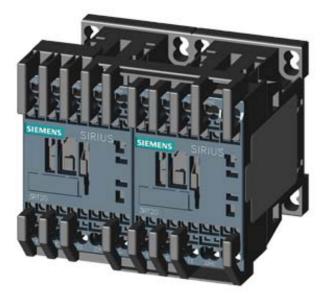
# SIEMENS

## **Product data sheet**

### 3RA2315-8XB30-2BB4



REV. COMB. AC3, 3KW/400V DC24V 3-POLE, SZ S00 SPRING-LOADED TERMINAL ELECTR. AND MECH. INTERLOCK

General technical data:			
Product brand name		SIRIUS	
product designation		reversing contactor assembly 3RA23	
Product function		reversing contactor	
Size of the contactor		S00	
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 a height over sea level / maximum	m	2,000	
Ambient temperature			
during transport	°C	-55 80	
during storage	°C	-55 80	
during operating	°C	-25 60	
Resistance against shock		9.8g / 5 ms and 5.9g / 10 ms	
Impulse voltage resistance / rated value	kV	6	
Active power loss / per conductor / typical	W	0.4	
Item designation			
<ul> <li>according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> </ul>		к	
according to DIN EN 61346-2		Q	

Manufacturer article number		
<ul> <li>1 / of the contactor included in the scope of supply</li> </ul>		<u>3RT2015-2BB42</u>
<ul> <li>2 / of the contactor included in the scope of supply</li> </ul>		<u>3RT2015-2BB42</u>
<ul> <li>of the RS applied assembly kit</li> </ul>		<u>3RA2913-2AA2</u>
Mechanical operating cycles as operating time		
of the main contacts / typical		10,000,000
<ul> <li>of the auxiliary contacts / typical</li> </ul>		10,000,000
• of the contactor / typical		10,000,000
• of the contactor with added auxiliary switch block / typical		10,000,000
Communication:		
Product function		
bus-communication		No
control circuit interface with IO link		No
Protocol / will be 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 40 °C ambient temperature / rated value	А	18
• at 60 °C ambient temperature / rated value	А	16
• at AC-2 / at 400 V / rated value	А	7
• at AC-3 / at 400 V / rated value	А	7
• at AC-4 / at 400 V / rated value	А	6.5
• with 1 current path / at DC-1		
• at 24 V / rated value	А	15
• at 110 V / rated value	А	1.5
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	А	15
• at 110 V / rated value	А	8.4
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	А	15
• at 110 V / rated value	А	15
• with 1 current path / at DC-3 / at DC-5		
• at 24 V / rated value	А	15
• at 110 V / rated value	А	0.1

• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	А	15
• at 110 V / rated value	А	0.25
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	А	15
• at 110 V / rated value	А	15
Service power		
• at AC-2 / at 400 V / rated value	kW	3
• at AC-3		
• at 400 V / rated value	kW	3
• at 500 V / rated value	kW	3.5
• at 690 V / rated value	kW	4
• at AC-4 / at 400 V / rated value	kW	1.15
Off-load operating frequency	1/h	15
Frequency of operation		
• at AC-1 / according to IEC 60947-6-2 / maximum	1/h	1,000
• at AC-2 / according to IEC 60947-6-2 / maximum	1/h	750
• at AC-3 / according to IEC 60947-6-2 / maximum	1/h	750
• at AC-4 / according to IEC 60947-6-2 / maximum	1/h	250
Control circuit:		
Design of activation		conventional

Design of activation		conventional
Type of voltage / of the controlled supply voltage	-	DC
Control supply voltage frequency	-	
• 1 / rated value	Hz	50
• 2 / rated value	Hz	60
Control supply voltage / 1		
• for DC / rated value	V	24
Operating range factor control supply voltage rated value / of the solenoid		
• for DC		0.85 1.1
Pull-in power / of the solenoid / for DC	W	4
Holding power / of the solenoid / for DC	W	4
Resistive loss / of the magnet coil / for DC		
• typical	W	4
Auxiliary circuit:		

