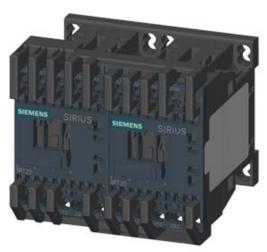
# **SIEMENS**

# Data sheet

# 3RA2318-8XB30-2AF0





product brand name	SIRIUS
Product designation	reversing contactor assembly 3RA23
Manufacturer article number	
<ul> <li>1 of the supplied contactor</li> </ul>	3RT2018-2AF02
• 2 of the supplied contactor	3RT2018-2AF02
<ul> <li>of the supplied RH assembly kit</li> </ul>	3RA2913-2AA2

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	22
— at 400 V at ambient temperature 60 °C Rated value	Α	20
at AC-2 at 400 V Rated value	Α	7
• at AC-3		
— at 400 V Rated value	Α	16
• at AC-4 at 400 V Rated value	Α	11.5
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	7.5
• at AC-4 at 400 V Rated value	kW	5.5
Operating power		
• at AC-3		
— at 400 V Rated value	kW	7.5
— 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		AC
Control supply voltage 1 with AC		
● at 50 Hz Rated value	V	110
● at 60 Hz Rated value	V	110
Operating range factor control supply voltage rated		
value of the magnet coil with AC		
● at 50 Hz		0.8 1.1
● at 60 Hz		0.85 1.1
Auxiliary circuit:		
Number of NC contacts		
for auxiliary contacts		
<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
<ul><li>— leading contact</li></ul>		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	Δ.	
● at 230 V	A	6
• at 400 V	Α	3
Operating current of the auxiliary contacts at DC-13		40
● at 24 V	A	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	14
• at 600 V Rated value	Α	11
yielded mechanical performance [hp]		
<ul> <li>for single-phase AC motor at 110/120 V Rated value</li> </ul>	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 200/208 V Rated value</li> </ul>	metric hp	3
<ul> <li>for three-phase AC motor at 220/230 V Rated value</li> </ul>	metric hp	5
<ul> <li>for three-phase AC motor at 460/480 V Rated value</li> </ul>	metric hp	10
• 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	
<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: 50 A
— with type of assignment 2 required	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25 A
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gL/gG: 10 A

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	84
Width	mm	90
Depth	mm	83
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		
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— Backwards	mm	0
— upwards	mm	6
— downwards	mm	6
— at the side	mm	6

Connections/ Terminals:		
Type of electrical connection		
• for main current circuit		spring-loaded terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>		spring-loaded terminals
Type of connectable conductor cross-section		
• for main contacts		
<ul><li>— single or multi-stranded</li></ul>		2x (0,5 4 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.5 2.5 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>		2x (0.5 2.5 mm²)
<ul> <li>for AWG conductors for main contacts</li> </ul>		1x (20 12)
<ul> <li>for auxiliary contacts</li> </ul>		
<ul> <li>single or multi-stranded</li> </ul>		2x (0,5 2,5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.5 1.5 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>		2x (0.5 1.5 mm²)
<ul> <li>for AWG conductors for auxiliary contacts</li> </ul>		2x (20 14)
Apparent pick-up power of the magnet coil with AC		
● at 50 Hz	V·A	37

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
• with high demand rate acc. to SN 31920	%	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	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

#### Certificates/ approvals:

General Product Approval	Declaration of	Test Certificates
	Conformity	









Special Test Certificate Type Test
Certificates/Test
Report

## **Shipping Approval**









GL





## **Shipping Approval**







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

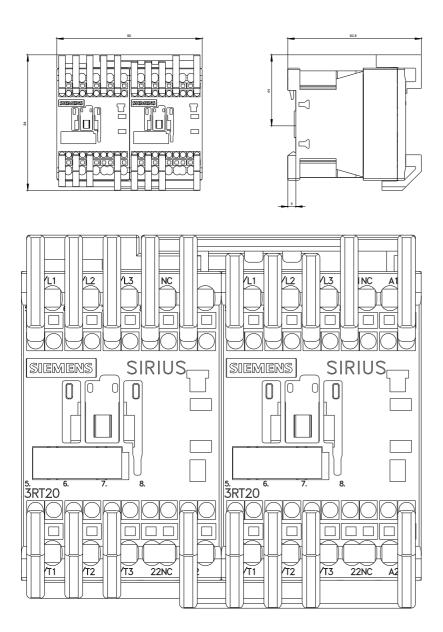
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA23188XB302AF0

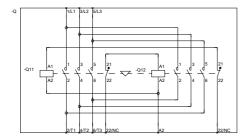
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RA23188XB302AF0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA23188XB302AF0&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA23188XB302AF0&lang=en</a>



WENDEKOMBINATION BGR. S00



REVERSING COMB. SZ S0

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11.03.2015