Data sheet

reversing contactor assembly, AC-3e/AC-3, 9 A, 4 kW / 400 V, 3-pole, 220 V AC, 50 Hz / 240 V, 60 Hz, screw 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	3RT2016-1AP62	
2 of the supplied contactor	3RT2016-1AP62	
 of the supplied RH assembly kit 	3RA2913-2AA1	
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	
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 500 V rated value	7.7 A
— at 690 V rated value	6.7 A
operating power	
• at AC-3	
— 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	220 V
at 60 Hz rated value	240 V
operating range factor control supply voltage rated value of	
magnet coil at AC	00.44
• at 50 Hz	0.8 1.1
• at 60 Hz	0.85 1.1
apparent pick-up power of magnet coil at AC	07.1/4
• at 50 Hz	27 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.8
apparent holding power of magnet coil at AC	4074
• at 50 Hz	4.2 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.25
Auxiliary circuit	100 30 1
contact reliability of auxiliary contacts UL/CSA ratings	< 1 error per 100 million operating cycles
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	7.6. A
full-load current (FLA) for 3-phase AC motor • at 480 V rated value	7.6 A
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value	7.6 A 9 A
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	9 A
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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	9 A 2 hp 3 hp
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	9 A 2 hp 3 hp 5 hp
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	9 A 2 hp 3 hp 5 hp 7.5 hp
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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	9 A 2 hp 3 hp 5 hp 7.5 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
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— downwards	6 mm
— at the side	6 mm
• for grounded parts	O THIN
— forwards	6 mm
— backwards	0 mm
— upwards	6 mm
— at the side	6 mm
— downwards	6 mm
for live parts	Othin
— forwards	6 mm
— backwards	0 mm
— upwards	6 mm
— downwards	6 mm
— at the side	6 mm
Connections/ Terminals	Offiliti
type of electrical connection	
for main current circuit	screw-type terminals
for auxiliary and control circuit	**
at contactor for auxiliary contacts	screw-type terminals Screw-type terminals
of magnet coil	Screw-type terminals Screw-type terminals
type of connectable conductor cross-sections for main contacts	Sciew-type terminals
• solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
solid solid or stranded	2x (0.5 1,5 mm²), 2x (0.75 2,5 mm²), 2x (0,5 4 mm²)
finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
type of connectable conductor cross-sections	2x (0.0 1.0 mm), 2x (0.70 2.0 mm)
• for auxiliary contacts	
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
for AWG cables for auxiliary contacts	2x (20 16), 2x (18 14)
Safety related data	ZA (20 10), ZA (10 14)
B10 value with high demand rate according to SN 31920	1 000 000
proportion of dangerous failures	1 000 000
with low demand rate according to SN 31920	40 %
with high demand rate according to SN 31920	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	20 a
61508	ID00
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529 Communication/ Protocol	finger-safe, for vertical contact from the front
	Vee
product function bus communication	Yes
protocol is supported AS-Interface protocol	No No
product function control circuit interface with IO link Certificates/ approvals	INU
	Profes (C. 10.1)
General Product Approval	Declaration of Conformity

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Confirmation









Test Certificates

Marine / Shipping

Type Test Certificates/Test Report

Special Test Certificate









Marine / Shipping other Railway







Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3RA2316-8XB30-1AP6

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2316-8XB30-1AP6

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2316-8XB30-1AP6

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

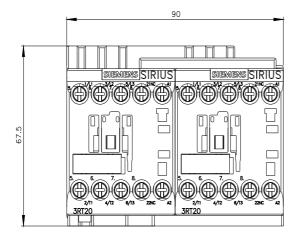
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2316-8XB30-1AP6&lang=en

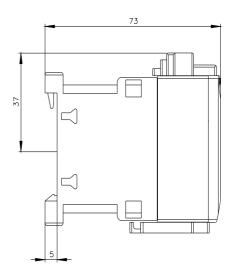
Characteristic: Tripping characteristics, I2t, Let-through current

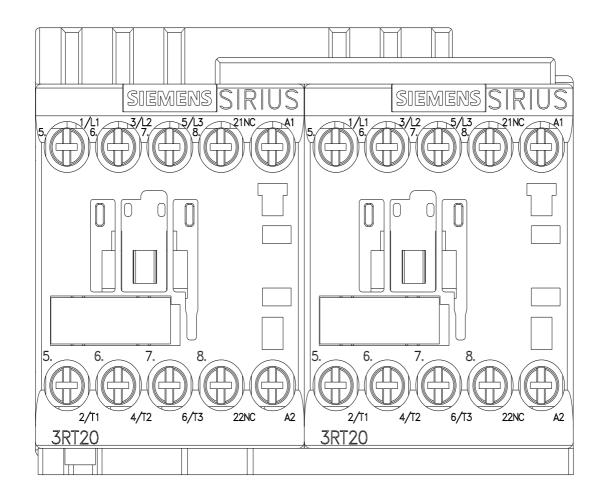
https://support.industry.siemens.com/cs/ww/en/ps/3RA2316-8XB30-1AP6/char

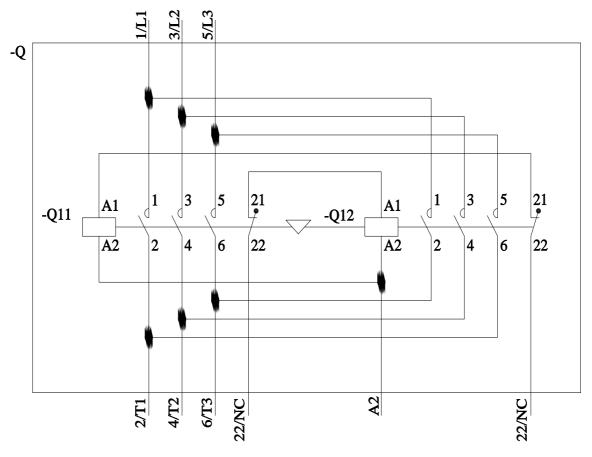
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2316-8XB30-1AP6&objecttype=14&gridview=view1









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