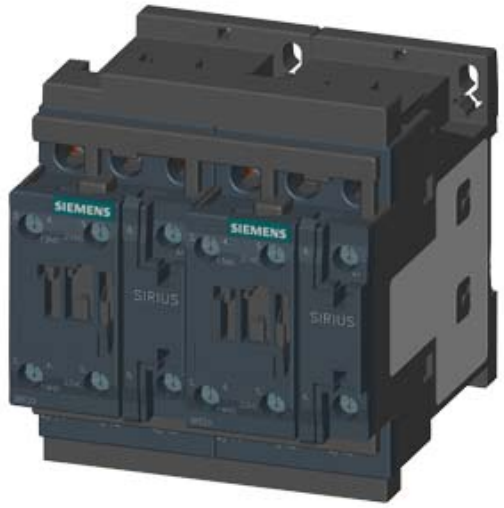
SIEMENS

Data sheet 3RA2328-8XB30-1AC2



REV. COMB., AC3, 18.5KW/ 400V AC24V, 50/60HZ, 3-POLE, SZ S0 SCREW TERMINAL ELECTR. AND MECH. INTERLOCK 2NO INTEGR.

product brand name		SIRIUS
Product designation		star-delta (wye-delta) contactor assembly 3RA24
Manufacturer article number		
• 1 of the supplied contactor		3RT2028-1AC20
• 2 of the supplied contactor		3RT2028-1AC20
• of the supplied RS assembly kit		3RA2923-2AA1
General technical data:		
Insulation voltage		
• with degree of pollution 3 Rated value	V	690
Degree of pollution		3
Shock resistance		12.5g / 5 ms and 7.8g / 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	50
— at 400 V at ambient temperature 60 °C Rated value	A	45
• at AC-2 at 400 V Rated value	A	38
• at AC-3		
— at 400 V Rated value	A	38
• at AC-4 at 400 V Rated value	A	22
Operating current with 1 current path		
• at DC-1		
— at 24 V Rated value	A	35
— at 110 V Rated value	A	4.5
• at DC-3 at DC-5		
— at 24 V Rated value	A	20
— at 110 V Rated value	A	2.5
Operating current with 2 current paths in series		
• at DC-1		
— at 24 V Rated value	A	35
— at 110 V Rated value	A	35
• at DC-3 at DC-5		
— at 110 V Rated value	A	15
— at 24 V Rated value	A	35
Operating current with 3 current paths in series		
• at DC-1		
— at 24 V Rated value	A	35
— at 110 V Rated value	A	35
• at DC-3 at DC-5		
— at 110 V Rated value	A	35
— at 24 V Rated value	A	35
Operating power		
• at AC-2 at 400 V Rated value	kW	18.5
• at AC-4 at 400 V Rated value	kW	11
Operating power		
• at AC-3		
— at 400 V Rated value	kW	18.5
— at 500 V Rated value	kW	22
— at 690 V Rated value	kW	18.5
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	24
• at 60 Hz Rated value	V	24
Operating range factor control supply voltage rated value of the magnet coil with AC		
• at 50 Hz		0.8 ... 1.1
• at 60 Hz		0.8 ... 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	34
• at 600 V Rated value	A	27
yielded mechanical performance [hp]		
• for single-phase AC motor at 110/120 V Rated value	metric hp	3

• for single-phase AC motor at 230 V Rated value	metric hp	5
• for three-phase AC motor at 220/230 V Rated value	metric hp	10
• for three-phase AC motor at 460/480 V Rated value	metric hp	25
• for three-phase AC motor at 575/600 V Rated value	metric hp	25
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: 125 A
— with type of assignment 2 required		gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 50 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	101
Width	mm	90
Depth	mm	97
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		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 (1 ... 2,5 mm²), 2x (2,5 ... 10 mm²)
— finely stranded with core end processing		2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm²
• for AWG conductors for main contacts		2x (16 ... 12), 2x (14 ... 8)
• for auxiliary contacts		
— single or multi-stranded		2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²)
— finely stranded with core end processing		2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)
• 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	77

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		S0

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	Shipping Approval
CSA	UL	EAC	EG-Konf.	Special Test Certificate	ABS

