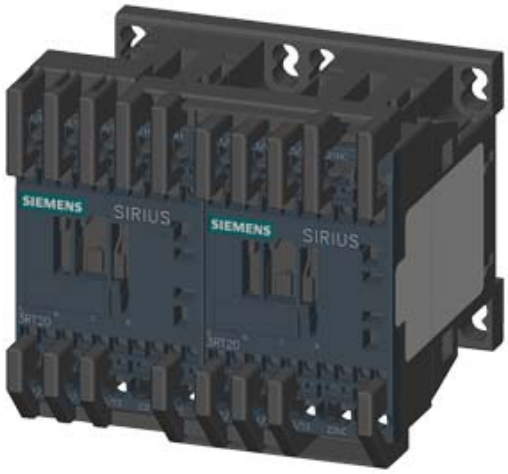
SIEMENS

Data sheet 3RA2318-8XB30-2AK6



REV. COMB., AC3, 7.5KW/ 400V AC110V 50HZ/120V 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		3RT2018-2AK62
• 2 of the supplied contactor		3RT2018-2AK62
• 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 block typical		10 000 000
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	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		AC
Control supply voltage 1 with AC		
• at 50 Hz Rated value	V	110
• at 60 Hz Rated value	V	120
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 maximum	A	10
Operating current of the auxiliary contacts at AC-15		
• at 230 V	A	6
• at 400 V	A	3
Operating current of the auxiliary contacts at DC-13		
• at 24 V	A	10
• at 60 V	A	2
• at 110 V	A	1
• at 220 V	A	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	A	14
• at 600 V Rated value	A	11
yielded mechanical performance [hp]		
• for single-phase AC motor at 110/120 V Rated value	metric hp	1

• for single-phase AC motor at 230 V Rated value	metric hp	2
• for three-phase AC motor at 200/208 V Rated value	metric hp	3
• for three-phase AC motor at 220/230 V Rated value	metric hp	5
• for three-phase AC motor at 460/480 V Rated value	metric hp	10
• for three-phase AC motor at 575/600 V Rated value	metric hp	10
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 NH 3NA, DIAZED 5SB, NEOZED 5SE: 50 A
— with type of assignment 2 required		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25 A
• for short-circuit protection of the auxiliary switch required		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	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		
— 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		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	37

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

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
Ambient temperature		
• during operation	°C	-25 ... +60
• during storage	°C	-55 ... +80

Certificates/ approvals:

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

Shipping Approval

ABS | BUREAU VERITAS | DNV | GL | LRS | PRS

Shipping Approval		other	
RINA	RMRS	Environmental Confirmations	other

Further information

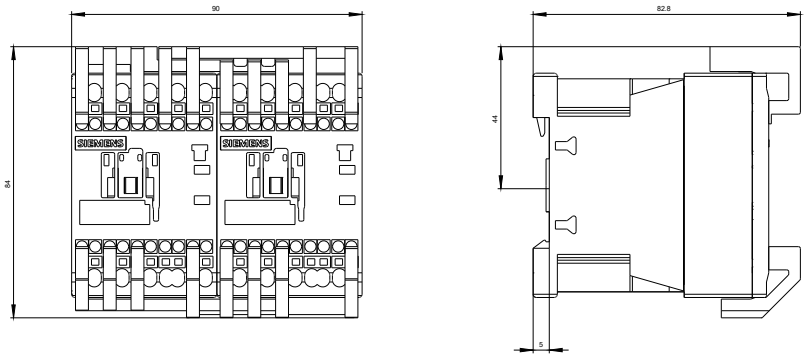
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

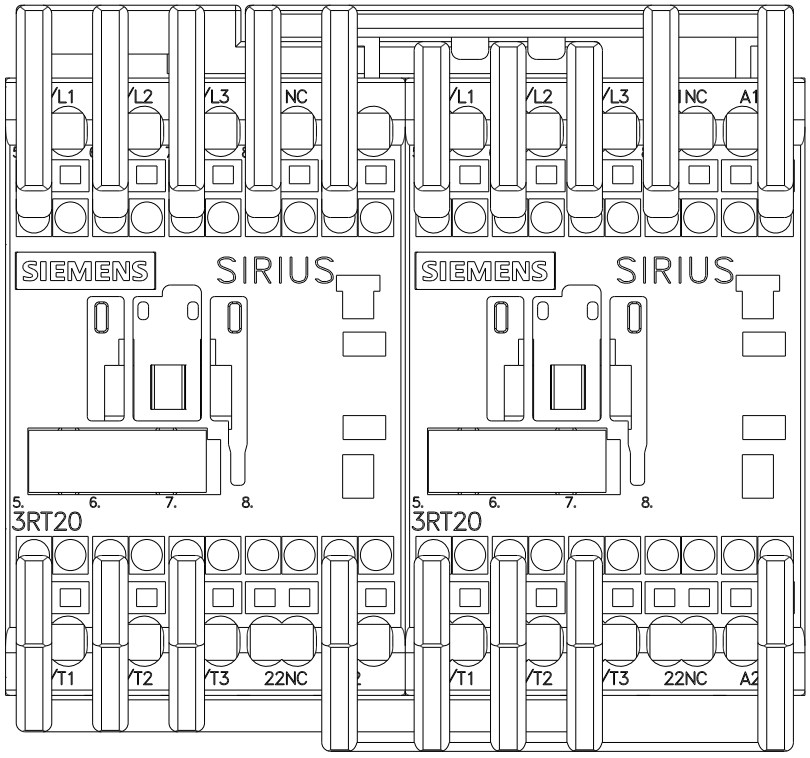
Industry Mall (Online ordering system)
http://www.siemens.com/industrymall

Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA23188XB302AK6

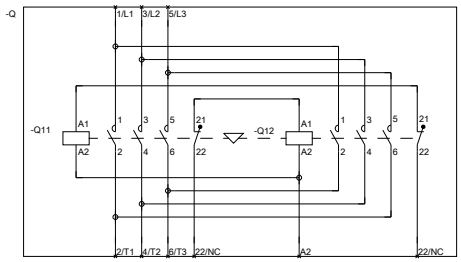
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3RA23188XB302AK6/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA23188XB302AK6&lang=en





WENDEKOMBINATION BGR. S00



REVERSING COMB. SZ S00

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