Product data sheet

3RA2335-8XB30-1NB3

REV. COMB., AC3:18.5KW/400V, 20-33V AC/DC, 3-POLE, SIZE S2 SCREW TERMINAL ELECTR. AND MECH. INTERLOCK 2NO INTEGR.

General technical data:		
product brand name		SIRIUS
Product function		Reversing contactor assembly
Size of contactor		S2
Protection class IP / on the front		IP20
Degree of pollution		3
Insulation voltage / with degree of pollution 3 / Rated value	V	690
Installation altitude / at height above sea level / maximum	m	2,000
Ambient temperature / during storage	°C	-55 +80
Ambient temperature / during operation	°C	-25 +60
Surge voltage resistance / Rated value	kV	6
Active power loss / per conductor / typical	W	2.2
Manufacturer article number		
• 1 / of the supplied contactor		3RT2035-1NB30
• 2 / of the supplied contactor		3RT2035-1NB30
• of the supplied RS assembly kit		3RA2934-2BB1
Mechanical service life (switching cycles)		
of the contactor / typical		10,000,000
of the contactor with added auxiliary switch block / typical		10,000,000
Communication/ Protocol:		
Product function		
Bus communication		No
Control circuit interface with IO link		No
Protocol / is supported / AS-interface protocol		No
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	60
• at ambient temperature 60 °C / Rated value	Α	55
• at AC-2 / at 400 V / Rated value	Α	40
• at AC-3 / at 400 V / Rated value	Α	40
• at AC-4 / at 400 V / Rated value	Α	35
• with 1 current path / at DC-1		
• at 24 V / Rated value	Α	55
at 110 V / Rated value	Α	4.5
 with 2 current paths in series / at DC-1 		
• at 24 V / Rated value	Α	55
• at 110 V / Rated value	Α	25
 with 3 current paths in series / at DC-1 		
at 24 V / Rated value	Α	55
• at 110 V / Rated value	Α	55
with 1 current path / at DC-3 / at DC-5		
• at 24 V / Rated value	Α	35
• at 110 V / Rated value	Α	2.5
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / Rated value	Α	55
• at 110 V / Rated value	Α	25
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / Rated value	Α	55
at 110 V / Rated value	Α	55
Operating power		
• at AC-2 / at 400 V / Rated value	kW	18.5
• at AC-3		
• at 400 V / Rated value	kW	18.5
• at 690 V / Rated value	kW	18.5
at AC-4 / at 400 V / Rated value	kW	18.5
No-load switching frequency	1/h	1,500
Operating frequency		
• at AC-1 / maximum	1/h	1,000
• at AC-2 / maximum	1/h	750
• at AC-3 / maximum	1/h	1,000
• at AC-4 / maximum	1/h	300

Control circuit/ Control:	
Type of voltage / of the control supply voltage	AC/DC
Control supply voltage / 1	

• for DC	V	20 33
• with AC		
• at 50 Hz	V	20 33
• with AC		
• at 60 Hz	V	20 33
Operating range factor control supply voltage rated value / of the magnet coil		
• with AC / at 50 Hz		0.8 1.1
• with AC / at 60 Hz		0.8 1.1
• for DC		0.8 1.1
Apparent pick-up power / of the magnet coil / with AC		
• at 50 Hz	V-A	40
• at 60 Hz	V-A	40
Inductive power factor / with closing power of the coil		
• at 50 Hz		0.64
• at 60 Hz		0.5
Apparent holding power / of the magnet coil / with AC		
• at 50 Hz	V-A	2
• at 60 Hz	V-A	2
Inductive power factor / with the holding power of the coil		
• at 50 Hz		0.36
• at 60 Hz		0.39
Closing power / of the magnet coil / for DC	W	23
Holding power / of the magnet coil / for DC	W	1

Auxiliary circuit:		
Product expansion / Auxiliary switch		Yes
Contact reliability / of the auxiliary contacts		< 1 error per 100 million operating cycles
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
Operating current / of the auxiliary contacts		
• at AC-12 / maximum	Α	10
• at AC-15		
• at 230 V	Α	6

