SIEMENS

Data sheet



reversing contactor assembly, AC-3e/AC-3, 16 A, 7.5 kW / 400 V, 3-pole, 110 V AC, 50 Hz / 120 V, 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 	3RT2018-2AK62
 2 of the supplied contactor 	3RT2018-2AK62
 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	7,3g / 5 ms, 4,7g / 10 ms
• at DC	7.3g / 5 ms, 4.7g / 10 ms
shock resistance with sine pulse	
• at AC	11,4g / 5 ms, 7,3g / 10 ms
• at DC	11,4g / 5 ms, 7,3g / 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
	10/01/2009
Substance Prohibitance (Date)	10/01/2009 2 000 m
Substance Prohibitance (Date) Ambient conditions	
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum	
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature	2 000 m
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation	2 000 m -25 +60 °C
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage	2 000 m -25 +60 °C
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage Main circuit	2 000 m -25 +60 °C -55 +80 °C
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage Main circuit number of poles for main current circuit	2 000 m -25 +60 °C -55 +80 °C
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage Main circuit number of poles for main current circuit number of NO contacts for main contacts	2 000 m -25 +60 °C -55 +80 °C
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage Main circuit number of poles for main current circuit number of NO contacts for main contacts number of NC contacts for main contacts	2 000 m -25 +60 °C -55 +80 °C
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage Main circuit number of poles for main current circuit number of NO contacts for main contacts number of NC contacts for main contacts operating voltage	2 000 m -25 +60 °C -55 +80 °C
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage Main circuit number of poles for main current circuit number of NO contacts for main contacts number of NC contacts for main contacts operating voltage • at AC-3 rated value maximum	2 000 m -25 +60 °C -55 +80 °C 3 3 0
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage Main circuit number of poles for main current circuit number of NO contacts for main contacts number of NC contacts for main contacts operating voltage • at AC-3 rated value maximum • at AC-3e rated value maximum	2 000 m -25 +60 °C -55 +80 °C 3 3 0
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage Main circuit number of poles for main current circuit number of NO contacts for main contacts number of NC contacts for main contacts operating voltage • at AC-3 rated value maximum • at AC-3e rated value maximum operational current	2 000 m -25 +60 °C -55 +80 °C 3 3 0
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage Main circuit number of poles for main current circuit number of NO contacts for main contacts number of NC contacts for main contacts operating voltage • at AC-3 rated value maximum • at AC-3e rated value maximum operational current • at AC-3	2 000 m -25 +60 °C -55 +80 °C 3 3 0 690 V 690 V
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage Main circuit number of poles for main current circuit number of NO contacts for main contacts number of NC contacts for main contacts operating voltage • at AC-3 rated value maximum • at AC-3e rated value maximum operational current • at AC-3 — at 400 V rated value	2 000 m -25 +60 °C -55 +80 °C 3 3 0 690 V 690 V
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage Main circuit number of poles for main current circuit number of NO contacts for main contacts number of NC contacts for main contacts operating voltage • at AC-3 rated value maximum • at AC-3e rated value maximum operational current • at AC-3 — at 400 V rated value — at 500 V rated value	2 000 m -25 +60 °C -55 +80 °C 3 3 0 690 V 690 V 16 A 12.4 A

— at 500 V rated value	12.4 A
— at 690 V rated value	8.9 A
operating power	
• at AC-3	
— at 400 V rated value	7.5 kW
— at 500 V rated value	7.5 kW
— at 690 V rated value	7.5 kW
• at AC-3e	
— at 400 V rated value	7.5 kW
— at 690 V rated value	7.5 kW
• at AC-4 at 400 V rated value	5.5 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	110 V
at 60 Hz rated value	120 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	37 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	5.7 VA
inductive power factor with the holding power of the coil	
	0.00
● at 50 Hz	0.28
at 50 Hz Auxiliary circuit	0.28
1111	< 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	
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 14 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	< 1 error per 100 million operating cycles 14 A 11 A
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 14 A 11 A 3 hp
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	< 1 error per 100 million operating cycles 14 A 11 A 3 hp 5 hp
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 14 A 11 A 3 hp 5 hp 10 hp
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	< 1 error per 100 million operating cycles 14 A 11 A 3 hp 5 hp 10 hp 10 hp
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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 14 A 11 A 3 hp 5 hp 10 hp 10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 50 A
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 14 A 11 A 3 hp 5 hp 10 hp 10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 50 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 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		
— 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)	
at AWG cables for auxiliary contacts	2x (20 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 	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 61508	20 a	
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		
Conoral Broduct Approval	Declaration of Conformity	



Declaration of Conformity



Confirmation









Test Certificates

Marine / Shipping

Special Test Certificate

Type Test Certificates/Test Report









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=3RA2318-8XB30-2AK6

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RA2318-8XB30-2AK6}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2318-8XB30-2AK6

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

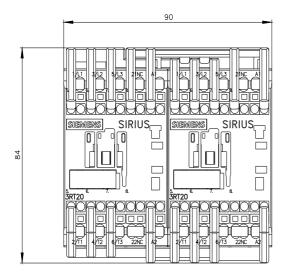
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2318-8XB30-2AK6&lang=en

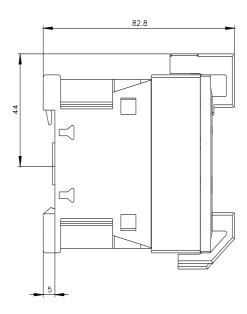
Characteristic: Tripping characteristics, I2t, Let-through current

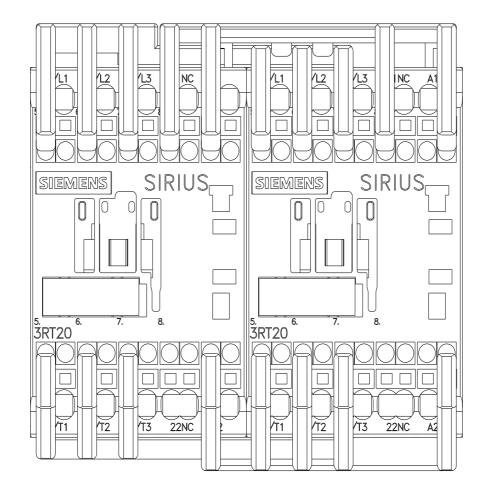
https://support.industry.siemens.com/cs/ww/en/ps/3RA2318-8XB30-2AK6/char

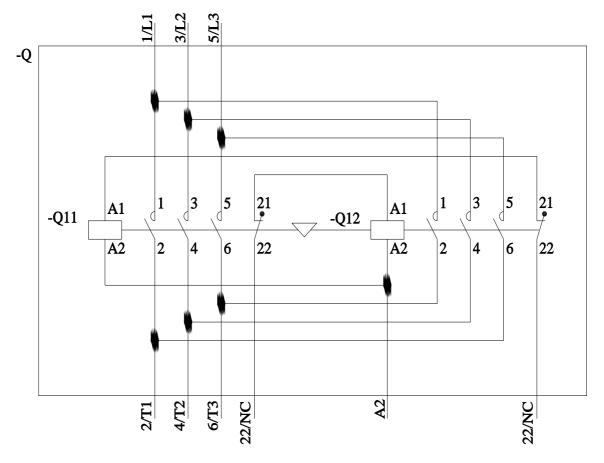
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2318-8XB30-2AK6&objecttype=14&gridview=view1









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