3RA2324-8XB30-2AL2

Data sheet



reversing contactor assembly, AC-3e/AC-3, 12 A, 5.5 kW / 400 V, 3-pole, 230 V AC, 50/60 Hz, spring-loaded terminal, electrical and mechanical interlock, auxiliary contacts: 2 x 1 NO

product brand name	SIRIUS
product designation	Reversing contactor assembly
product type designation	3RA23
manufacturer's article number	
• 1 of the supplied contactor	3RT2024-2AL20
• 2 of the supplied contactor	3RT2024-2AL20
 of the supplied RH assembly kit 	3RA2923-2AA2
General technical data	
size of contactor	S0
product extension auxiliary switch	Yes
shock resistance at rectangular impulse	
• at AC	7,5g / 5 ms, 4,7g / 10 ms
• at DC	10g / 5 ms, 7,5g / 10 ms
shock resistance with sine pulse	
• at AC	11,8g / 5 ms, 7,4g / 10 ms
• at DC	15g / 5 ms, 10g / 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
Substance Prohibitance (Date) Ambient conditions	10/01/2009
	10/01/2009 2 000 m
Ambient conditions	
Ambient conditions installation altitude at height above sea level maximum	
Ambient conditions installation altitude at height above sea level maximum ambient temperature	2 000 m
Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation	2 000 m -25 +60 °C
Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage	2 000 m -25 +60 °C
Ambient conditions installation altitude at height above sea level maximum ambient temperature	2 000 m -25 +60 °C -55 +80 °C
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
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
Ambient conditions installation altitude at height above sea level maximum ambient temperature	2 000 m -25 +60 °C -55 +80 °C
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 3 3 0
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
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
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
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 NC 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
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
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 12 A 12 A

— at 500 V rated value	12 A
— at 690 V rated value	9 A
operating power	
• at AC-3	
— at 400 V rated value	5.5 kW
— at 500 V rated value	5.5 kW
— at 690 V rated value	7.5 kW
• at AC-3e	7.0 KVV
— at 400 V rated value	5.5 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	1 000 1/h
at AC-3e maximum	1 000 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	0.8 1.1
apparent pick-up power of magnet coil at AC	
• at 50 Hz	65 VA
inductive power factor with closing power of the coil	
	0.00
• at 50 Hz	0.82
apparent holding power of magnet coil at AC	0.714
● at 50 Hz	8.5 VA
inductive power factor with the holding power of the coil	
● at 50 Hz	0.25
Auxiliary circuit	
number of NO contacts for auxiliary contacts	
 per direction of rotation 	1
 instantaneous contact 	2
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	11 A
• at 600 V rated value	11 A
yielded mechanical performance [hp] for 3-phase AC motor	
	2 ha
at 220/230 V rated value	3 hp
-t 400/400 \/t \	7.5 h
• at 460/480 V rated value	7.5 hp
• at 575/600 V rated value	10 hp
	·
• at 575/600 V rated value	10 hp
at 575/600 V rated value contact rating of auxiliary contacts according to UL	10 hp
at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection	10 hp
at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link	10 hp
at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link	10 hp A600 / Q600
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 — with type of assignment 2 required	10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 63 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 A
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 — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required	10 hp A600 / Q600 gg NH 3NA, DIAZED 5SB, NEOZED 5SE: 63 A
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 — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions	10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 63 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 A fuse gG: 10 A
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 — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required	10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 63 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 A
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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 — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method	10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 63 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 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
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 — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height	10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 63 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 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 114 mm
at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link	10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 63 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 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 114 mm 90 mm
at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link of or short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required of or short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth	10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 63 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 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 114 mm
at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link o for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required o for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing	10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 63 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 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 114 mm 90 mm
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General Product Approval	Declaration of Conformity	Test Certificates
Sertificates/ approvals		
product function control circuit interface with IO link	No	
protocol is supported AS-Interface protocol	No	
product function bus communication	Yes	
ommunication/ Protocol		
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front	
61508 protection class IP on the front according to IEC 60529	IP20	
T1 value for proof test interval or service life according to IEC	20 a	
failure rate [FIT] with low demand rate according to SN 31920	100 FIT	
with high demand rate according to SN 31920	75 %	
with low demand rate according to SN 31920	40 %	
proportion of dangerous failures		
B10 value with high demand rate according to SN 31920	1 000 000	
afety related data		
for AWG cables for auxiliary contacts	2x (20 14)	
— finely stranded with core end processing — finely stranded without core end processing	2x (0.5 1.5 mm²)	
solid or stranded finely stranded with core end processing	2x (0.5 2.5 mm²) 2x (0.5 1.5 mm²)	
for auxiliary contacts colid or stranded.	2v (0.5 2.5 mm²)	
type of connectable conductor cross-sections		
• finely stranded without core end processing	2x (1 6 mm²)	
finely stranded with core end processing finely stranded without core and processing	2x (1 6 mm²)	
solid or stranded finely stranded with some and processing.	2x (1 10 mm²)	
• solid	2x (1 10 mm²)	
ype of connectable conductor cross-sections for main contacts	24 (4 40 mags2)	
of magnet coil	Spring-type terminals	
at contactor for auxiliary contacts	Spring-type terminals	
for auxiliary and control circuit	spring-loaded terminals	
for main current circuit	spring-loaded terminals	
type of electrical connection		
onnections/ Terminals		
— at the side	6 mm	
— downwards	6 mm	
— upwards	6 mm	
— backwards	0 mm	
— forwards	6 mm	
• for live parts		
— downwards	6 mm	
— at the side	6 mm	
— upwards	6 mm	
— backwards	0 mm	
— forwards	6 mm	
for grounded parts		
— at the side	6 mm	
— downwards	6 mm	
— packwards — upwards	6 mm	
— backwards	0 mm	









