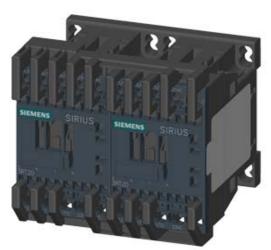
SIEMENS

Data sheet

3RA2316-8XB30-2AF0



REV. COMB., AC3, 4KW/400V AC110V, 50/60HZ, 3-POLE, SZ S00 SPRING-LOADED TERMINAL ELECTR. AND MECH. INTERLOCK

product brand name	SIRIUS
Product designation	reversing contactor assembly 3RA23
Manufacturer article number	
 1 of the supplied contactor 	3RT2016-2AF02
 2 of the supplied contactor 	3RT2016-2AF02
 of the supplied RH assembly kit 	3RA2913-2AA2

General technical data:		
Insulation voltage		
 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)		
 of the contactor typical 		10 000 000
 of the contactor with added auxiliary switch 		10 000 000
block typical		
Protection class IP		
• on the front		IP20
Equipment marking		
● 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	Α	18
 — at 400 V at ambient temperature 60 °C Rated value 	Α	16
• at AC-2 at 400 V Rated value	Α	7
• at AC-3		
— at 400 V Rated value	Α	9
• at AC-4 at 400 V Rated value	Α	8.5
Operating current with 1 current path		
• at DC-1		
— at 24 V Rated value	Α	20
— at 110 V Rated value	Α	2.1
• at DC-3 at DC-5		
— at 24 V Rated value	Α	20
— at 110 V Rated value	Α	0.15
Operating current with 2 current paths in series		
• at DC-1		
— at 24 V Rated value	Α	20
— at 110 V Rated value	Α	12
• at DC-3 at DC-5		
— at 110 V Rated value	Α	0.35
— at 24 V Rated value	Α	20
Operating current with 3 current paths in series		
• at DC-1		
— at 24 V Rated value	Α	20
— at 110 V Rated value	Α	20
• at DC-3 at DC-5		
— at 110 V Rated value	Α	20
— at 24 V Rated value	Α	20
Operating power		
• at AC-2 at 400 V Rated value	kW	4
• at AC-4 at 400 V Rated value	kW	4
Operating power		
• at AC-3		
— at 400 V Rated value	kW	4
— at 500 V Rated value	kW	4.5
— at 690 V Rated value	kW	5.5
Operating frequency		
● at AC-3 maximum	1/h	750

No-load switching frequency	1/h	1 500
Control circuit/ Control:		
Type of voltage of the control supply voltage		AC
Control supply voltage 1 with AC		
• at 50 Hz Rated value	V	110
• at 60 Hz Rated value	V	110
Operating range factor control supply voltage rated		
value of the magnet coil with AC		
• at 50 Hz		0.8 1.1
● at 60 Hz		0.85 1.1
Auxiliary circuit:		
Number of NC contacts		
• for auxiliary contacts		
 per direction of rotation 		0
 instantaneous contact 		0
— lagging switching		0
Number of NO contacts		
• for auxiliary contacts		
per direction of rotation		0
 instantaneous contact 		0
— leading contact		0
Product expansion Auxiliary switch		Yes
Operating current of the auxiliary contacts at AC-12	Α	10
maximum		
Operating current of the auxiliary contacts at AC-15	Δ.	
● at 230 V	A	6
• at 400 V	Α	3
Operating current of the auxiliary contacts at DC-13		40
● at 24 V	A	10
● at 60 V	Α .	2
● at 110 V	Α	1
• at 220 V	Α	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	Α	7.6
● at 600 V Rated value	Α	9
yielded mechanical performance [hp]		
• for single-phase AC motor at 110/120 V Rated value	metric hp	0.33

 for single-phase AC motor at 230 V Rated value 	metric hp	1
 for three-phase AC motor at 200/208 V Rated value 	metric hp	2
 for three-phase AC motor at 220/230 V Rated value 	metric hp	3
 for three-phase AC motor at 460/480 V Rated value 	metric hp	5
• 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	
• for short-circuit protection of the main circuit	
— with type of assignment 1 required	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
— with type of assignment 2 required	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20 A
• for short-circuit protection of the auxiliary switch required	fuse gL/gG: 10 A

nstallation/ 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	84
Width	mm	90
Depth	mm	83
Required spacing		
with side-by-side mounting		
— forwards	mm	6
— Backwards	mm	0
— upwards	mm	6
— downwards	mm	6
— at the side	mm	6
• for grounded parts		
— forwards	mm	6
— Backwards	mm	0
— upwards	mm	6
— at the side	mm	6
— downwards	mm	6
• for live parts		

mm	6
mm	0
mm	6
mm	6
mm	6
	mm mm 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-section		
• for main contacts		
— 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)
 for AWG conductors for main contacts 		1x (20 12)
 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)
 for AWG conductors for auxiliary contacts 		2x (20 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	У	20
Protection against electrical shock		finger-safe

Mechanical data:	
Size of contactor	S00
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	m	2 000			
maximum					
Ambient temperature					
during operation	°C	-25 + 60			
during storage	°C	-55 + 80			

Certificates/ approvals:

General Product Approval		Declaration of Conformity			
				Type Test	Special Test









Certificates/Test Report

Certificate

Shipping Approval









GL





Shipping Approval

other





Environmental Confirmations other

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

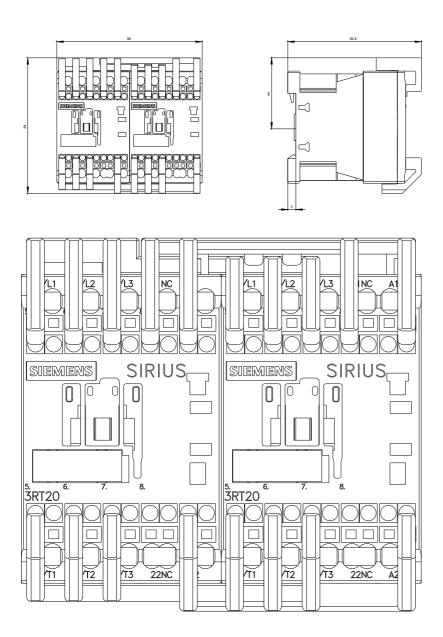
http://www.siemens.com/industrymall

Cax online generator

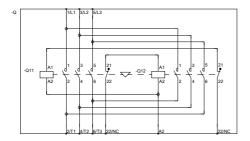
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA23168XB302AF0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RA23168XB302AF0/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=3RA23168XB302AF0&lang=en



WENDEKOMBINATION BGR. S00



REVERSING COMB. SZ S0

last modified: 11.03.2015