Auxiliary circuit:	
Product extension / 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 switching		0		
lagging switching	_	0		
Number of NO contacts / for auxiliary contacts				
per direction of rotation		0		
instantaneous switching		0		
leading switching	_	0		
Operating current / of the auxiliary contacts				
• at AC-12 / maximum	А	10		
• at AC-15				
• at 230 V	А	6		
• at 400 V	А	3		
• at DC-12				
• at 48 V	А	6		
• at 60 V	А	6		
• at 110 V	А	3		
• at 220 V	А	1		
• at DC-13				
• at 24 V	А	10		
• at 48 V	А	2		
• at 60 V	А	2		
• at 110 V	А	1		
• at 220 V	А	0.3		
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		
at type of coordination 2 / required		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		
Installation/mounting/dimensions:				
Built in orientation		any		
Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail		
Width	mm	90		
Height	mm	84		
Depth	mm	83		
Distance, to be maintained, to the ranks assembly				
• forwards	mm	6		

backwards

mm

0

• upwards	mm	6			
downwards	mm	6			
• sidewards	mm	6			
Distance, to be maintained, to earthed part					
• forwards	mm	6			
backwards	mm	0			
• upwards	mm	6			
downwards	mm	6			
• sidewards	mm	6			
Distance, to be maintained, conductive elements					
• forwards	mm	6			
backwards	mm	0			
• upwards	mm	6			
downwards	mm	6			
• sidewards	mm	6			
Connections:					
Design of the electrical connection					
for main current circuit		spring-loaded terminals			
<ul> <li>for auxiliary and control current circuit</li> </ul>		spring-loaded terminals			
Type of the connectable conductor cross-section					
for main contacts					
• solid		2x (0.5 4 mm²)			
• stranded		2x (0.5 4 mm²)			
• finely stranded					

with conductor end processing

without conductor final cutting

• for AWG conductors / for main contacts

for auxiliary contacts

• solid

finely stranded

with conductor end processingwithout conductor final cutting

• for AWG conductors / for auxiliary contacts

Certificates/approvals:

Verification of suitability

CE / UL / CSA / CCC

2x (0.5 ... 2.5 mm<sup>2</sup>)

2x (0.5 ... 2.5 mm<sup>2</sup>)

2x (0.5 ... 2.5 mm<sup>2</sup>)

2x (0.5 ... 1.5 mm<sup>2</sup>)

2x (0.5 ... 1.5 mm<sup>2</sup>)

2x (20 ... 14)

1x (20 ... 12)

General Product Ap	proval		Test Certific	ates	
(SA)	<u>ROSTEST</u>		Manufacture	ī	
Shipping Approval					
ABS	JÅ DNV DNV	GL	Lloyd's Kegister LRS	PRS	RINA
Shipping Approval	other				
RMRS	<u>other</u>				
UL/CSA ratings					
yielded mechanical p	erformance (hp)				
<ul> <li>for single-phase so</li> </ul>	quirrel cage motors				
• at 110/120 V / ra	ated value		hp	0.25	
• at 230 V / rated	value		hp	0.75	
<ul> <li>for three-phase square</li> </ul>	uirrel cage motors				
• at 200/208 V / ra	ated value		hp	1.5	
• at 220/230 V / ra	ated value		hp	2	
• at 460/480 V / ra	ated value		hp	3	
• at 575/600 V / ra	ated value		hp 5		
Operating current (FL	.A) / for three-pha	se squirrel cage motors			
• at 480 V / rated va	lue		А	4.8	
• at 600 V / rated va	lue		А	6.1	
Contact rating designation / for auxiliary contacts / according to UL				A600 / Q600	
Safety:					
B10 value / with high	demand rate				
according to SN 31920			1,000,000		
Failure rate (FIT value	e) / with low dema	nd rate			
<ul> <li>according to SN 31</li> </ul>	according to SN 31920		FIT	100	
Proportion of danger	ous failures				
<ul> <li>with low demand rate</li> </ul>	ate / according to S	SN 31920	%	40	

Protection against electrical shock

• according to IEC 61508

• with high demand rate / according to SN 31920

T1 value / for proof test interval or service life

%

а

75

20

finger-safe

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

Industry Mall (Online ordering system)

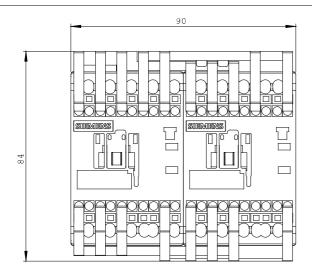
http://www.siemens.com/industrial-controls/mall

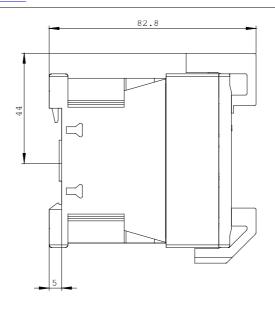
#### **CAx-Online-Generator**

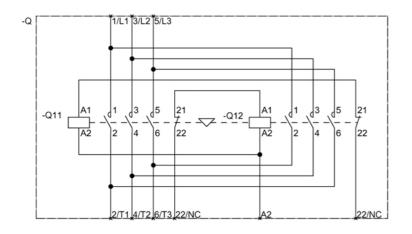
http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RA2315-8XB30-2BB4/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RA2315-8XB30-2BB4







last change:

Oct 24, 2011