

Reversing contactor assembly AC-3, 4 kW/400 V, 24 V DC 3-pole, Size S00 screw terminal electrical and mechanical interlock



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 • 2 of the supplied contactor • of the supplied RH assembly kit 	3RT2016-1BB42 3RT2016-1BB42 3RA2913-2AA1

General technical data

size of contactor	S00
product extension auxiliary switch	Yes
shock resistance at rectangular impulse	
<ul style="list-style-type: none"> • at AC • at DC 	6,7g / 5 ms, 4,2g / 10 ms 6,7g / 5 ms, 4,2g / 10 ms
shock resistance with sine pulse	
<ul style="list-style-type: none"> • at AC • at DC 	10,5g / 5 ms, 6,6g / 10 ms 10,5g / 5 ms, 6,6g / 10 ms
mechanical service life (switching cycles)	
<ul style="list-style-type: none"> • of contactor typical • of the contactor with added auxiliary switch block typical 	10 000 000 10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitation (Date)	10/01/2009

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 	-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	
<ul style="list-style-type: none"> • at AC-3 rated value maximum • at AC-3e rated value maximum 	690 V 690 V
operational current	
<ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> — at 400 V rated value — at 500 V rated value — at 690 V rated value • at AC-3e <ul style="list-style-type: none"> — at 400 V rated value — at 500 V rated value 	9 A 7.7 A 6.7 A 9 A 7.7 A

<ul style="list-style-type: none"> — at 690 V rated value 	6.7 A
operating power	
<ul style="list-style-type: none"> ● at AC-3 <ul style="list-style-type: none"> — at 400 V rated value — at 500 V rated value — at 690 V rated value ● at AC-3e <ul style="list-style-type: none"> — at 400 V rated value — at 690 V rated value ● at AC-4 at 400 V rated value 	4 kW 4 kW 5.5 kW 4 kW 5.5 kW 4 kW
operating frequency	
<ul style="list-style-type: none"> ● at AC-3 maximum ● at AC-3e maximum 	750 1/h 750 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	DC
control supply voltage 1	
<ul style="list-style-type: none"> ● 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	
contact reliability of auxiliary contacts	< 1 error per 100 million operating cycles
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
<ul style="list-style-type: none"> ● at 480 V rated value ● at 600 V rated value 	7.6 A 9 A
yielded mechanical performance [hp] for 3-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 	2 hp 3 hp 5 hp 7.5 hp
contact rating of auxiliary contacts according to UL	A600 / Q600
Short-circuit protection	
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 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
fastening method	screw and snap-on mounting onto 35 mm DIN rail
height	68 mm
width	90 mm
depth	73 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 — downwards ● for live parts <ul style="list-style-type: none"> — forwards — backwards — upwards 	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

— downwards	6 mm
— at the side	6 mm

Connections/ Terminals

type of electrical connection

- for main current circuit
- for auxiliary and control circuit
- at contactor for auxiliary contacts
- of magnet coil

screw-type terminals
screw-type terminals
Screw-type terminals
Screw-type terminals

type of connectable conductor cross-sections

- for main contacts
 - solid
 - solid or stranded
 - finely stranded with core end processing
- at AWG cables for main contacts

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm²
2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²), 2x (0,5 ... 4 mm²)
2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)
2x (20 ... 16), 2x (18 ... 14)

type of connectable conductor cross-sections

- for auxiliary contacts
 - solid or stranded
 - finely stranded with core end processing
- at AWG cables for auxiliary contacts

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)
2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)
2x (20 ... 16), 2x (18 ... 14)

Safety related data

B10 value with high demand rate according to SN 31920

1 000 000

proportion of dangerous failures

- with low demand rate according to SN 31920
- with high demand rate according to SN 31920

40 %
75 %

failure rate [FIT] with low demand rate according to SN 31920

100 FIT

T1 value for proof test interval or service life according to IEC 61508

20 y

protection class IP on the front according to IEC 60529

IP20

touch protection on the front according to IEC 60529

finger-safe, for vertical contact from the front

Communication/ Protocol

product function bus communication

Yes

protocol is supported AS-Interface protocol

No

product function control circuit interface with IO link

No

Certificates/ approvals

General Product Approval

Declaration of Conformity



[Confirmation](#)



Test Certificates

Marine / Shipping

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



Marine / Shipping

other

Railway

Dangerous Good



[Confirmation](#)

[Vibration and Shock](#)

