

REV. COMB., AC3, 4KW/400V AC24V, 50/60HZ, 3-POLE, SZ S00
 SPRING-LOADED TERMINAL ELECTR. AND MECH. INTERLOCK



product brand name	SIRIUS
Product designation	reversing contactor assembly 3RA23
Manufacturer article number	
<ul style="list-style-type: none"> • 1 of the supplied contactor • 2 of the supplied contactor • of the supplied RH assembly kit 	3RT2016-2AB02 3RT2016-2AB02 3RA2913-2AA2

General technical data:	
Size of contactor	S00
Product expansion	
<ul style="list-style-type: none"> • Auxiliary switch 	Yes
Insulation voltage	
<ul style="list-style-type: none"> • with degree of pollution 3 Rated value 	690 V
Surge voltage resistance Rated value	6 kV
Protection class IP	
<ul style="list-style-type: none"> • on the front 	IP20
Degree of pollution	3
Mechanical service life (switching cycles)	
<ul style="list-style-type: none"> • of the contactor typical • of the contactor with added auxiliary switch block typical 	10 000 000 10 000 000
Equipment marking	
<ul style="list-style-type: none"> • acc. to DIN EN 81346-2 	Q

Ambient conditions:	
Installation altitude at height above sea level maximum	2 000 m

Ambient temperature	
<ul style="list-style-type: none"> during operation during storage 	<p>-25 ... +60 °C</p> <p>-55 ... +80 °C</p>
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 style="list-style-type: none"> at AC-3 Rated value maximum 	690 V
Operating current	
<ul style="list-style-type: none"> at AC-1 at 400 V <ul style="list-style-type: none"> at ambient temperature 40 °C Rated value at ambient temperature 60 °C Rated value at AC-2 at 400 V Rated value at AC-3 <ul style="list-style-type: none"> at 400 V Rated value 	<p>18 A</p> <p>16 A</p> <p>7 A</p> <p>9 A</p>
Operating current	
<ul style="list-style-type: none"> with 1 current path at DC-1 <ul style="list-style-type: none"> at 24 V Rated value at 110 V Rated value with 2 current paths in series at DC-1 <ul style="list-style-type: none"> at 24 V Rated value at 110 V Rated value with 3 current paths in series at DC-1 <ul style="list-style-type: none"> at 24 V Rated value at 110 V Rated value 	<p>20 A</p> <p>2.1 A</p> <p>20 A</p> <p>12 A</p> <p>20 A</p> <p>20 A</p>
Operating current	
<ul style="list-style-type: none"> with 1 current path at DC-3 at DC-5 <ul style="list-style-type: none"> at 24 V Rated value at 110 V Rated value with 2 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> at 110 V Rated value at 24 V Rated value with 3 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> at 110 V Rated value at 24 V Rated value 	<p>20 A</p> <p>0.15 A</p> <p>0.35 A</p> <p>20 A</p> <p>20 A</p> <p>20 A</p>
No-load switching frequency	1 500 1/h
Operating frequency	
<ul style="list-style-type: none"> at AC-1 maximum at AC-2 maximum at AC-3 maximum 	<p>1 000 1/h</p> <p>750 1/h</p> <p>750 1/h</p>

- at AC-4 maximum

250 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 the magnet coil at AC	
• at 50 Hz	0.8 ... 1.1
• at 60 Hz	0.85 ... 1.1
Apparent pick-up power of the magnet coil at AC	
• at 50 Hz	27 V·A
Inductive power factor with closing power of the coil	
• at 50 Hz	0.8
Apparent holding power of the magnet coil at AC	
• at 50 Hz	4.2 V·A
Inductive power factor with the holding power of the coil	
• at 50 Hz	0.25

Auxiliary circuit:

Number of NC contacts	
• for auxiliary contacts	
— per direction of rotation	0
— instantaneous contact	0
— lagging switching	0
Number of NO contacts	
• for auxiliary contacts	
— per direction of rotation	0
— instantaneous contact	0
— leading contact	0
Operating current of the auxiliary contacts at AC-12 maximum	10 A
Operating current of the auxiliary contacts at AC-15	
• at 230 V	6 A
• at 400 V	3 A
Operating current of the 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 the auxiliary contacts	< 1 error per 100 million operating cycles

UL/CSA ratings:

Full-load current (FLA) for three-phase AC motor	
<ul style="list-style-type: none"> • at 480 V Rated value • at 600 V Rated value 	<p>7.6 A</p> <p>9 A</p>
yielded mechanical performance [hp]	
<ul style="list-style-type: none"> • for single-phase AC motor <ul style="list-style-type: none"> — at 110/120 V Rated value — at 230 V Rated value • for three-phase AC motor <ul style="list-style-type: none"> — at 200/208 V Rated value — at 220/230 V Rated value — at 460/480 V Rated value — at 575/600 V Rated value 	<p>0.33 hp</p> <p>1 hp</p> <p>2 hp</p> <p>3 hp</p> <p>5 hp</p> <p>7.5 hp</p>
Contact rating of the auxiliary contacts acc. to UL	A600 / Q600

Short-circuit:

