

Reversing contactor assembly for 3RA27 AC-3, 3 kW/400 V, 24 V DC 3-pole, Size S00 screw terminal electrical and mechanical interlock with voltage tap



product brand name	SIRIUS
Product designation	Reversing contactor assembly
Product type designation	3RA23
Manufacturer's article number	<ul style="list-style-type: none"> • 1 of the supplied contactor 3RT2015-1BB42-0CC0 • 2 of the supplied contactor 3RT2015-1BB42 • of the supplied RH assembly kit 3RA2913-2AA1

General technical data	
Size of contactor	S00
Product extension	<ul style="list-style-type: none"> • Auxiliary switch Yes • Insulation voltage with degree of pollution 3 at AC rated value 690 V
Surge voltage resistance rated value	6 kV
<ul style="list-style-type: none"> • protection class IP on the front IP20 	
Shock resistance at rectangular impulse	<ul style="list-style-type: none"> • at AC 6,7g / 5 ms, 4,2g / 10 ms • at DC 6,7g / 5 ms, 4,2g / 10 ms
Shock resistance with sine pulse	

<ul style="list-style-type: none"> • at AC 	10,5g / 5 ms, 6,6g / 10 ms
<ul style="list-style-type: none"> • at DC 	10,5g / 5 ms, 6,6g / 10 ms
Mechanical service life (switching cycles)	
<ul style="list-style-type: none"> • of contactor typical 	10 000 000
<ul style="list-style-type: none"> • of the contactor with added auxiliary switch block typical 	10 000 000
Reference code acc. to DIN EN 81346-2	Q

Ambient conditions

Installation altitude at height above sea level	
<ul style="list-style-type: none"> • maximum 	2 000 m
Ambient temperature	
<ul style="list-style-type: none"> • during operation 	-25 ... +60 °C
<ul style="list-style-type: none"> • 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 style="list-style-type: none"> • at AC-3 rated value maximum 	690 V
Operating current	
<ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> — at 400 V rated value 	7 A
Operating current	
<ul style="list-style-type: none"> • at 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 	15 A 1.5 A 15 A 8.4 A 15 A 15 A
Operating current	
<ul style="list-style-type: none"> • at 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 24 V rated value — at 110 V rated value • with 3 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> — at 24 V rated value 	15 A 0.1 A 15 A 0.25 A 15 A

— at 110 V rated value	15 A
Operating power	
• at AC-3	
— at 400 V rated value	3 kW
— at 500 V rated value	3.5 kW
— at 690 V rated value	4 kW
• at AC-4 at 400 V rated value	3 kW
No-load switching frequency	1 500 1/h
Operating frequency at AC-3 maximum	750 1/h

Control circuit/ Control	
Type of voltage of the control supply voltage	DC
Control supply voltage 1	
• at DC rated value	24 V
Closing power of magnet coil at DC	4 W
Holding power of magnet coil at DC	4 W

Auxiliary circuit	
Operating current of auxiliary contacts at AC-12 maximum	10 A
• Operating current of auxiliary contacts at AC-15 at 230 V	6 A
• operating current of auxiliary contacts at AC-15 at 400 V	3 A
• operating current of auxiliary contacts at DC-13 at 24 V	10 A
• Operating current of auxiliary contacts at DC-13 at 60 V	2 A
• Operating current of auxiliary contacts at DC-13 at 110 V	1 A
• Operating current of auxiliary contacts at DC-13 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	4.8 A
• at 600 V rated value	6.1 A
Yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	0.25 hp
— at 230 V rated value	0.75 hp
• for three-phase AC motor	
— at 200/208 V rated value	1.5 hp
— at 220/230 V rated value	2 hp

— at 460/480 V rated value	3 hp
— at 575/600 V rated value	5 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

gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 20 A
 fuse 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

68 mm

Width

90 mm

Depth

73 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

screw-type terminals

<ul style="list-style-type: none"> • Type of electrical connection for auxiliary and control current circuit 	screw-type terminals
Type of connectable conductor cross-sections <ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — solid — single or multi-stranded — finely stranded with core end processing • at AWG conductors for main contacts 	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²), 2x 4 mm ² 2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²), 2x (0,5 ... 4 mm ²) 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) 2x (20 ... 16), 2x (18 ... 14)
Type of connectable conductor cross-sections <ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — 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 <ul style="list-style-type: none"> • with high demand rate acc. to SN 31920 	1 000 000
Proportion of dangerous failures <ul style="list-style-type: none"> • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 	40 % 75 %
Failure rate [FIT] <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • AS-Interface protocol 	No
Product function Control circuit interface with IO link	No

Certificates/ approvals

General Product Approval			Declaration of Conformity	Test Certificates
 CSA	 UL		 EG-Konf.	Miscellaneous Special Test Certificate

Test Certificates	Marine / Shipping				
Type Test Certificates/Test Report	 ABS	 BUREAU VERITAS	 LRS	 PRS	 RINA

Marine / Shipping	other	Railway
 RMRS	 DNV-GL DNVGL.COM/AF	Confirmation Vibration and Shock

