

REV. COMB., AC3, 4KW/400V AC24V, 50/60 HZ, 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 	3RT2016-1AB02 3RT2016-1AB02 3RA2913-2AA1

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		

<ul style="list-style-type: none"> • at AC-3 Rated value maximum 	V	690
Operating current		
<ul style="list-style-type: none"> • at AC-1 <ul style="list-style-type: none"> — at 400 V at ambient temperature 40 °C Rated value — at 400 V at ambient temperature 60 °C Rated value • at AC-2 at 400 V Rated value • at AC-3 <ul style="list-style-type: none"> — at 400 V Rated value • at AC-4 at 400 V Rated value 	A	18
	A	16
	A	7
	A	9
	A	8.5
Operating current with 1 current path		
<ul style="list-style-type: none"> • at DC-1 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value • at DC-3 at DC-5 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value 	A	20
	A	2.1
	A	20
	A	0.15
Operating current with 2 current paths in series		
<ul style="list-style-type: none"> • at DC-1 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value • at DC-3 at DC-5 <ul style="list-style-type: none"> — at 110 V Rated value — at 24 V Rated value 	A	20
	A	12
	A	0.35
	A	20
Operating current with 3 current paths in series		
<ul style="list-style-type: none"> • at DC-1 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value • at DC-3 at DC-5 <ul style="list-style-type: none"> — at 110 V Rated value — at 24 V Rated value 	A	20
	A	20
	A	20
	A	20
Operating power		
<ul style="list-style-type: none"> • at AC-2 at 400 V Rated value • at AC-4 at 400 V Rated value 	kW	4
	kW	4
Operating power		
<ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> — at 400 V Rated value — at 500 V Rated value — at 690 V Rated value 	kW	4
	kW	4.5
	kW	5.5
Operating frequency		
<ul style="list-style-type: none"> • at AC-3 maximum 	1/h	750

No-load switching frequency	1/h	1 500
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Control circuit/ Control:

Type of voltage of the control supply voltage		AC
Control supply voltage 1 with AC		
<ul style="list-style-type: none"> at 50 Hz Rated value 	V	24
<ul style="list-style-type: none"> at 60 Hz Rated value 	V	24
Operating range factor control supply voltage rated value of the magnet coil with AC		
<ul style="list-style-type: none"> at 50 Hz 		0.8 ... 1.1
<ul style="list-style-type: none"> at 60 Hz 		0.85 ... 1.1

Auxiliary circuit:

Number of NC contacts		
<ul style="list-style-type: none"> for auxiliary contacts <ul style="list-style-type: none"> per direction of rotation instantaneous contact lagging switching 		0 0 0
Number of NO contacts		
<ul style="list-style-type: none"> for auxiliary contacts <ul style="list-style-type: none"> 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		
<ul style="list-style-type: none"> at 230 V 	A	6
<ul style="list-style-type: none"> at 400 V 	A	3
Operating current of the auxiliary contacts at DC-13		
<ul style="list-style-type: none"> 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		
<ul style="list-style-type: none"> at 480 V Rated value at 600 V Rated value 	A A	7.6 9
yielded mechanical performance [hp]		
<ul style="list-style-type: none"> for single-phase AC motor at 110/120 V Rated value 	metric hp	0.33

<ul style="list-style-type: none"> • for single-phase AC motor at 230 V Rated value 	metric hp	1
<ul style="list-style-type: none"> • for three-phase AC motor at 200/208 V Rated value 	metric hp	2
<ul style="list-style-type: none"> • for three-phase AC motor at 220/230 V Rated value 	metric hp	3
<ul style="list-style-type: none"> • for three-phase AC motor at 460/480 V Rated value 	metric hp	5
<ul style="list-style-type: none"> • for three-phase AC motor at 575/600 V Rated value 	metric hp	7.5
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 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	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 • for live parts 	mm	6 0 6 6 6 6 0 6 6 6

— 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)
Apparent pick-up power of the magnet coil with AC		
• at 50 Hz	V·A	27

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

Ambient conditions:

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

- during operation
- during storage

°C	-25 ... +60
°C	-55 ... +80

Certificates/ approvals:

General Product Approval



EG-Konf.

Test Certificates

[Type Test
Certificates/Test
Report](#)

[Special Test
Certificate](#)

Shipping Approval



GL



LRS



PRS

Shipping Approval

other



RINA



RMRS

[Environmental
Confirmations](#)

[other](#)

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

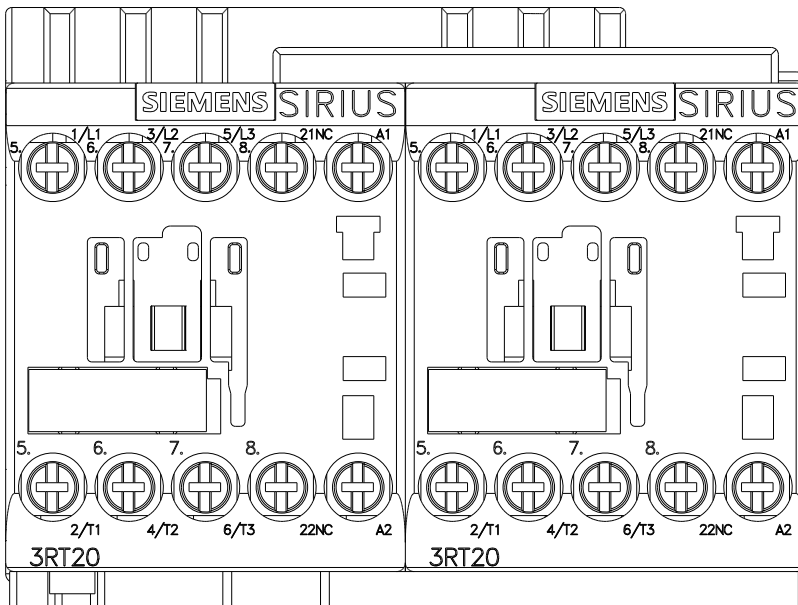
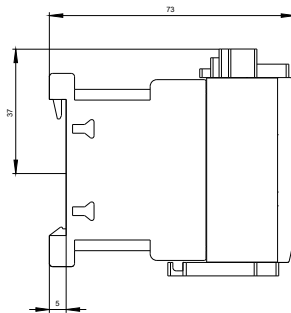
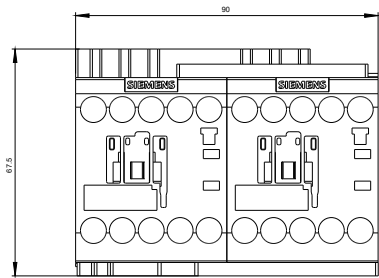
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA23168XB301AB0>

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

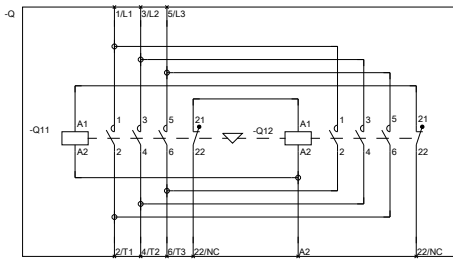
<http://support.automation.siemens.com/WW/view/en/3RA23168XB301AB0/all>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA23168XB301AB0&lang=en



WENDEKOMBINATION BGR. S00



REVERSING COMB. SZ S00

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11.03.2015