# **SIEMENS**

# Data sheet

# 3RA2316-8XB30-1BW4

REV. COMB., AC3, 4KW/400V DC48V 3-POLE, SZ S00 SCREW TERMINAL ELECTR. AND MECH. INTERLOCK



product brand name	SIRIUS
Product designation	reversing contactor assembly 3RA23
Manufacturer article number	
<ul> <li>1 of the supplied contactor</li> </ul>	3RT2016-1BW42
<ul> <li>2 of the supplied contactor</li> </ul>	3RT2016-1BW42
<ul> <li>of the supplied RH assembly kit</li> </ul>	3RA2913-2AA1

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	

<ul> <li>at AC-3 Rated value maximum</li> </ul>	V	690
Operating current		
• at AC-1		
— at 400 V at ambient temperature 40 °C Rated value	Α	18
— at 400 V at ambient temperature 60 °C Rated value	Α	16
• at AC-2 at 400 V Rated value	Α	7
• at AC-3		
— at 400 V Rated value	Α	9
• at AC-4 at 400 V Rated value	Α	8.5
Operating current with 1 current path		
• at DC-1		
— at 24 V Rated value	Α	20
— at 110 V Rated value	Α	2.1
• at DC-3 at DC-5		
— at 24 V Rated value	Α	20
— at 110 V Rated value	Α	0.15
Operating current with 2 current paths in series		
• at DC-1		
— at 24 V Rated value	Α	20
— at 110 V Rated value	Α	12
• at DC-3 at DC-5		
— at 110 V Rated value	Α	0.35
— at 24 V Rated value	Α	20
Operating current with 3 current paths in series		
• at DC-1		
— at 24 V Rated value	Α	20
— at 110 V Rated value	Α	20
• at DC-3 at DC-5		
— at 110 V Rated value	Α	20
— at 24 V Rated value	Α	20
Operating power		
• at AC-2 at 400 V Rated value	kW	4
• at AC-4 at 400 V Rated value	kW	4
Operating power		
• at AC-3		
— at 400 V Rated value	kW	4
— at 500 V Rated value	kW	4.5
— at 690 V Rated value	kW	5.5
Operating frequency		
• at AC-3 maximum	1/h	750

No-load switching frequency	1/h	1 500
Control circuit/ Control:		
Type of voltage of the control supply voltage		DC
Control supply voltage 1		
<ul> <li>for DC Rated value</li> </ul>	V	48
Operating range factor control supply voltage rated		0.85 1.1
value of the magnet coil for DC		
Closing power of the magnet coil for DC	W	4
Holding power of the magnet coil for DC	W	4
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		
<ul> <li>for auxiliary contacts</li> </ul>		
<ul><li>per direction of rotation</li></ul>		0
— instantaneous contact		0
— leading contact		0
Product expansion Auxiliary switch		Yes
Operating current of the auxiliary contacts at AC-12	Α	10
maximum		
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	7.6
• at 600 V Rated value	Α	9
yielded mechanical performance [hp]		
• for single-phase AC motor at 110/120 V Rated value	metric hp	0.33
<ul> <li>for single-phase AC motor at 230 V Rated value</li> </ul>	metric hp	1

<ul> <li>for three-phase AC motor at 200/208 V Rated value</li> <li>for three-phase AC motor at 220/230 V Rated</li> </ul>	metric hp metric	3
value  ● for three-phase AC motor at 460/480 V Rated value	hp metric hp	5
• for three-phase AC motor at 575/600 V Rated value	metric hp	7.5
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>	
<ul> <li>with type of assignment 1 required</li> </ul>	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
<ul> <li>with type of assignment 2 required</li> </ul>	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20 A
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gL/gG: 10 A

nstallation/ mounting/ dimensions:		1/100° rotation possible as warting as well-
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	68
Width	mm	90
Depth	mm	73
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
<ul> <li>for auxiliary and control current circuit</li> </ul>	screw-type terminals
Type of connectable conductor cross-section	
• for main contacts	
— single or multi-stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x (0,5 4 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 main contacts</li> </ul>	2x (20 16), 2x (18 14)
<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)
— 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)

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

Size of contactor	S00
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	m	2 000
maximum		
Ambient temperature		
<ul> <li>during operation</li> </ul>	°C	-25 +60
during storage	°C	-55 <b>+</b> 80

Mechanical data:

# Certificates/ approvals:

## **General Product Approval**

**Declaration of** Conformity

#### **Test Certificates**









**Special Test** Certificate

Type Test Certificates/Test Report

#### **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)

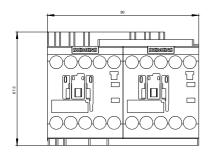
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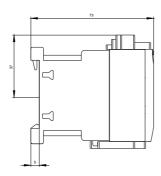
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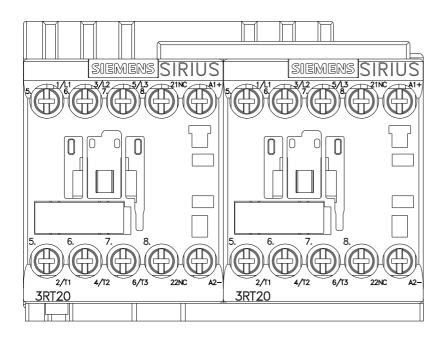
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Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RA23168XB301BW4/all

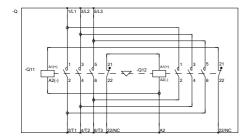
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA23168XB301BW4&lang=en







WENDEKOMBINATION BGR. S00



REVERSING COMB. SZ S0

last modified: 11.03.2015