

REV. COMB., AC3, 5.5KW/ 400V AC24V, 50/60HZ, 3-POLE, SZ S0
SCREW TERMINAL ELECTR. AND MECH. INTERLOCK 2NO
INTEGR.



Product brand name	SIRIUS
Product designation	Reversing contactor assembly
Product type designation	3RA23
Manufacturer's article number	
• 1 of the supplied contactor	3RT2024-1AC20
• 2 of the supplied contactor	3RT2024-1AC20
• of the supplied RH assembly kit	3RA2923-2AA1
General technical data	
Size of contactor	S0
Product extension	
• Auxiliary switch	Yes
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 at rectangular impulse	
• at AC	7,5g / 5 ms, 4,7g / 10 ms

• at DC	10g / 5 ms, 7,5g / 10 ms
Shock resistance with sine pulse	
• at AC	11,8g / 5 ms, 7,4g / 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 block typical	10 000 000
Equipment marking	
• acc. to DIN EN 81346-2	Q
Ambient conditions	
Ambient temperature	
• during operation	-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	
• at AC-3 rated value maximum	690 V
Operating current	
• at AC-1 at 400 V	
— at ambient temperature 40 °C rated value	40 A
— at ambient temperature 60 °C rated value	35 A
• at AC-2 at 400 V rated value	12 A
• at AC-3	
— at 400 V rated value	12 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 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	AC
Control supply voltage 1 at AC	
• at 50 Hz rated value	24 V
• at 60 Hz rated value	24 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	65 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	8.5 V·A
Inductive power factor with the holding power of the coil	
• at 50 Hz	0.25

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	11 A
• at 600 V rated value	11 A
Yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	1 hp
— at 230 V rated value	2 hp
• for three-phase AC motor	
— at 220/230 V rated value	3 hp
— at 460/480 V rated value	7.5 hp
— at 575/600 V rated value	10 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	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 63 A
— with type of assignment 2 required	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25 A
• for short-circuit protection of the auxiliary switch required	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	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	screw-type terminals
• for auxiliary and control current circuit	screw-type terminals
Type of connectable conductor cross-sections	
• for main contacts	
— solid	2x (1 ... 2.5 mm ²), 2x (2.5 ... 10 mm ²)
— single or multi-stranded	2x (1 ... 2.5 mm ²), 2x (2.5 ... 10 mm ²)
— finely stranded with core end processing	2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²), 1x 10 mm ²
• at AWG conductors for main contacts	2x (16 ... 12), 2x (14 ... 8)
Type of connectable conductor cross-sections	
• for auxiliary contacts	
— single or multi-stranded	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
— finely stranded with core end processing	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
• at 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	
• with low demand rate acc. to SN 31920	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	No
Protocol is supported	
• AS-interface protocol	No

Certificates/approvals

General Product Approval	Declaration of Conformity	Test Certificates	Marine / Shipping
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EG-Konf.

[Special Test Certificate](#)



ABS



BUREAU VERITAS

Marine / Shipping

other



GL



LRS



PRS



RMRS



DNV-GL

[Environmental Confirmations](#)

other

Railway

[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=3RA2324-8XB30-1AC2>

Cax online generator

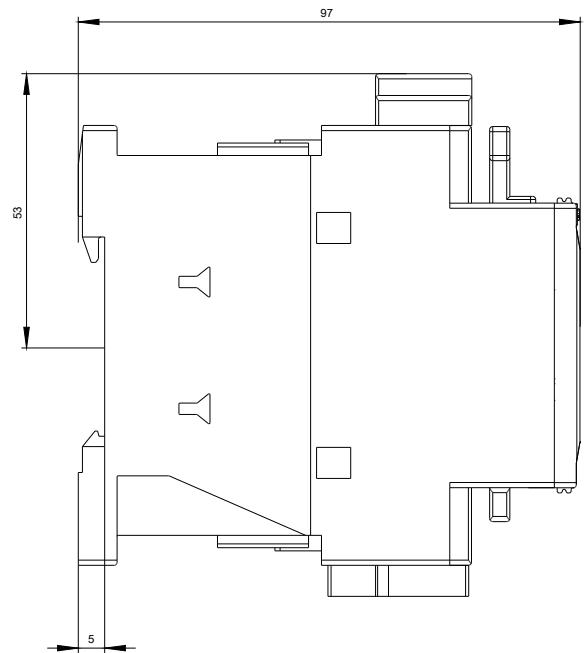
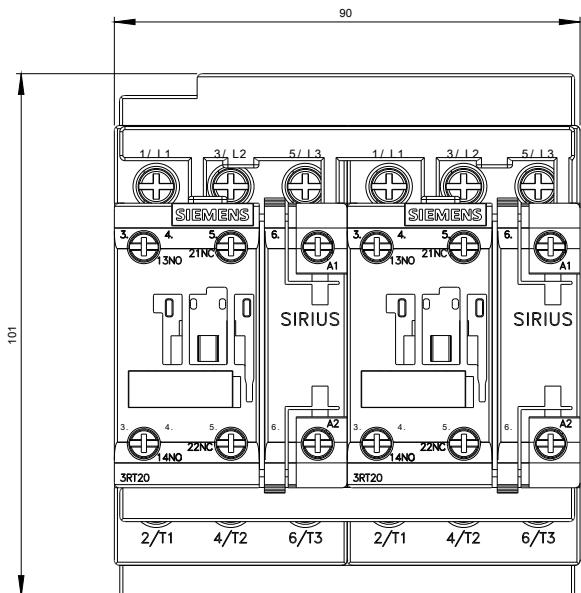
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2324-8XB30-1AC2>