Further information

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

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2315-8XE30-1BB4>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2315-8XE30-1BB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2315-8XE30-1BB4>

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

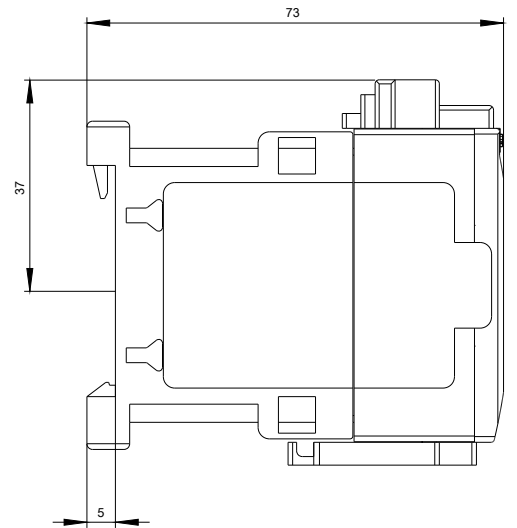
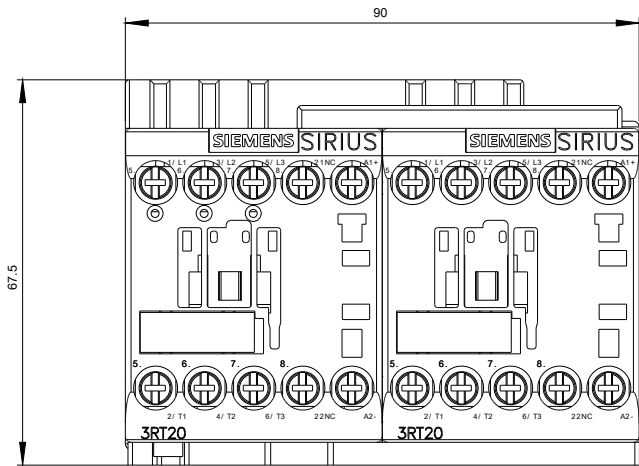
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2315-8XE30-1BB4&lang=en

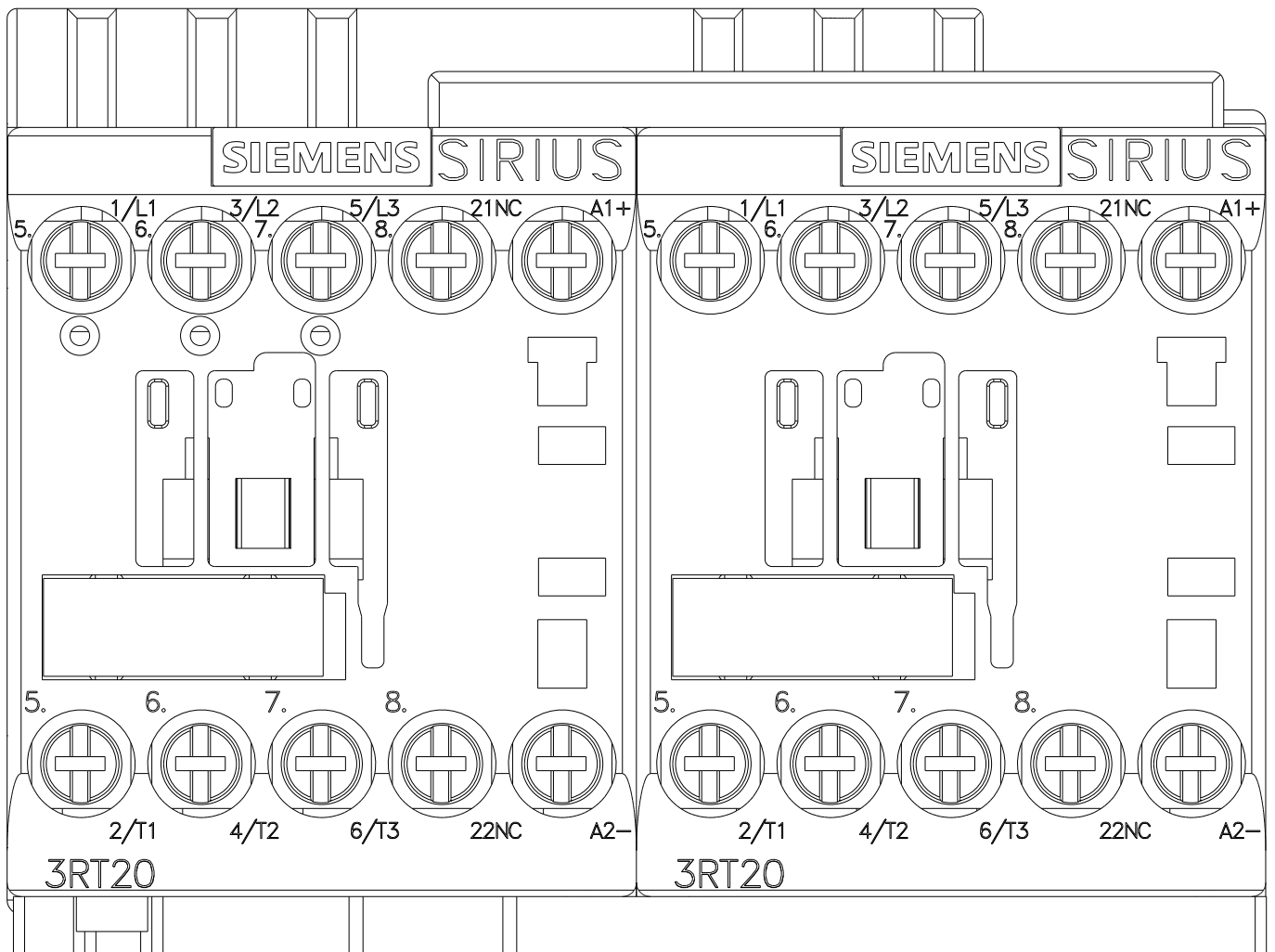
Characteristic: Tripping characteristics, I²t, Let-through current