[Transport Information](#)

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=3RA2316-8XB30-1BB4>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2316-8XB30-1BB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2316-8XB30-1BB4>

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

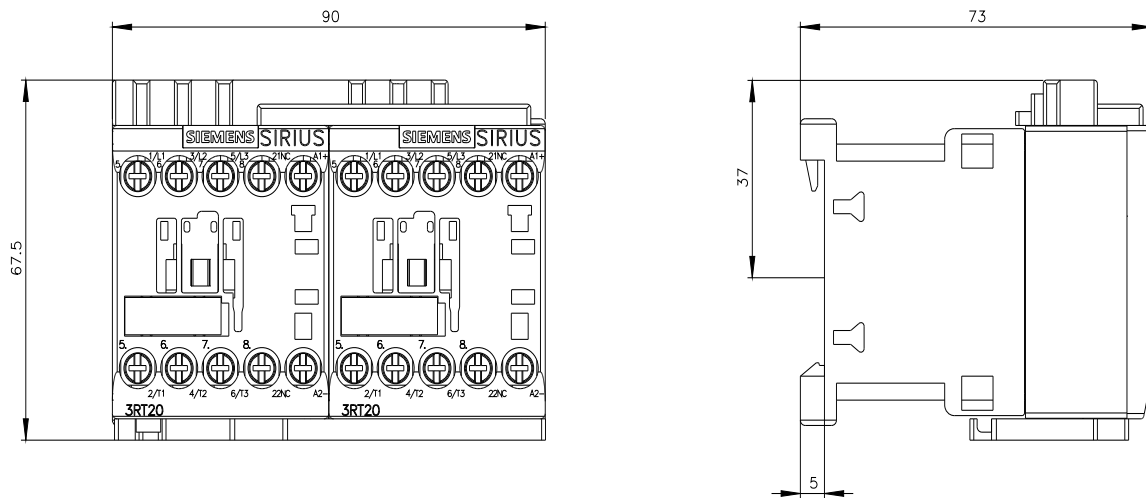
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2316-8XB30-1BB4&lang=en