Marine / Shipping













Marine / Shipping

other

Railway



Confirmation Vibration and Shock

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=3RA2324-8XB30-2AL2

Cax online generator

 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RA2324-8XB30-2AL2}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2324-8XB30-2AL2

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

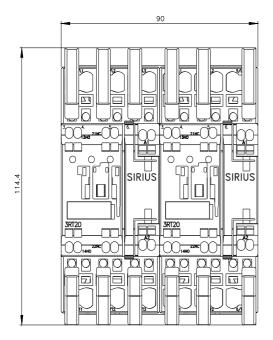
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2324-8XB30-2AL2&lang=en

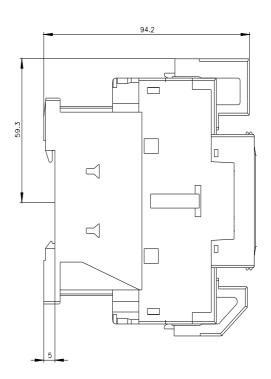
Characteristic: Tripping characteristics, I2t, Let-through current

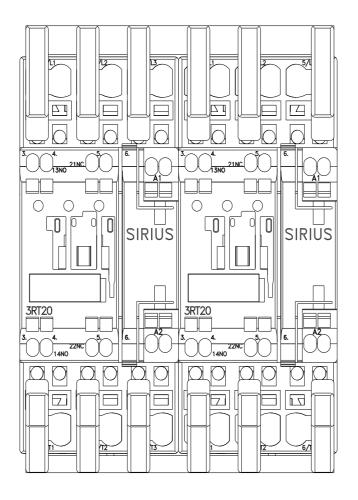
https://support.industry.siemens.com/cs/ww/en/ps/3RA2324-8XB30-2AL2/char

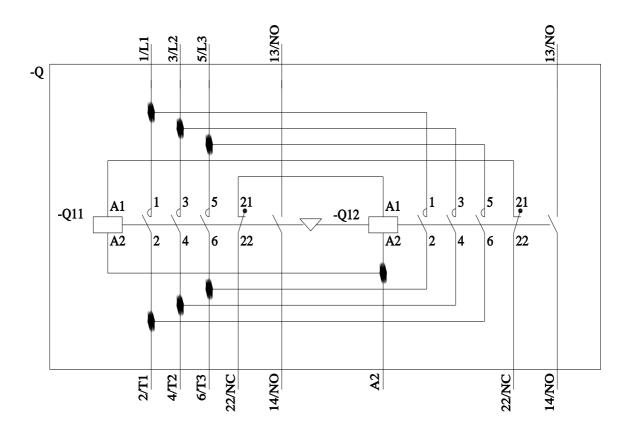
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2324-8XB30-2AL2&objecttype=14&gridview=view1









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