# **SIEMENS**

### Data sheet

## 3RA2335-8XB30-1AK6



REV. COMB., AC3:18.5KW/400V, 110V AC 50HZ/120V 60HZ, 3-POLE, SIZE S2 SCREW CONNECTION ELECTR. AND MECH. INTERLOCK 2NO INTEGR.

Figure similar

product brand name	SIRIUS
Product designation	reversing contactor assembly 3RA23
Manufacturer article number	
<ul> <li>1 of the supplied contactor</li> </ul>	3RT2035-1AK60
<ul> <li>2 of the supplied contactor</li> </ul>	3RT2035-1AK60
<ul> <li>of the supplied RS assembly kit</li> </ul>	3RA2934-2BB1

General technical data:		
Insulation voltage		
<ul> <li>with degree of pollution 3 Rated value</li> </ul>	V	690
Degree of pollution		3
Surge voltage resistance Rated value	kV	6
Mechanical service life (switching cycles)		
<ul> <li>of the contactor typical</li> </ul>		10 000 000
<ul> <li>of the contactor with added auxiliary switch</li> </ul>		10 000 000
block typical		
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		
<ul> <li>at AC-3 Rated value maximum</li> </ul>	V	690

Operating current		
● at AC-1		
<ul> <li>— at 400 V at ambient temperature 40 °C</li> <li>Rated value</li> </ul>	Α	60
<ul> <li>— at 400 V at ambient temperature 60 °C</li> <li>Rated value</li> </ul>	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
Operating current with 1 current path		
● at DC-1		
— at 24 V Rated value	Α	55
— at 110 V Rated value	Α	4.5
• at DC-3 at DC-5		
— at 24 V Rated value	Α	35
— at 110 V Rated value	Α	2.5
Operating current with 2 current paths in series		
• at DC-1		
— at 24 V Rated value	Α	55
— at 110 V Rated value	Α	25
• at DC-3 at DC-5		
— at 110 V Rated value	Α	25
— at 24 V Rated value	Α	55
Operating current with 3 current paths in series	_	
• at DC-1		
— at 24 V Rated value	Α	55
— at 110 V Rated value	Α	55
• at DC-3 at DC-5		
— at 110 V Rated value	Α	55
— at 24 V Rated value	Α	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
Control supply voltage 1 with AC		
• at 50 Hz Rated value	٧	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		0.8 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	Α	10
Operating current of the auxiliary contacts at AC-15		
● at 230 V	Α	6
● at 400 V	Α	3
Operating current of the auxiliary contacts at DC-13		
● at 24 V	Α	10
● at 60 V	Α	2
• at 110 V	Α	1
• at 220 V	Α	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	Α	40
• at 600 V Rated value	Α	41
yielded mechanical performance [hp]		
<ul> <li>for single-phase AC motor at 110/120 V Rated value</li> </ul>	metric hp	3
<ul> <li>for single-phase AC motor at 230 V Rated value</li> </ul>	metric hp	7.5

• for three-phase AC motor at 220/230 V Rated value	metric hp	15
<ul> <li>for three-phase AC motor at 460/480 V Rated value</li> </ul>	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	
<ul> <li>for short-circuit protection of the main circuit</li> </ul>	
— 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	fuse gL/gG: 10 A
required	

stallation/ mounting/ dimensions:		
mounting position		+/-180° rotation possible on vertical mounting
		surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
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Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail
Height	mm	141
Width	mm	120
Depth	mm	130
Required spacing		
<ul><li>with side-by-side mounting</li></ul>		
— 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
<ul> <li>for auxiliary and control current circuit</li> </ul>		screw-type terminals
Type of connectable conductor cross-section		
• for main contacts		
<ul><li>— single or multi-stranded</li></ul>		2x (1 35 mm²), 1x (1 50 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		2x (1 25 mm²), 1x (1 35 mm²)
<ul> <li>for AWG conductors for main contacts</li> </ul>		2x (18 2), 1x (18 1)
<ul> <li>for auxiliary contacts</li> </ul>		
<ul> <li>single or multi-stranded</li> </ul>		2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>for AWG conductors for auxiliary contacts</li> </ul>		2x (20 16), 2x (18 14)
Apparent pick-up power of the magnet coil with AC		
● at 50 Hz	V·A	212
● at 60 Hz	V·A	188
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	У	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		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		
<ul><li>during operation</li></ul>	°C	-25 <b>+</b> 60
during storage	°C	-55 <b>+</b> 80
Certificates/ approvals:		

**General Product Approval Declaration of** other Conformity









Environmental Confirmations

### Further information

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

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

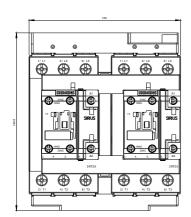
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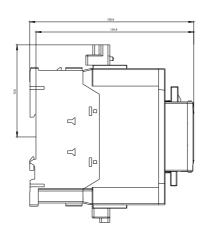
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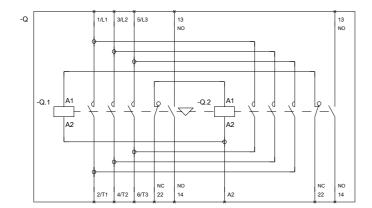
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RA23358XB301AK6/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA23358XB301AK6&lang=en





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