## **SIEMENS**

## Data sheet

3RA2327-8XE30-2BB4

REV. COMB. FOR 3RA27, AC3, 15KW/400V, DC24V 3-POLE, SZ S0 SPRING-LOADED TERMINAL ELECTR. AND MECH. INTERLOCK 2NO INTEGR., W. VOLTAGE TAP-OFF



Product brand name	SIRIUS
Product designation	Reversing contactor assembly
Product type designation	3RA23
Manufacturer's article number	
<ul> <li>1 of the supplied contactor</li> </ul>	3RT2027-2BB40-0CC0
<ul> <li>2 of the supplied contactor</li> </ul>	3RT2027-2BB40
<ul> <li>of the supplied RS assembly kit</li> </ul>	3RA2923-2AA2
<ul> <li>of the supplied function module for communication</li> </ul>	3RA2711-2BA00

General technical data	
Size of contactor	S0
Product extension	
Auxiliary switch	Yes
Insulation voltage	
<ul> <li>with degree of pollution 3 rated value</li> </ul>	690 V
Degree of pollution	3
Surge voltage resistance rated value	6 kV
Protection class IP	
• on the front	IP20

Shock resistance at rectangular impulse	
• at AC	8,3g / 5 ms, 5,3g / 10 ms
• at DC	10g / 5 ms, 7,5g / 10 ms
Shock resistance with sine pulse	
• at AC	13,5g / 5 ms, 8,3g / 10 ms
• at DC	15g / 5 ms, 10g / 10 ms
Mechanical service life (switching cycles)	
of contactor typical	10 000 000
of the contactor with added auxiliary switch	10 000 000
block typical	
Equipment marking	
• acc. to DIN EN 81346-2	Q
Ambient conditions	
Ambient temperature	
<ul><li>during operation</li></ul>	-25 +60 °C
during storage	-55 +80 °C
Main circuit	
Number of poles for main current circuit	3
Number of NO contacts for main contacts	3
Number of NC contacts for main contacts	0
Operating voltage	
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
Operating current	
● at AC-1 at 400 V	
— at ambient temperature 40 °C rated value	50 A
— at ambient temperature 60 °C rated value	45 A
• at AC-2 at 400 V rated value	32 A
• at AC-3	
— at 400 V rated value	32 A
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	35 A
— at 110 V rated value	4.5 A
<ul><li>with 2 current paths in series at DC-1</li></ul>	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
<ul> <li>with 3 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
Operating current	
• at 1 current path at DC-3 at DC-5	