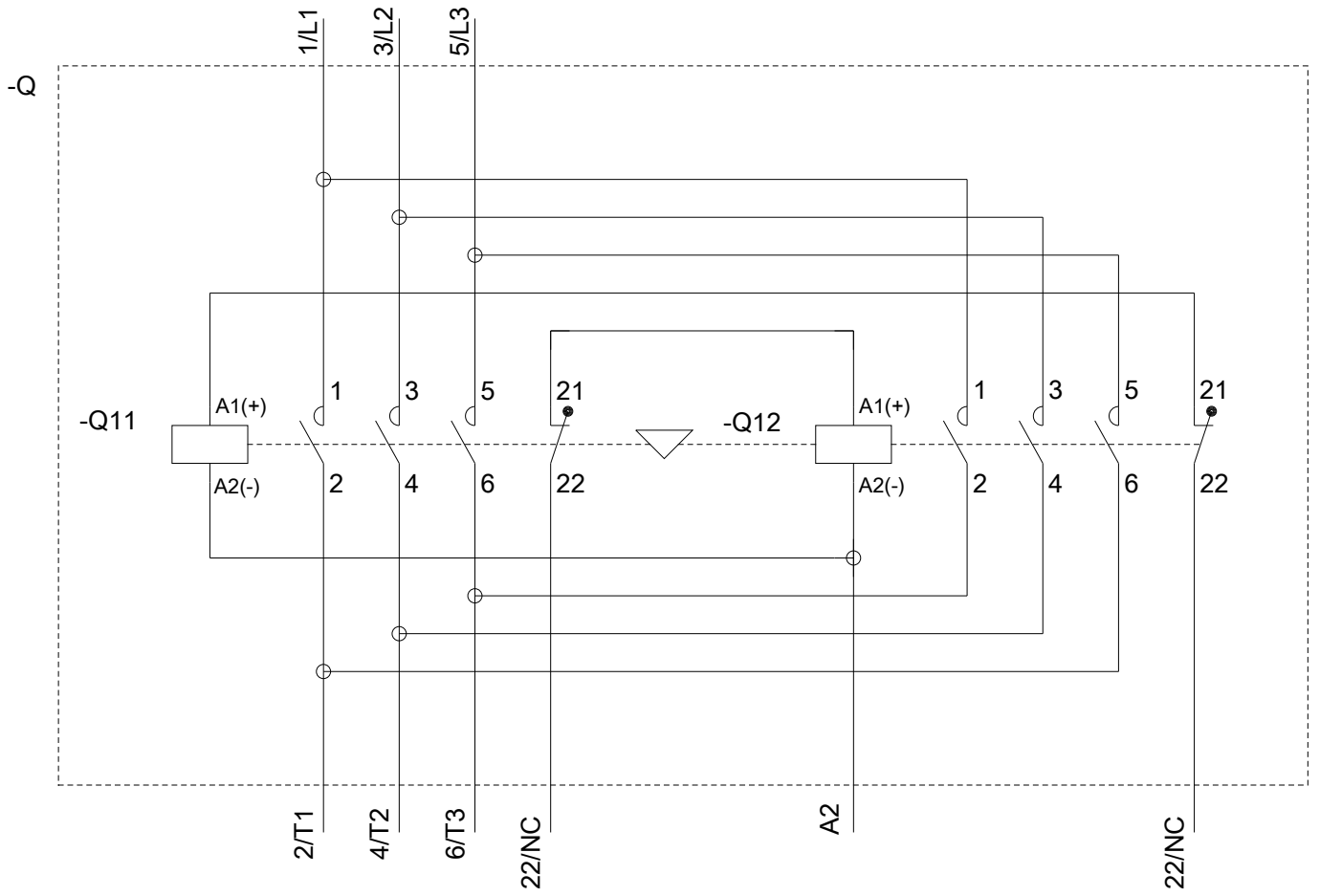
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2315-8XE30-1BB4/char>

Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2315-8XE30-1BB4&objecttype=14&gridview=view1>







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