SIEMENS

Data sheet



reversing contactor assembly, AC-3e/AC-3, 9 A, 4 kW / 400 V, 3-pole, 230 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 	3RT2016-2AP02
 2 of the supplied contactor 	3RT2016-2AP02
 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
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 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	230 V
• at 60 Hz rated value	230 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	
● 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	
● at 50 Hz	4.2 VA
inductive power factor with the holding power of the coil	
1.50.11	0.05
• at 50 Hz	0.25
• at 50 Hz Auxiliary circuit	0.25
	< 1 error per 100 million operating cycles
Auxiliary circuit	
Auxiliary circuit contact reliability of auxiliary contacts	
Auxiliary circuit contact reliability of auxiliary contacts UL/CSA ratings	
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— downwards	6 mm
— at the side	6 mm
for grounded parts	O IIIIII
— forwards	6 mm
— backwards	0 mm
— upwards	6 mm
— at the side	6 mm
— downwards	6 mm
• for live parts	6 mm
— forwards — backwards	6 mm 0 mm
— packwards — upwards	6 mm
— upwarus — downwards	6 mm
— at the side	
Connections/ Terminals	6 mm
type of electrical connection	
for main current circuit	anting loaded terminals
	spring-loaded terminals
for auxiliary and control circuit	spring-loaded terminals
at contactor for auxiliary contacts	Spring-type terminals
of magnet coil type of connectable conductor cross sections for main contacts.	Spring-type terminals
type of connectable conductor cross-sections for main contacts • solid	2v (0.5 4 mm²)
solid solid or stranded	2x (0.5 4 mm²)
	$2x (0.5 4 mm^2)$
finely stranded without core and processing finely stranded without core and processing	2x (0.5 2.5 mm²)
finely stranded without core end processing type of connectable conductor cross-sections	2x (0.5 2.5 mm²)
• 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 with core end processing — finely stranded without core end processing	2x (0.5 1.5 mm²)
for AWG cables for auxiliary contacts	2x (20 14)
Safety related data	ZA (20 17)
-	1 000 000
B10 value with high demand rate according to SN 31920 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	200
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

Type Test Certificates/Test Report

Special Test Certificate









Marine / Shipping other Railway







Confirmation

Vibration and Shock

Further information

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

https://press.siemens.com/qlobal/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=3RA2316-8XB30-2AP0

Cax online generator

 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RA2316-8XB30-2APOlicy for the action of the act$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2316-8XB30-2AP0

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

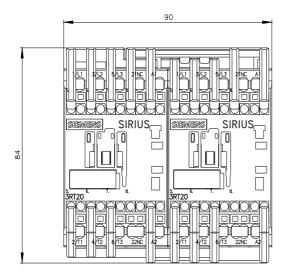
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2316-8XB30-2AP0&lang=en

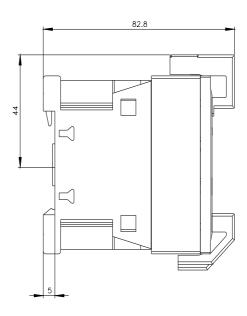
Characteristic: Tripping characteristics, I2t, Let-through current

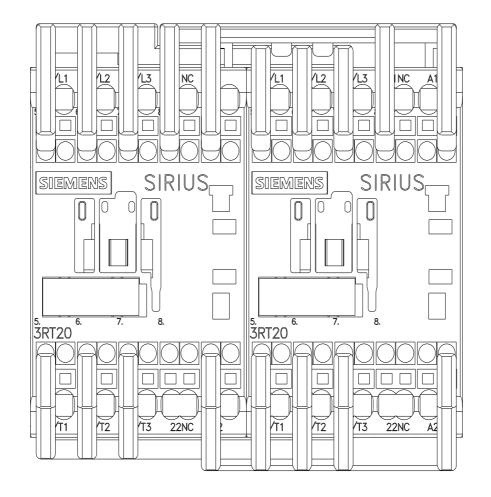
https://support.industry.siemens.com/cs/ww/en/ps/3RA2316-8XB30-2AP0/char

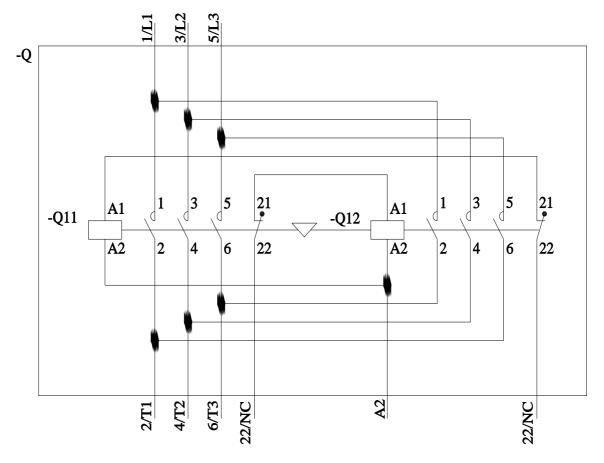
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2316-8XB30-2AP0&objecttype=14&gridview=view1









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