:

Number of NC contacts • for auxiliary contacts — per direction of rotation — instantaneous contact — lagging switching		0 0 0
Number of NO contacts • for auxiliary contacts — per direction of rotation — instantaneous contact — leading contact		0 0 0
Product expansion Auxiliary switch		Yes
Operating current of the auxiliary contacts at AC-12 maximum	A	10
Operating current of the auxiliary contacts at AC-15 • at 230 V • at 400 V	A A	6 3
Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 110 V • at 220 V	A A A A	10 2 1 0.3
Contact reliability of the 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	A A	14 11
yielded mechanical performance [hp]		

<ul style="list-style-type: none"> • for single-phase AC motor at 110/120 V Rated value • for single-phase AC motor at 230 V Rated value • for three-phase AC motor at 200/208 V Rated value • for three-phase AC motor at 220/230 V Rated value • for three-phase AC motor at 460/480 V Rated value • for three-phase AC motor at 575/600 V Rated value 	metric hp	1
	metric hp	2
	metric hp	3
	metric hp	5
	metric hp	10
	metric hp	10
Contact rating of the auxiliary contacts acc. to UL		A600 / Q600

Short-circuit:

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 assignment 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	mm	68
Width	mm	90
Depth	mm	73
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 	mm	6 0 6 6 6 6 0 6 6 6

• for live parts		
— forwards	mm	6
— Backwards	mm	0
— upwards	mm	6
— downwards	mm	6
— at the side	mm	6

Connections/ Terminals:

Type of electrical connection		
• for main current circuit		screw-type terminals
• for auxiliary and control current circuit		screw-type terminals
Type of connectable conductor cross-section		
• for main contacts		
— single or multi-stranded		2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²), 2x (0,5 ... 4 mm ²)
— finely stranded with core end processing		2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
• for AWG conductors for main contacts		2x (20 ... 16), 2x (18 ... 14)
• for auxiliary contacts		
— single or multi-stranded		2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²)
— finely stranded with core end processing		2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
• for AWG conductors for auxiliary contacts		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	FIT	100
T1 value for proof test interval or service life acc. to IEC 61508	y	20
Protection against electrical shock		finger-safe

Mechanical data:

Size of contactor		S00
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Communication/ Protocol:

Product function Bus communication		Yes
Protocol is supported		
• AS-interface protocol		No
Product function Control circuit interface with IO link		Yes



Ambient conditions:

Installation altitude at height above sea level maximum	m	2 000
Ambient temperature		

- during operation
- during storage

°C	-25 ... +60
°C	-55 ... +80



Certificates/ approvals:

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

Shipping Approval

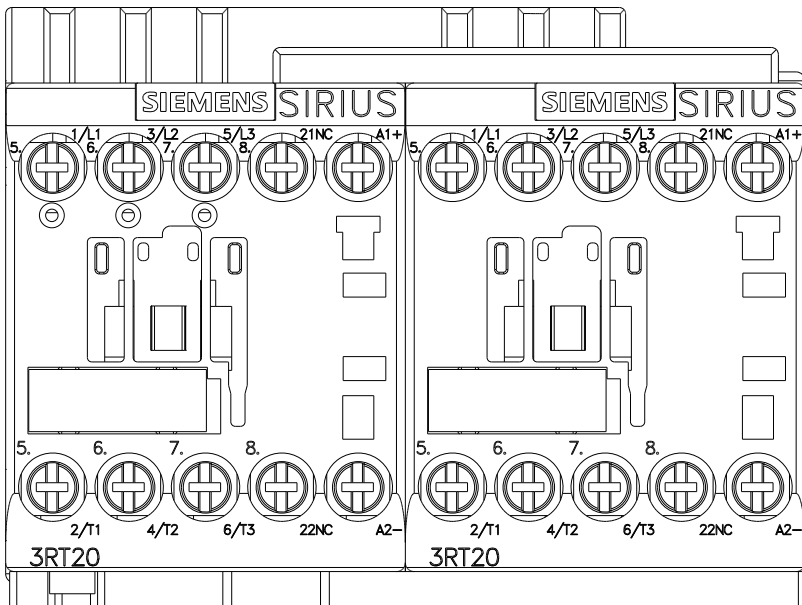
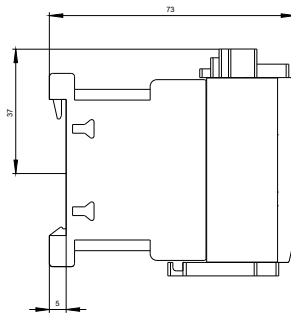
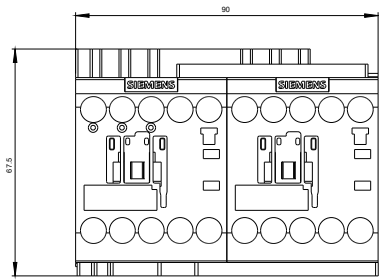
 ABS	 BUREAU VERITAS	 DNV	 GL	 LRS	 PRS
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Shipping Approval other

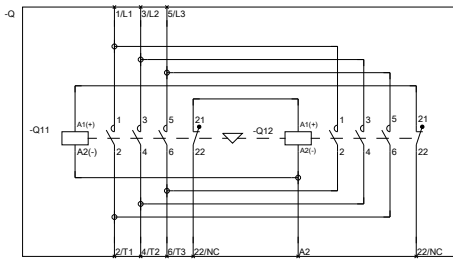
 RINA	 RMRS	Environmental Confirmations	other
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Further information

- Information- and Downloadcenter (Catalogs, Brochures,...)**
<http://www.siemens.com/industrial-controls/catalogs>
- Industry Mall (Online ordering system)**
<http://www.siemens.com/industrymall>
- Cax online generator**
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA23188XE301BB4>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
<http://support.automation.siemens.com/WW/view/en/3RA23188XE301BB4/all>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA23188XE301BB4&lang=en



WENDEKOMBINATION BGR. S00



REVERSING COMB. SZ S00

last modified:

11.03.2015