SIEMENS

Data sheet



reversing contactor assembly, AC-3e/AC-3, 9 A, 4 kW / 400 V, 3-pole, 24 V AC, 50/60 Hz, spring-loaded terminal, electrical and mechanical interlock

product brand name	SIRIUS
product designation	Reversing contactor assembly
product type designation	3RA23
manufacturer's article number	
1 of the supplied contactor	3RT2016-2AB02
2 of the supplied contactor	3RT2016-2AB02
of the supplied RH assembly kit	3RA2913-2AA2
General technical data	
size of contactor	S00
product extension auxiliary switch	Yes
shock resistance at rectangular impulse	
• 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	
• at AC	10,5g / 5 ms, 6,6g / 10 ms
• at DC	10,5g / 5 ms, 6,6g / 10 ms
mechanical service life (operating cycles)	
 of contactor typical 	10 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
Weight	0.583 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
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
at AC-3e rated value maximum	690 V
operational current	
• at AC-3	
— at 400 V rated value	9 A
— at 500 V rated value	7.7 A
— at 690 V rated value	6.7 A
• at AC-3e	

at 400 V rated value	9 A
— at 400 V rated value	7.7 A
— at 500 V rated value	
— at 690 V rated value	6.7 A
operating power	
• at AC-3	4114
— at 400 V rated value	4 kW
— at 500 V rated value	4 kW
— at 690 V rated value	5.5 kW
• at AC-3e	
— at 400 V rated value	4 kW
— at 690 V rated value	5.5 kW
at AC-4 at 400 V rated value	4 kW
operating frequency	
• at AC-3 maximum	750 1/h
at AC-3e maximum	750 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	0.85 1.1
apparent pick-up power of magnet coil at AC	0.00 1.1
• at 50 Hz	27 VA
inductive power factor with closing power of the coil	ZIVA
• at 50 Hz	0.8
apparent holding power of magnet coil at AC	0.0
• at 50 Hz	4.2 VA
inductive power factor with the holding power of the coil	4.2 VA
• at 50 Hz	0.25
	0.20
Auxiliary circuit	
Auxiliary circuit contact reliability of auxiliary contacts	< 1 error per 100 million operating cycles
Auxiliary circuit contact reliability of auxiliary contacts UL/CSA ratings	
Auxiliary circuit contact reliability of auxiliary contacts UL/CSA ratings full-load current (FLA) for 3-phase AC motor	< 1 error per 100 million operating cycles
Auxiliary circuit contact reliability of auxiliary contacts UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value	< 1 error per 100 million operating cycles 7.6 A
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Auxiliary circuit contact reliability of auxiliary contacts UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value	< 1 error per 100 million operating cycles 7.6 A 9 A 2 hp
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Auxiliary circuit contact reliability of auxiliary contacts UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value	< 1 error per 100 million operating cycles 7.6 A 9 A 2 hp 3 hp 5 hp
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Auxiliary circuit contact reliability of auxiliary contacts UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required	7.6 A 9 A 2 hp 3 hp 5 hp 7.5 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
Auxiliary circuit contact reliability of auxiliary contacts UL/CSA ratings full-load current (FLA) for 3-phase AC motor	7.6 A 9 A 2 hp 3 hp 5 hp 7.5 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 20 A
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Auxiliary circuit contact reliability of auxiliary contacts UL/CSA ratings full-load current (FLA) for 3-phase AC motor	7.6 A 9 A 2 hp 3 hp 5 hp 7.5 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 20 A fuse gG: 10 A +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail 84 mm 90 mm
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unuarda	6
— 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	spring-loaded terminals
 for auxiliary and control circuit 	spring-loaded terminals
 at contactor for auxiliary contacts 	Spring-type terminals
of magnet coil	Spring-type terminals
type of connectable conductor cross-sections for main contacts	
• solid	2x (0.5 4 mm²)
 solid or stranded 	2x (0,5 4 mm²)
 finely stranded with core end processing 	2x (0.5 2.5 mm²)
finely stranded without core end processing	2x (0.5 2.5 mm²)
type of connectable conductor cross-sections	
 for auxiliary contacts 	
— solid or stranded	2x (0.5 2.5 mm²)
 finely stranded with core end processing 	2x (0.5 1.5 mm²)
 finely stranded without core end processing 	2x (0.5 1.5 mm²)
 for AWG cables for auxiliary contacts 	2x (20 14)
Safety related data	
product function suitable for safety function	Yes
Electrical Safety	
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
Approvals Certificates	
General Product Approval	







Confirmation





Test Certificates

Marine / Shipping

Special Test Certificate

Type Test Certificates/Test Report









Marine / Shipping other Railway Environment







Further information

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3RA2316-8XB30-2AB0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2316-8XB30-2AB0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2316-8XB30-2AB0

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

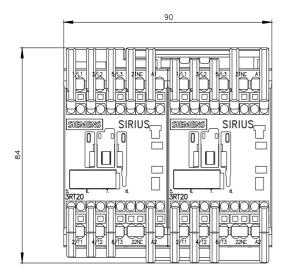
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2316-8XB30-2AB0&lang=en

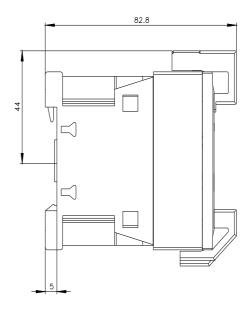
Characteristic: Tripping characteristics, I2t, Let-through current

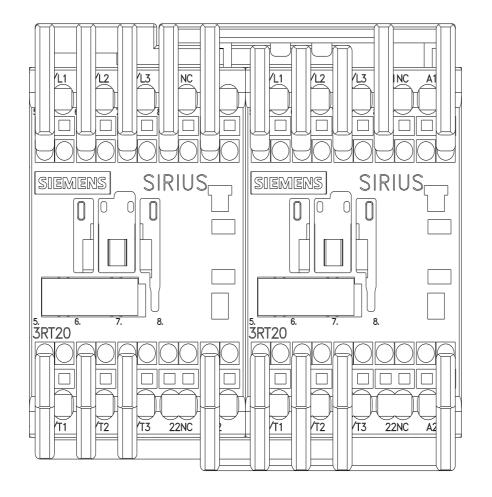
https://support.industry.siemens.com/cs/ww/en/ps/3RA2316-8XB30-2AB0/char

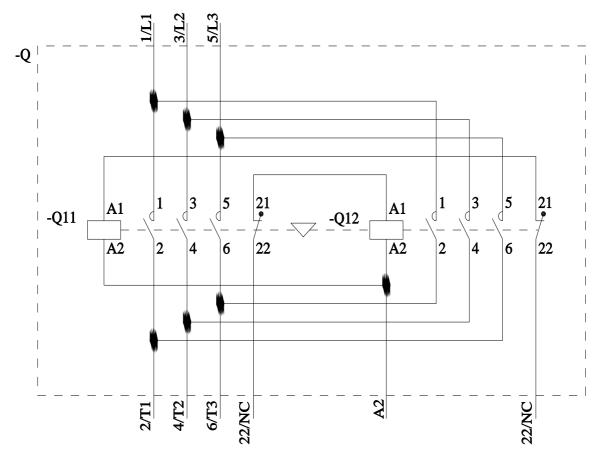
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2316-8XB30-2AB0&objecttype=14&gridview=view1









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