# **SIEMENS**

# Data sheet

# 3RA2324-8XE30-1BB4



REV. COMB. FOR 3RA27, AC3, 5.5KW/400V, DC24V 3-POLE, SZ S0 SCREW TERMINAL ELECTR. AND MECH. INTERLOCK 2NO INTEGR.

product brand name	SIRIUS
Product designation	reversing contactor assembly 3RA23
Manufacturer article number	
<ul><li>1 of the supplied contactor</li></ul>	3RT2024-1BB40-0CC0
• 2 of the supplied contactor	3RT2024-1BB40
<ul> <li>of the supplied RH assembly kit</li> </ul>	3RA2923-2AA1
<ul> <li>of the supplied function module for communication</li> </ul>	3RA2711-1BA00

General technical data:		
Insulation voltage		
<ul> <li>with degree of pollution 3 Rated value</li> </ul>	V	690
Degree of pollution		3
Shock resistance		9.8g / 5 ms and 5.9g / 10 ms
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		
at AC-3 Rated value maximum	V	690
Operating current		
• at AC-1		
<ul> <li>— at 400 V at ambient temperature 40 °C</li> <li>Rated value</li> </ul>	Α	40
— at 400 V at ambient temperature 60 °C Rated value	Α	35
• at AC-2 at 400 V Rated value	Α	12
• at AC-3		
— at 400 V Rated value	Α	12
• at AC-4 at 400 V Rated value	Α	12.5
Operating current with 1 current path		
• at DC-1		
— at 24 V Rated value	Α	35
— at 110 V Rated value	Α	4.5
• at DC-3 at DC-5		
— at 24 V Rated value	Α	20
— 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	35
— at 110 V Rated value	Α	35
• at DC-3 at DC-5		
— at 110 V Rated value	Α	15
— at 24 V Rated value	Α	35
Operating current with 3 current paths in series		
• at DC-1		
— at 24 V Rated value	Α	35
— at 110 V Rated value	Α	35
• at DC-3 at DC-5		
— at 110 V Rated value	Α	35
— at 24 V Rated value	Α	35
Operating power		
• at AC-2 at 400 V Rated value	kW	5.5
• at AC-4 at 400 V Rated value	kW	5.5
Operating power		
• at AC-3		
— at 400 V Rated value	kW	5.5
— at 500 V Rated value	kW	7.5
— at 690 V Rated value	kW	7.5

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		DC
Control supply voltage 1		
• for DC Rated value	V	24
Operating range factor control supply voltage rated value of the magnet coil for DC		0.8 1.1
Design of the surge suppressor		with varistor
Closing power of the magnet coil for DC	W	5.9
Holding power of the magnet coil for DC	W	5.9
Auxiliary circuit:		
Number of NC contacts		
<ul> <li>for auxiliary contacts</li> </ul>		
<ul><li>per direction of rotation</li></ul>		0
<ul> <li>instantaneous contact</li> </ul>		0
<ul> <li>lagging switching</li> </ul>		0
Number of NO contacts		
• for auxiliary contacts		
<ul><li>per direction of rotation</li></ul>		0
<ul> <li>instantaneous contact</li> </ul>		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	11
• at 600 V Rated value	Α	11
yielded mechanical performance [hp]		

● for single-phase AC motor at 110/120 V Rated value	metric hp	1.
<ul> <li>for single-phase AC motor at 230 V Rated value</li> </ul>	metric hp	2
<ul> <li>for three-phase AC motor at 220/230 V Rated value</li> </ul>	metric hp	3
• for three-phase AC motor at 460/480 V Rated value	metric hp	7.5
• for three-phase AC motor at 575/600 V Rated value	metric hp	10
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 LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 63 A
— with type of assignment 2 required	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25 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	107
Required spacing		
<ul><li>with side-by-side mounting</li></ul>		
— 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		Solow type terminals
• for main contacts		
		2x (1 2,5 mm²), 2x (2,5 10 mm²)
— single or multi-stranded		2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
— finely stranded with core end processing		
for AWG conductors for main contacts		2x (16 12), 2x (14 8)
• for auxiliary contacts		
<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)
Safety related data:		
B10 value with high demand rate acc. to SN 31920		1 000 000
Proportion of dangerous failures		
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	%	40
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	%	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	У	20
Protection against electrical shock		finger-safe
Mechanical data:		
Size of contactor		S0
Communication/ Protocol:		
Product function Bus communication		Yes
Protocol is supported		
AS-interface protocol		No
Product function Control circuit interface with IO link	_	Yes
Ambient conditions:		
Installation altitude at height above sea level	m	2 000
maximum		
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** Conformity

**Test** Certificates **Shipping Approval** 









**Special Test** Certificate



### **Shipping Approval**













**Shipping Approval**  other



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

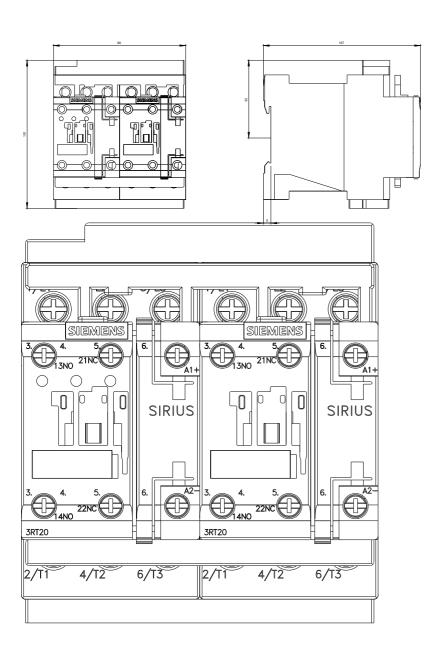
#### Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA23248XE301BB4

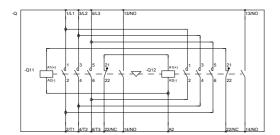
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RA23248XE301BB4/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=3RA23248XE301BB4&lang=en



WENDEKOMBINATION BGR. S0



REVERSING COMB. SZ SC

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