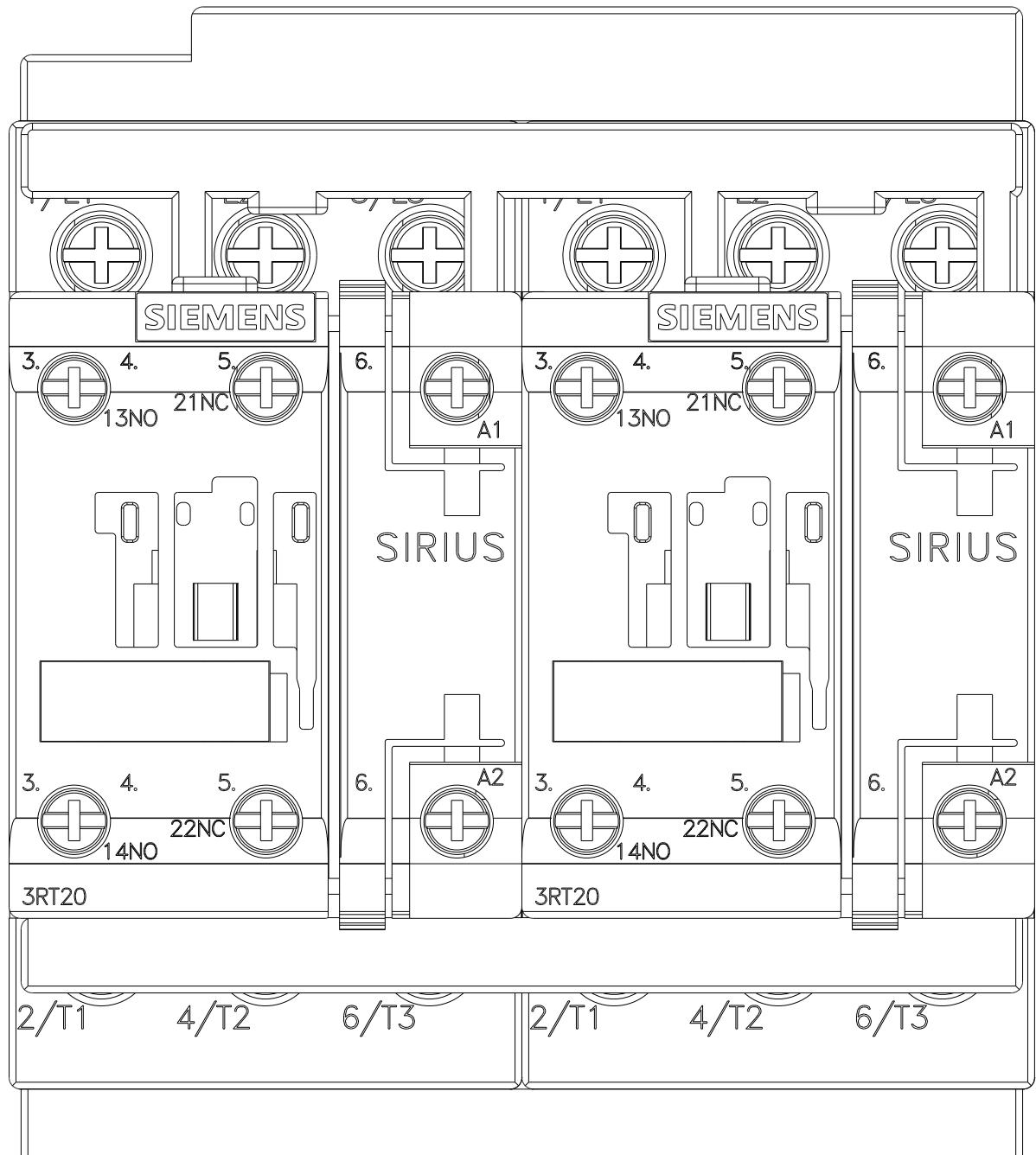
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2324-8XB30-1AC2>

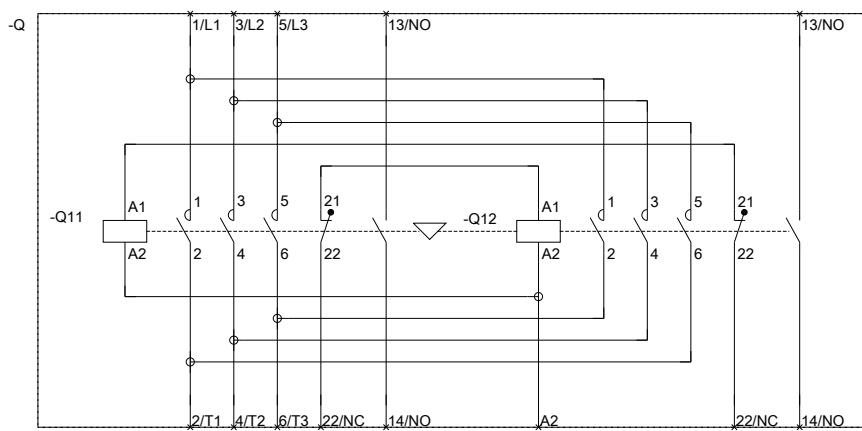
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2324-8XB30-1AC2&lang=en





WENDEKOMBINATION BGR. S0



REVERSING COMB. SZ S0

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