• at DC-12 • at 48 V • at 60 V • at 110 V • at 220 V • at 24 V • at 48 V • at 60 V A A 10 • at 48 V • at 60 V A A 2 • at 10 V • at 20 V A A A A A A A A A A A A A	• at 400 V	Α	3
• at 60 V • at 110 V • at 220 V • at DC-13 • at 24 V • at 48 V • at 60 V • at 110 V A A 6 A A A 1	• at DC-12		
 at 110 V at 220 V at DC-13 at 24 V at 48 V at 60 V at 110 V A 1 	• at 48 V	Α	6
• at 220 V • at DC-13 • at 24 V • at 48 V • at 60 V • at 110 V A 1	• at 60 V	Α	6
• at DC-13 • at 24 V • at 48 V • at 60 V • at 110 V A 1	• at 110 V	Α	3
• at 24 V • at 48 V • at 60 V • at 110 V A 10 A 2 A 1	• at 220 V	Α	1
• at 48 V • at 60 V • at 110 V A 2 A 2 A 1	• at DC-13		
• at 60 V A 2 • at 110 V A 1	• at 24 V	Α	10
• at 110 V A 1	• at 48 V	Α	2
	• at 60 V	Α	2
• at 220 V A 0.3	• at 110 V	Α	1
	• at 220 V	Α	0.3

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
• 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
Width	mm	120
Height	mm	141
Depth	mm	130

Connections/ terminals:		
Design of the 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)	
Type of connectable conductor cross-section		
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)	

Certificates/ approvals:

Declaration of Conformity



UL/CSA ratings:		
yielded mechanical performance [hp]		
for single-phase AC motor		
• at 110/120 V / Rated value	hp	3
• at 230 V / Rated value	hp	7.5
for three-phase AC motor		
• at 220/230 V / Rated value	hp	15
• at 460/480 V / Rated value	hp	30
• at 575/600 V / Rated value	hp	40
Full-load current (FLA) / for three-phase AC motor		
• at 480 V / Rated value	Α	40
• at 600 V / Rated value	Α	41
Contact rating / of the auxiliary contacts / acc. to UL		A600 / Q600

Safety related data:		
B10 value / with high demand rate		
• acc. to SN 31920		1,000,000
Failure rate [FIT] / with low demand rate		
• acc. to SN 31920	FIT	100
Proportion of dangerous failures		
• with low demand rate / acc. to SN 31920	%	40
• with high demand rate / acc. to SN 31920	%	73
T1 value / for proof test interval or service life		
• acc. to IEC 61508	а	20

Further information:

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

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

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

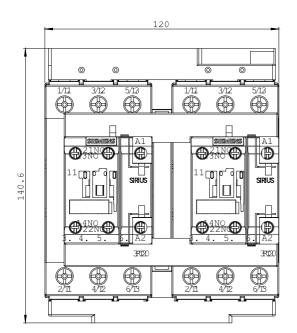
Cax online generator

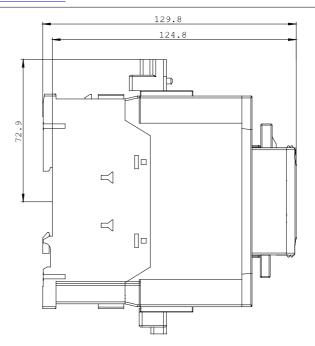
http://www.siemens.com/cax

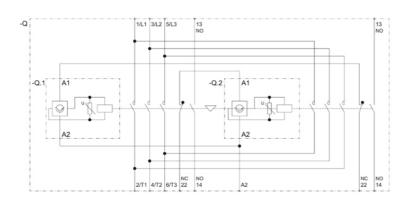
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

 $\underline{\text{http://support.automation.siemens.com/WW/view/en/3RA2335-8XB30-1NB3/all}}$

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2335-8XB30-1NB3







last change: Dec 17, 2014