

REV. COMB., AC3, 15KW/400V AC230V, 50/60HZ, 3-POLE, SZ S0
SCREW TERMINAL ELECTR. AND MECH. INTERLOCK 2NO
INTEGR.

product brandname	SIRIUS
Product designation	reversing contactor assembly 3RA23
Manufacturer's article number	• 1 of the supplied contactor 3RT2027-1AL20 • 2 of the supplied contactor 3RT2027-1AL20 • of the supplied RH assembly kit 3RA2923-2AA1

General technical data	
Size of contactor	S0
Product extension	Yes
• Auxiliary switch	
Insulation voltage	
• with degree of pollution 3 rated value	690 V
Degree of pollution	3
Surge voltage resistance rated value	6 kV
Protection class IP	
• on the front	IP20
Shock resistance	12.5g / 5 ms and 7.8g / 10 ms
• at rectangular impulse — at AC — at DC • with sine pulse — at AC — at DC	8,3g / 5 ms, 5,3g / 10 ms 10g / 5 ms, 7,5g / 10 ms 13,5g / 5 ms, 8,3g / 10 ms 15g / 5 ms, 10g / 10 ms
Mechanical service life (switching cycles)	
• of contactor typical • of the contactor with added auxiliary switch block typical	10 000 000 10 000 000
Equipment marking	
• acc. to DIN EN 81346-2	Q

Ambient conditions	
Installation altitude at height above sea level maximum	2 000 m
Ambient temperature	
• during operation • during storage	-25 ... +60 °C -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	
• at AC-3 rated value maximum	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
• with 2 current paths in series at DC-1	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
• with 3 current paths in series at DC-1	
— 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 110 V rated value	15 A
— at 24 V rated value	35 A
• with 3 current paths in series at DC-3 at DC-5	
— at 110 V rated value	35 A
— at 24 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	AC

Control supply voltage 1 at AC	
• at 50 Hz rated value	230 V
• at 60 Hz rated value	230 V
Operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.8 ... 1.1
• at 60 Hz	0.8 ... 1.1
Apparent pick-up power of magnet coil at AC	
• at 50 Hz	77 V·A
Inductive power factor with closing power of the coil	
• at 50 Hz	0.82
Apparent holding power of magnet coil at AC	
• at 50 Hz	9.8 V·A
Inductive power factor with the holding power of the coil	
• at 50 Hz	0.27

Auxiliary circuit

Number of NO contacts	
• for auxiliary contacts	
— per direction of rotation	1
— instantaneous contact	2
Operating current of auxiliary contacts at AC-12 maximum	10 A
Operating current of auxiliary contacts at AC-15	
• at 230 V	6 A
• at 400 V	3 A
Operating current of auxiliary contacts at DC-13	
• at 24 V	10 A
• at 60 V	2 A
• at 110 V	1 A
• at 220 V	0.3 A
Contact reliability of 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	27 A
• at 600 V rated value	27 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

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	101 mm
Width	90 mm
Depth	97 mm
Required spacing	
• with side-by-side mounting — forwards — Backwards — upwards — downwards — at the side • for grounded parts — forwards — Backwards — upwards — at the side — downwards • for live parts — forwards — Backwards — upwards — downwards — at the side	6 mm 0 mm 6 mm 6 mm 6 mm 6 mm 0 mm 6 mm 6 mm 6 mm 6 mm 0 mm 6 mm 6 mm 6 mm

Connections/Terminals

Type of electrical connection	
• for main current circuit • for auxiliary and control current circuit	screw-type terminals screw-type terminals

Type of connectable conductor cross-sections	
• for main contacts — solid — single or multi-stranded — finely stranded with core end processing • at AWG conductors for main contacts	2x (1 ... 2.5 mm ²), 2x (2.5 ... 10 mm ²) 2x (1 ... 2,5 mm ²), 2x (2,5 ... 10 mm ²) 2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²), 1x 10 mm ² 2x (16 ... 12), 2x (14 ... 8)
Type of connectable conductor cross-sections	
• for auxiliary contacts — single or multi-stranded — finely stranded with core end processing • at AWG conductors for auxiliary contacts	2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²) 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) 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	
• with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920	40 % 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	No
Protocol is supported	
• AS-interface protocol	No
Certificates/approvals	

General Product Approval			Declaration of Conformity	Test Certificates	Shipping Approval
				spezielle Prüfbescheinigungen n	
CSA	UL		EG-Konf.		ABS

Shipping Approval					
					
BUREAU VERITAS	DNV	GL	LRS	PRS	RINA

Shipping Approval	other	Railway	
	Umweltbestätigung	Bestätigungen	Schwingen/Schocke n
RMRS			

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=3RA2327-8XB30-1AL2-Z W96>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2327-8XB30-1AL2-Z W96>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2327-8XB30-1AL2-Z W96>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2327-8XB30-1AL2-Z W96&lang=en

last modified:

10/19/2016