Shipping Approval					
BUREAU VERITAS	DNV	GL	LRS	PRS	RINA

Shipping Approval	other	
RMRS	Environmental Confirmations	other

Further information

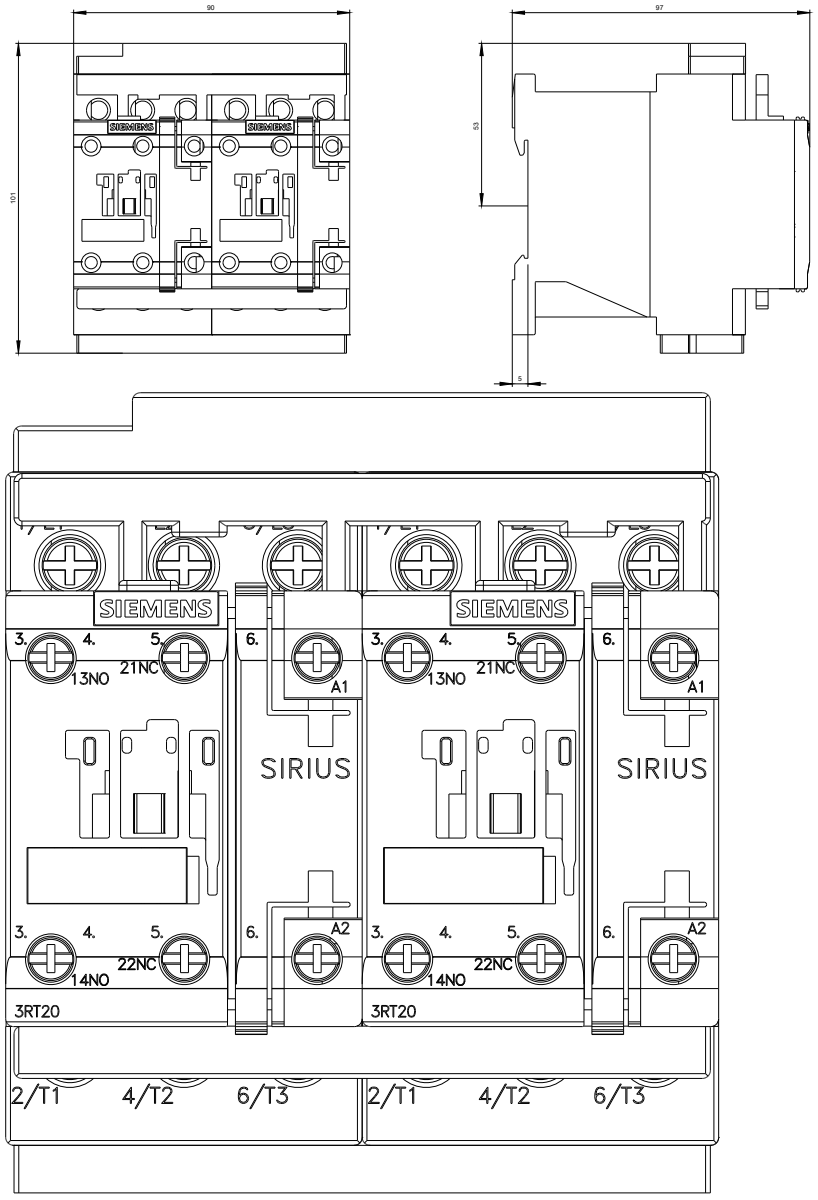
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

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

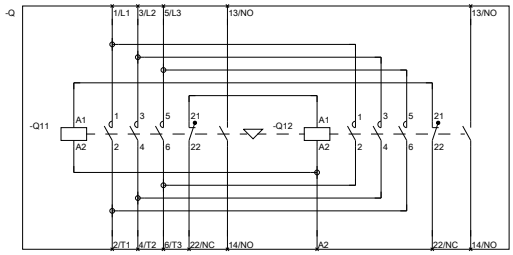
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA23288XB301AC2

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3RA23288XB301AC2/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=3RA23288XB301AC2&lang=en



WENDEKOMBINATION BGR. S0



REVERSING COMB. SZ S0

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