Design of the fuse link	
<ul style="list-style-type: none"> • for short-circuit protection of the main circuit <ul style="list-style-type: none"> — with type of assignment 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required 	<p>gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A</p> <p>gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20 A</p> <p>fuse gL/gG: 10 A</p>

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	84 mm
Width	90 mm
Depth	83 mm
Required spacing	
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — at the side 	<p>6 mm</p> <p>0 mm</p> <p>6 mm</p> <p>6 mm</p> <p>6 mm</p> <p>6 mm</p> <p>6 mm</p> <p>0 mm</p> <p>6 mm</p> <p>6 mm</p>

— 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
• for auxiliary and control current circuit	spring-loaded terminals
Type of connectable conductor cross-section	
• for main contacts	
— single or multi-stranded	2x (0,5 ... 4 mm ²)
— finely stranded with core end processing	2x (0.5 ... 2.5 mm ²)
— finely stranded without core end processing	2x (0.5 ... 2.5 mm ²)
• for AWG conductors for main contacts	1x (20 ... 12)
Type of connectable conductor cross-section	
• for auxiliary contacts	
— single or multi-stranded	2x (0,5 ... 2,5 mm ²)
— finely stranded with core end processing	2x (0.5 ... 1.5 mm ²)
— finely stranded without core end processing	2x (0.5 ... 1.5 mm ²)
• for AWG conductors for auxiliary contacts	2x (20 ... 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 %
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	
 CSA	 UL		 EG-Konf.	spezielle Prüfbescheinigungen <u>n</u>	Typprüfbescheinigung/Werkszeugnis

Shipping Approval					
 ABS	 BUREAU VERITAS	 DNV	 GL	 LRS	 PRS

Shipping Approval	other
 RINA	 RMRS
	Umweltbestätigung

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

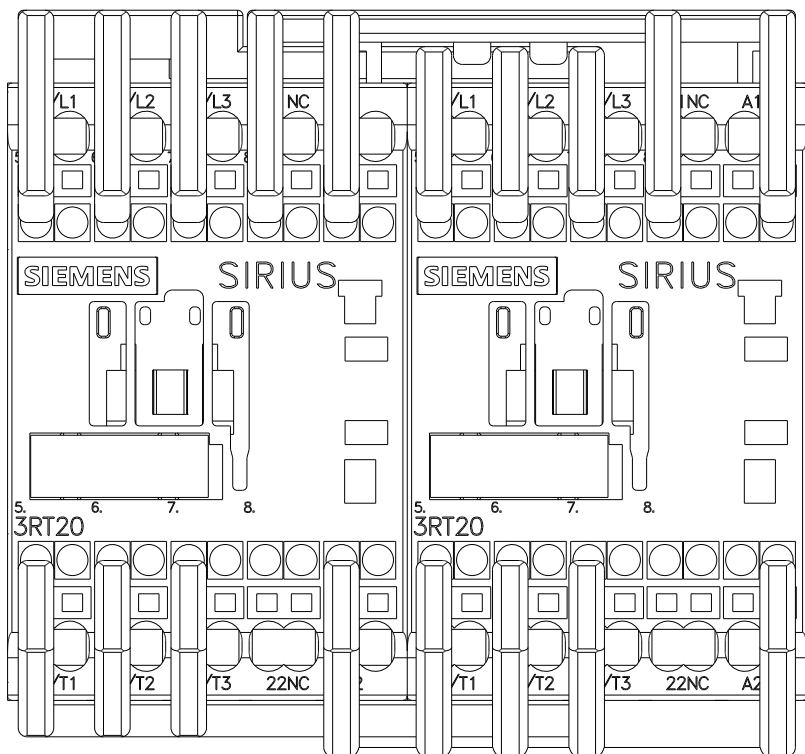
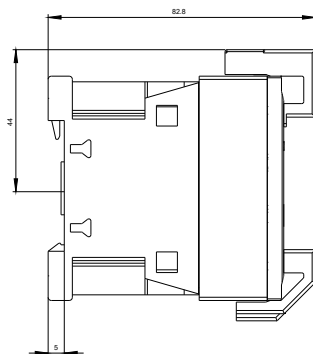
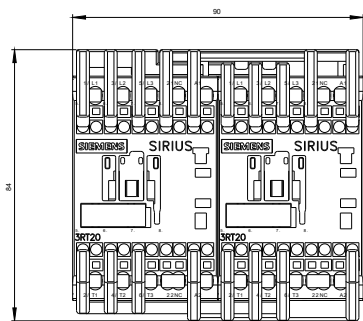
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA23168XB302AB0>

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

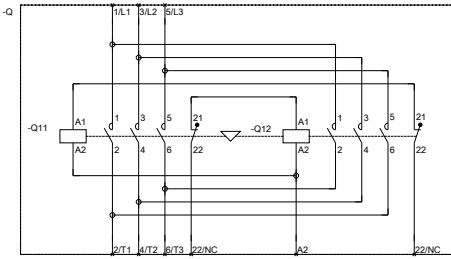
<https://support.industry.siemens.com/cs/ww/en/ps/3RA23168XB302AB0>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA23168XB302AB0&lang=en



WENDEKOMBINATION BGR. S00



REVERSING COMB. SZ S00

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29.06.2015