— at 24 V rated value	20 A
— at 110 V rated value	2.5 A
• with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value	35 A
— at 110 V rated value	15 A
• with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
No-load switching frequency	1 500 1/h
Operating frequency	
• at AC-1 maximum	1 000 1/h
• at AC-2 maximum	1 000 1/h
• at AC-3 maximum	1 000 1/h
• at AC-4 maximum	300 1/h
Control circuit/ Control	
Type of voltage of the control supply voltage	DC
Control supply voltage 1	
• at DC rated value	24 V
Design of the surge suppressor	with varistor
Closing power of magnet coil at DC	5.9 W
Holding power of magnet coil at DC	5.9 W
Auxiliary circuit	
Auxiliary circuit	
Auxiliary circuit  Number of NO contacts	1
Auxiliary circuit  Number of NO contacts  • for auxiliary contacts	1 2
Auxiliary circuit  Number of NO contacts  • for auxiliary contacts  — per direction of rotation	
Auxiliary circuit  Number of NO contacts  • for auxiliary contacts  — per direction of rotation  — instantaneous contact  Operating current of auxiliary contacts at AC-12	2
Auxiliary circuit  Number of NO contacts  • for auxiliary contacts  — per direction of rotation  — instantaneous contact  Operating current of auxiliary contacts at AC-12 maximum	2
Auxiliary circuit  Number of NO contacts  • for auxiliary contacts  — per direction of rotation  — instantaneous contact  Operating current of auxiliary contacts at AC-12 maximum  Operating current of auxiliary contacts at AC-15	2 10 A
Auxiliary circuit  Number of NO contacts  • for auxiliary contacts  — per direction of rotation  — instantaneous contact  Operating current of auxiliary contacts at AC-12 maximum  Operating current of auxiliary contacts at AC-15  • at 230 V	2 10 A 6 A
Auxiliary circuit  Number of NO contacts  • for auxiliary contacts  — per direction of rotation  — instantaneous contact  Operating current of auxiliary contacts at AC-12 maximum  Operating current of auxiliary contacts at AC-15  • at 230 V  • at 400 V	2 10 A 6 A
Auxiliary circuit  Number of NO contacts  • for auxiliary contacts  — per direction of rotation  — instantaneous contact  Operating current of auxiliary contacts at AC-12 maximum  Operating current of auxiliary contacts at AC-15  • at 230 V  • at 400 V  Operating current of auxiliary contacts at DC-13	2 10 A 6 A 3 A
Auxiliary circuit  Number of NO contacts  • for auxiliary contacts  — per direction of rotation  — instantaneous contact  Operating current of auxiliary contacts at AC-12 maximum  Operating current of auxiliary contacts at AC-15  • at 230 V  • at 400 V  Operating current of auxiliary contacts at DC-13  • at 24 V	2 10 A 6 A 3 A
Auxiliary circuit  Number of NO contacts  • for auxiliary contacts  — per direction of rotation  — instantaneous contact  Operating current of auxiliary contacts at AC-12 maximum  Operating current of auxiliary contacts at AC-15  • at 230 V  • at 400 V  Operating current of auxiliary contacts at DC-13  • at 24 V  • at 60 V	2 10 A 6 A 3 A 10 A 2 A
Auxiliary circuit  Number of NO contacts  • for auxiliary contacts  — per direction of rotation  — instantaneous contact  Operating current of auxiliary contacts at AC-12 maximum  Operating current of auxiliary contacts at AC-15  • at 230 V  • at 400 V  Operating current of auxiliary contacts at DC-13  • at 24 V  • at 60 V  • at 110 V	2 10 A 6 A 3 A 10 A 2 A 1 A
Auxiliary circuit  Number of NO contacts  • for auxiliary contacts  — per direction of rotation  — instantaneous contact  Operating current of auxiliary contacts at AC-12 maximum  Operating current of auxiliary contacts at AC-15  • at 230 V  • at 400 V  Operating current of auxiliary contacts at DC-13  • at 24 V  • at 60 V  • at 110 V  • at 220 V	2 10 A 6 A 3 A 10 A 2 A 1 A 0.3 A
Auxiliary circuit  Number of NO contacts  • for auxiliary contacts  — per direction of rotation  — instantaneous contact  Operating current of auxiliary contacts at AC-12 maximum  Operating current of auxiliary contacts at AC-15  • at 230 V  • at 400 V  Operating current of auxiliary contacts at DC-13  • at 24 V  • at 60 V  • at 110 V  • at 220 V  Contact reliability of auxiliary contacts	2 10 A 6 A 3 A 10 A 2 A 1 A 0.3 A
Auxiliary circuit  Number of NO contacts  • for auxiliary contacts  — per direction of rotation  — instantaneous contact  Operating current of auxiliary contacts at AC-12 maximum  Operating current of auxiliary contacts at AC-15  • at 230 V  • at 400 V  Operating current of auxiliary contacts at DC-13  • at 24 V  • at 60 V  • at 110 V  • at 220 V  Contact reliability of auxiliary contacts	2 10 A 6 A 3 A 10 A 2 A 1 A 0.3 A

Yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	2 hp
— at 230 V rated value	5 hp
• for three-phase AC motor	
— at 220/230 V rated value	10 hp
— at 460/480 V rated value	20 hp
— at 575/600 V rated value	25 hp
Contact rating of auxiliary contacts according to UL	A600 / Q600

## Short-circuit protection

### Design of the fuse link

• for short-circuit protection of the main circuit

— with type of coordination 1 required

— with type of assignment 2 required

• for short-circuit protection of the auxiliary switch required

gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 125 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 50 A

fuse gL/gG: 10 A

Mounting position	+/-180° rotation possible on vertical mounting surface; can be
<b>9</b> Facility	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	114 mm
Width	90 mm
Depth	107 mm
•	107 11111
Required spacing	
<ul><li>with side-by-side mounting</li></ul>	
— forwards	6 mm
— Backwards	0 mm
— upwards	6 mm
— downwards	6 mm
— at the side	6 mm
• for grounded parts	
— forwards	6 mm
— Backwards	0 mm
— upwards	6 mm
— at the side	6 mm
— downwards	6 mm
• for live parts	
— forwards	6 mm
— Backwards	0 mm
— upwards	6 mm