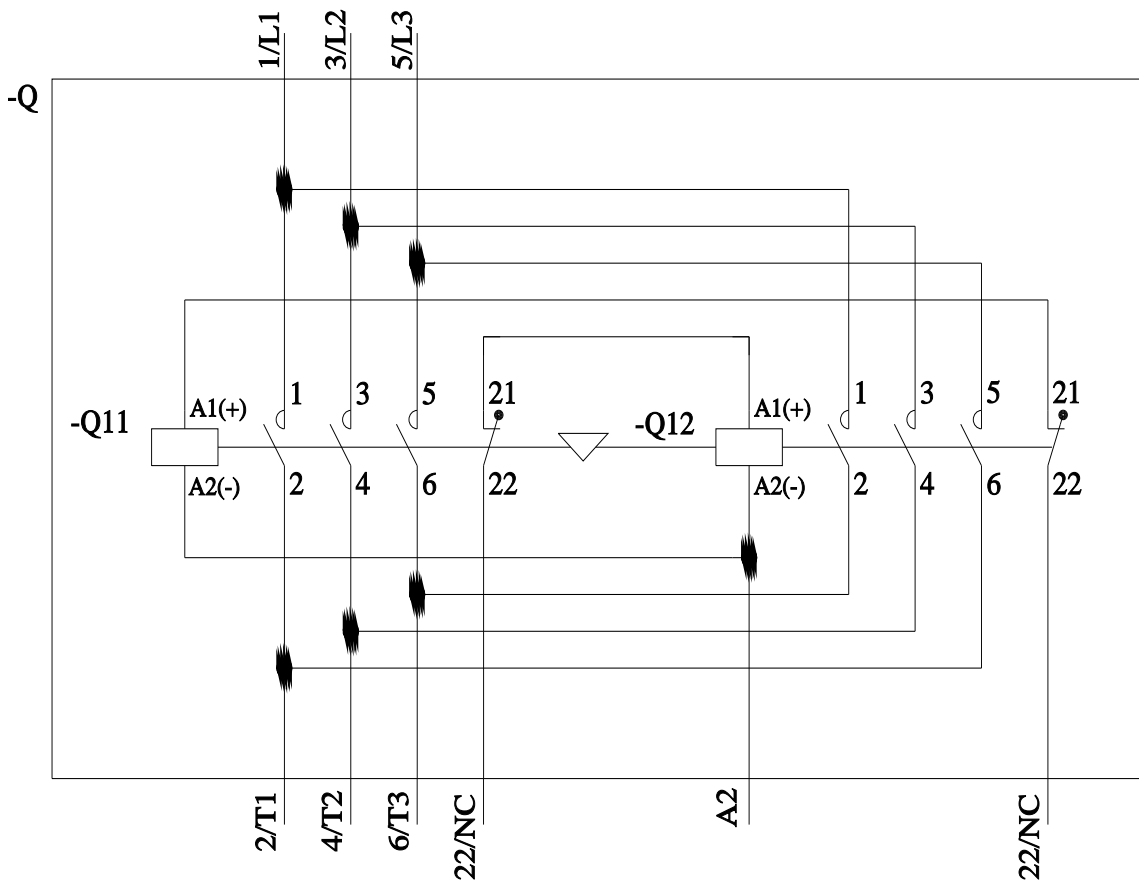
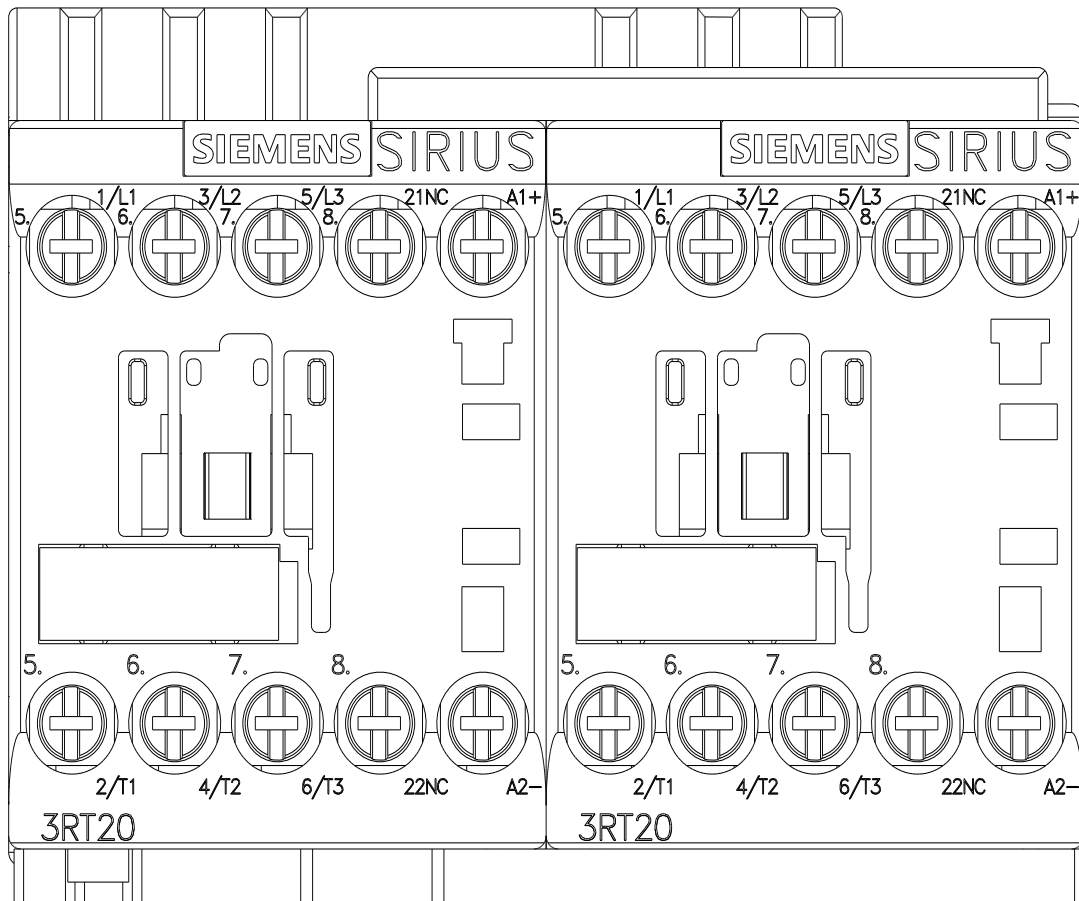
Characteristic: Tripping characteristics, I^t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2316-8XB30-1BB4/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2316-8XB30-1BB4&objecttype=14&gridview=view1>





last modified:

11/21/2022 ↗