SIEMENS

Data sheet 3RA2335-8XE30-1NB3

Figure similar

REV. COMB. F.3RA27, 18.5KW, 20-33V AC/DC, 3-POLE, SIZE S2 SCREW TERMINAL ELECTR. AND MECH. INTERLOCK 2NO INTEGR.

product brand name		SIRIUS
Product designation		reversing contactor assembly 3RA23
Manufacturer article number		
• 1 of the supplied contactor		3RT2035-1NB30-0CC0
• 2 of the supplied contactor		3RT2035-1NB30
• of the supplied RS assembly kit		3RA2934-2BB1
General technical data:		
Insulation voltage		
• with degree of pollution 3 Rated value	V	690
Degree of pollution		3
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		0
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	60
— at 400 V at ambient temperature 60 °C Rated value	A	55
• at AC-2 at 400 V Rated value	A	40
• at AC-3		
— at 400 V Rated value	A	40
• at AC-4 at 400 V Rated value	A	35
Operating current with 1 current path		
• at DC-1		
— at 24 V Rated value	A	55
— at 110 V Rated value	A	4.5
• at DC-3 at DC-5		
— at 24 V Rated value	A	35
— 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	55
— at 110 V Rated value	A	25
• at DC-3 at DC-5		
— at 110 V Rated value	A	25
— at 24 V Rated value	A	55
Operating current with 3 current paths in series		
• at DC-1		
— at 24 V Rated value	A	55
— at 110 V Rated value	A	55
• at DC-3 at DC-5		
— at 110 V Rated value	A	55
— at 24 V Rated value	A	55
Operating power		
• at AC-2 at 400 V Rated value	kW	18.5
• at AC-4 at 400 V Rated value	kW	18.5
Operating power		
• at AC-3		
— at 400 V Rated value	kW	18.5
— 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/DC
Control supply voltage 1 with AC		
• at 50 Hz	V	20 ... 33
• at 60 Hz	V	20 ... 33
Control supply voltage 1		
• for DC	V	20 ... 33
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
Operating range factor control supply voltage rated value of the magnet coil for DC		0.8 ... 1.1
Closing power of the magnet coil for DC	W	23
Holding power of the magnet coil for DC	W	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	40
• at 600 V Rated value	A	41

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	7.5
• for three-phase AC motor at 220/230 V Rated value	metric hp	15
• for three-phase AC motor at 460/480 V Rated value	metric hp	30
• for three-phase AC motor at 575/600 V Rated value	metric hp	40
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: 160 A
— with type of assignment 2 required		gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 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	141
Width	mm	120
Depth	mm	130
Required spacing		
• with side-by-side mounting		
— forwards	mm	10
— Backwards	mm	0
— upwards	mm	10
— downwards	mm	10
— at the side	mm	10
• for grounded parts		
— forwards	mm	10
— Backwards	mm	0
— upwards	mm	10
— at the side	mm	10
— downwards	mm	10
• for live parts		

— forwards	mm	10
— Backwards	mm	0
— upwards	mm	10
— downwards	mm	10
— at the side	mm	10

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 ... 35 mm²), 1x (1 ... 50 mm²)
— finely stranded with core end processing		2x (1 ... 25 mm²), 1x (1 ... 35 mm²)
• for AWG conductors for main contacts		2x (18 ... 2), 1x (18 ... 1)
• 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	40
• at 60 Hz	V·A	40

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	%	73
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 when touched vertically from front acc. to IEC 60529

Mechanical data:		
Size of contactor		S2

Communication/ Protocol:		
Product function Bus communication		Yes
Protocol is supported		
• AS-interface protocol		Yes
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	°C	-25 ... +60
• during storage	°C	-55 ... +80

Certificates/ approvals:

General Product Approval			Declaration of Conformity	other
CSA	UL	EAC	EG-Konf.	Environmental Confirmations

Further information

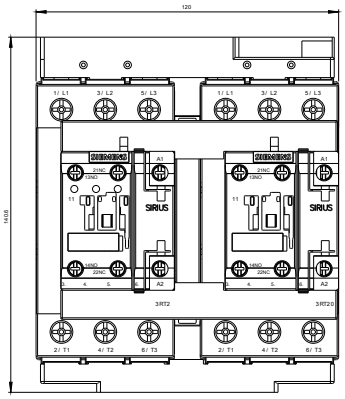
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

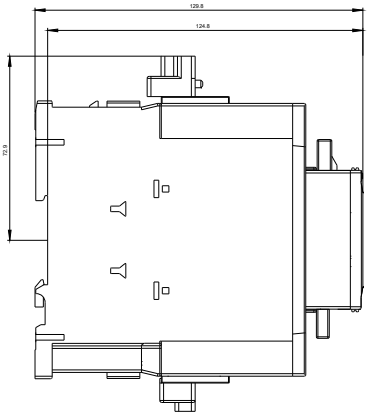
Industry Mall (Online ordering system)
http://www.siemens.com/industrymall

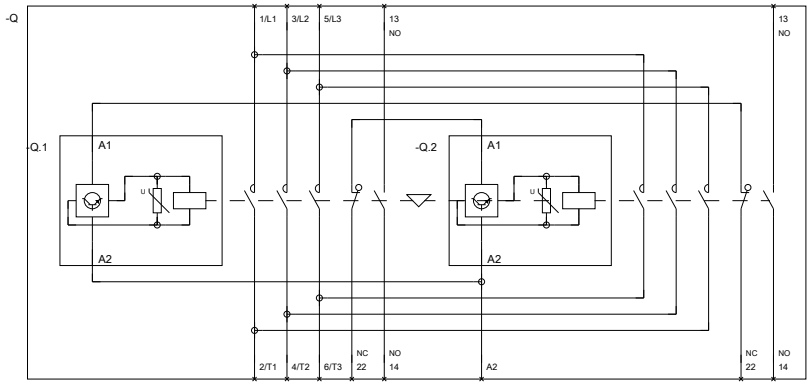
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA23358XE301NB3

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3RA23358XE301NB3/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=3RA23358XE301NB3&lang=en







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