

Reversing contactor assembly AC-3,4 kW/400 V,AC230V,50/60 Hz 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 	3RT2016-1TP02-0RA0 3RT2016-1TP02-0RA0 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 	3 000 000 3 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (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 ... +70 °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
operational current at AC-3	
<ul style="list-style-type: none"> • at 400 V rated value • at 500 V rated value • at 690 V rated value 	7.7 A 7.7 A 6.7 A
operating power	
<ul style="list-style-type: none"> • at AC-3 — at 400 V rated value 	4 kW

— at 500 V rated value	4 kW
— at 690 V rated value	4.7 kW
● at AC-4 at 400 V rated value	1.7 kW
operating frequency at AC-3 maximum	642 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage 1 at AC	
● at 50 Hz	218 ... 237 V
● at 60 Hz	218 ... 237 V
operating range factor control supply voltage rated value of magnet coil at AC	
● at 50 Hz	0.95 ... 1.03
design of the surge suppressor	with varistor
apparent pick-up power of magnet coil at AC	
● at 50 Hz	27 VA
apparent holding power of magnet coil at AC	
● at 50 Hz	4.2 VA
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	
● at 480 V rated value	6.5 A
● at 600 V rated value	7.7 A
yielded mechanical performance [hp] for 3-phase AC motor	
● at 200/208 V rated value	1.7 hp
● at 220/230 V rated value	2.5 hp
● at 460/480 V rated value	4.3 hp
● at 575/600 V rated value	6.4 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	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
— with type of assignment 2 required	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 20 A
● for short-circuit protection of the auxiliary switch required	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 standard mounting rail
height	68 mm
width	90 mm
depth	73 mm
required spacing	
● with side-by-side mounting	
— forwards	6 mm
— backwards	0 mm
— upwards	6 mm
— downwards	6 mm
— at the side	0 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 <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — solid — solid or stranded — finely stranded with core end processing • at AWG cables 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"> — solid or stranded — finely stranded with core end processing • at AWG cables 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 according to SN 31920	1 000 000
proportion of dangerous failures <ul style="list-style-type: none"> • 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
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[Confirmation](#)



EG-Konf.

Test Certificates	Marine / Shipping
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[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



LRS

Marine / Shipping	other
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[Confirmation](#)

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=3RA2316-8XB30-1TP3>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2316-8XB30-1TP3>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2316-8XB30-1TP3>

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

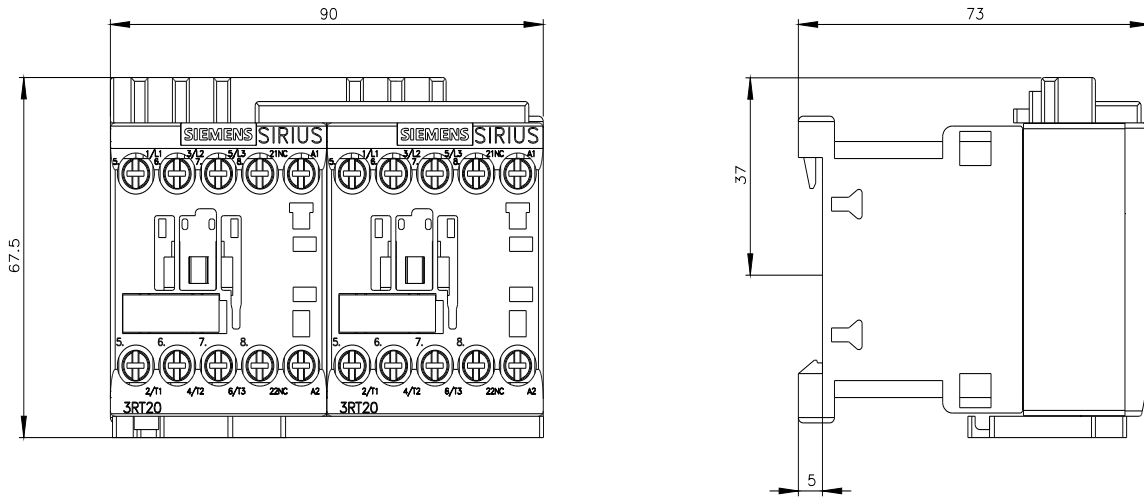
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2316-8XB30-1TP3&lang=en

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2316-8XB30-1TP3/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2316-8XB30-1TP3&objecttype=14&gridview=view1>



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