— downwards	6 mm
— at the side	6 mm

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-sections	
• for main contacts	
— solid	2x (1 10 mm²)
<ul> <li>single or multi-stranded</li> </ul>	2x (1 10 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 6 mm²)
<ul> <li>finely stranded without core end</li> </ul>	2x (1 6 mm²)
processing	
<ul> <li>at AWG conductors for main contacts</li> </ul>	1x (18 8)
Type of connectable conductor cross-sections	
<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</li> </ul>	2x (0.5 1.5 mm²)
processing	
<ul> <li>at AWG conductors for auxiliary contacts</li> </ul>	2x (20 14)

Safety related data	
B10 value	
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	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	100 FIT
T1 value for proof test interval or service life acc. to IEC 61508	20 y

Communication/ Protocol	
Product function Bus communication	Yes
Protocol is supported	
AS-interface protocol	No

## Certificates/approvals

#### **General Product Approval**

# Declaration of Conformity

Test Certificates Marine / Shipping









Special Test Certificate



## Marine / Shipping













other

Railway

Environmental Confirmations

Confirmation

Vibration and Shock

### Further information

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

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

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2327-8XE30-2BB4

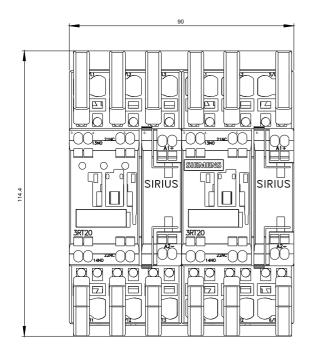
Cax online generator

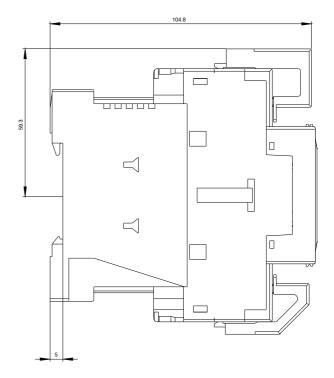
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2327-8XE30-2BB4

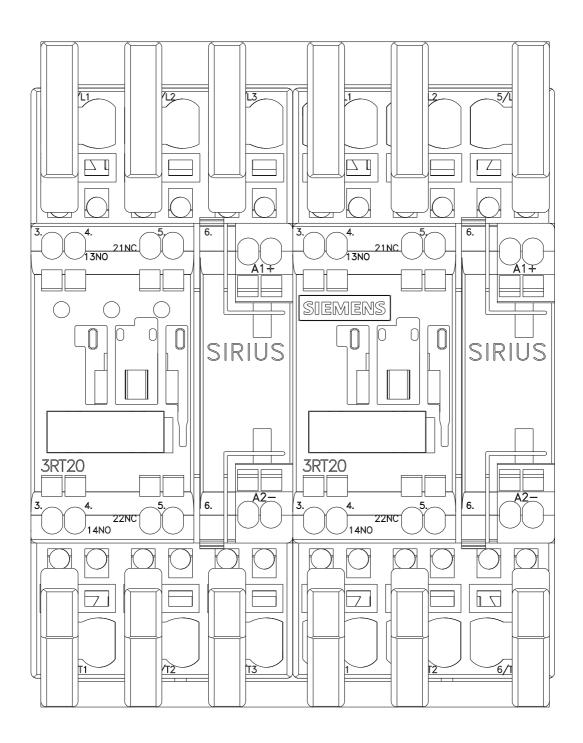
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

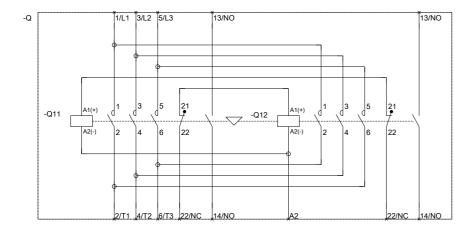
https://support.industry.siemens.com/cs/ww/en/ps/3RA2327-8XE30-2BB4

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=3RA2327-8XE30-2BB4&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2327-8XE30-2BB4&lang=en</a>









REVERSING COMB. SZ S0

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