SIEMENS

Product data sheet 3RA2336-8XB30-1AK6

REVERSING COMB., AC3:22KW/400V,
110V AC 50HZ/120V 60HZ, 3-POLE,
SIZE S2 SCREW CONNECTION 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	4
Manufacturer article number		
• 1 / of the supplied contactor		3RT2036-1AK60
• 2 / of the supplied contactor		3RT2036-1AK60
• 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	A	60
• at ambient temperature 60 °C / Rated value	A	55
• at AC-2 / at 400 V / Rated value	A	50
• at AC-3 / at 400 V / Rated value	A	50
• at AC-4 / at 400 V / Rated value	A	41
• with 1 current path / at DC-1		
• at 24 V / Rated value	A	55
• at 110 V / Rated value	A	4.5
• with 2 current paths in series / at DC-1		
• at 24 V / Rated value	A	55
• at 110 V / Rated value	A	25
• with 3 current paths in series / at DC-1		
• at 24 V / Rated value	A	55
• at 110 V / Rated value	A	55
• with 1 current path / at DC-3 / at DC-5		
• at 24 V / Rated value	A	35
• at 110 V / Rated value	A	2.5
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / Rated value	A	55
• at 110 V / Rated value	A	25
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / Rated value	A	55
• at 110 V / Rated value	A	55
Operating power		
• at AC-2 / at 400 V / Rated value	kW	22
• at AC-3		
• at 400 V / Rated value	kW	22
• at 690 V / Rated value	kW	22
• at AC-4 / at 400 V / Rated value	kW	22
No-load switching frequency	1/h	1,500
Operating frequency		
• at AC-1 / maximum	1/h	1,000
• at AC-2 / maximum	1/h	600
• at AC-3 / maximum	1/h	800
• at AC-4 / maximum	1/h	250

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
• with AC / 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
• with AC / at 60 Hz		0.8 … 1.1
Apparent pick-up power / of the magnet coil / with AC		
• at 50 Hz	V·A	212
• at 60 Hz	V·A	188
Inductive power factor / with closing power of the coil		
• at 50 Hz		0.67
• at 60 Hz		0.65
Apparent holding power / of the magnet coil / with AC		
• at 50 Hz	V·A	18.5
• at 60 Hz	V·A	16.5
Inductive power factor / with the holding power of the coil		
• at 50 Hz		0.36
• at 60 Hz		0.39

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	A	10
• at AC-15		
• at 230 V	A	6
• at 400 V	A	3
• at DC-12		
• at 48 V	A	6
• at 60 V	A	6
• at 110 V	A	3
• at 220 V	A	1

• at DC-13		
• at 24 V	A	10
• at 48 V	A	2
• at 60 V	A	2
• at 110 V	A	1
• at 220 V	A	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)
• for AWG conductors / for auxiliary contacts		2x (20 ... 16), 2x (18 ... 14)

Certificates/ approvals:

Declaration of Conformity

EG-Konf.

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	40
• at 575/600 V / Rated value	hp	50
Full-load current (FLA) / for three-phase AC motor		
• at 480 V / Rated value	A	52
• at 600 V / Rated value	A	52
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	a	20

Further information:

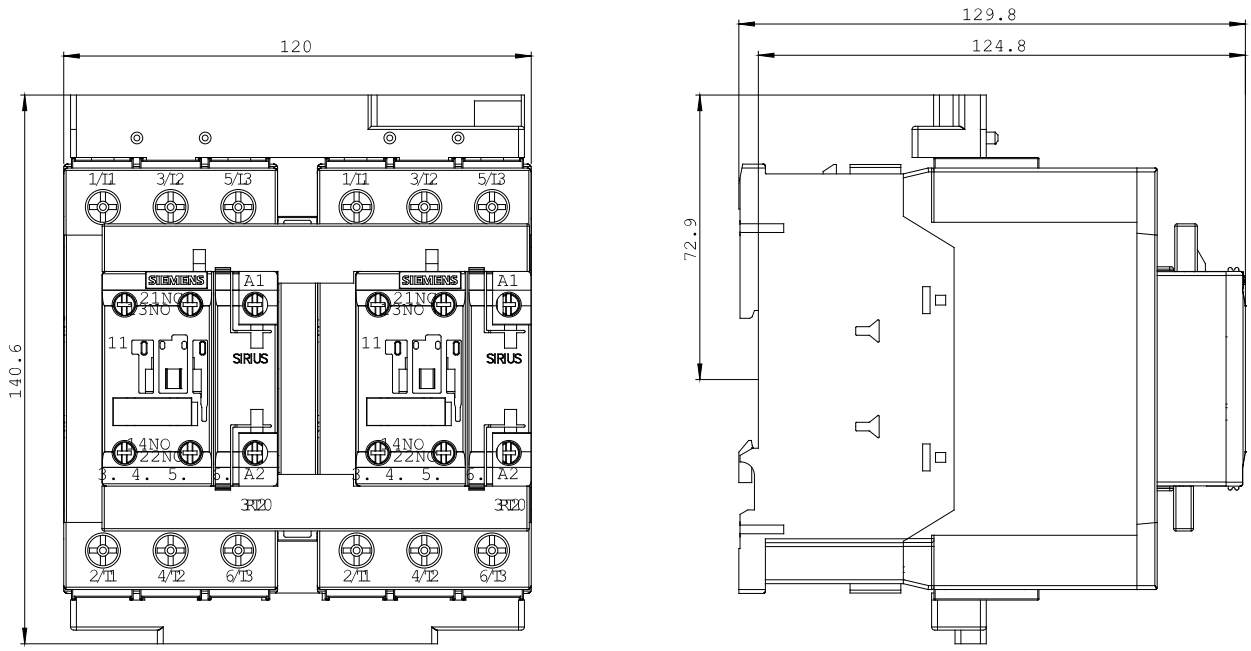
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

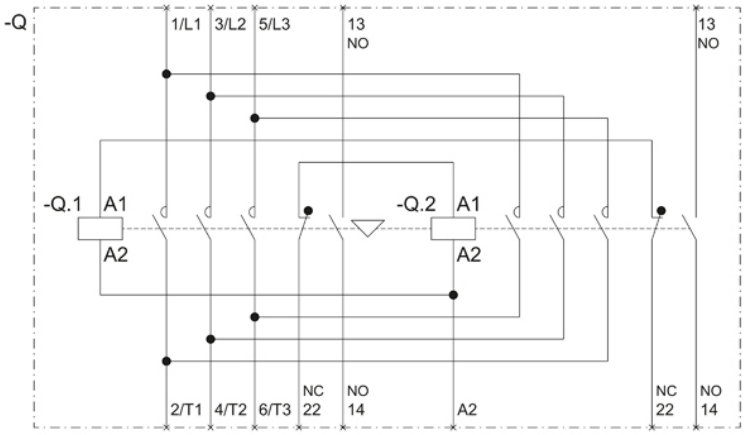
Industry Mall (Online ordering system)
http://www.siemens.com/industrymall

Cax online generator
http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3RA2336-8XB30-1AK6/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2336-8XB30-1AK6





last change: Dec 17, 2014