3RA2324-8XB30-1AL2

Data sheet



reversing contactor assembly, AC-3e/AC-3, 12 A, 5.5 kW / 400 V, 3-pole, 230 V AC, 50/60 Hz, screw 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 	3RT2024-1AL20
 2 of the supplied contactor 	3RT2024-1AL20
 of the supplied RH assembly kit 	3RA2923-2AA1
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	
— at 400 V rated value	5.5 kW
	7.5 kW
— at 690 V rated value	
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	55 77
• at 50 Hz	0.82
	0.02
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	
at 220/230 V rated value	3 hp
	·
• at 460/480 V rated value	7.5 hp
at 575/600 V rated value	10 hp
contact rating of auxiliary contacts according to UL	A600 / Q600
Short-circuit protection	
design of the fuse link	
 for short-circuit protection of the main circuit 	
 — with type of coordination 1 required 	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 63 A
 — with type of assignment 2 required 	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 A
• for short-circuit protection of the auxiliary switch required	fuse gG: 10 A
Installation/ mounting/ dimensions	
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
fastening method	screw and snap-on mounting onto 35 mm DIN rail
height	101 mm
width	90 mm
depth	97 mm
required spacing	
required spacing ■ with side-by-side mounting — forwards	6 mm

— backwards	0 mm
— 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	screw-type terminals
 for auxiliary and control circuit 	screw-type terminals
 at contactor for auxiliary contacts 	Screw-type terminals
of magnet coil	Screw-type terminals
type of connectable conductor cross-sections for main contacts	
• solid	2x (1 2.5 mm²), 2x (2.5 10 mm²)
 solid or stranded 	2x (1 2.5 mm²), 2x (2.5 10 mm²)
 finely stranded with core end processing 	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
type of connectable conductor cross-sections	
 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	
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	
General Product Approval	Declaration of Conformity Test Certificates

General Product Approval

Declaration of Conformity

Test Certificates

Confirmation









Special Test Certificate

Marine / Shipping















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=3RA2324-8XB30-1AL2

Cax online generator

 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RA2324-8XB30-1AL2}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2324-8XB30-1AL2

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

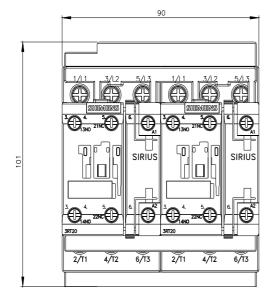
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2324-8XB30-1AL2&lang=en

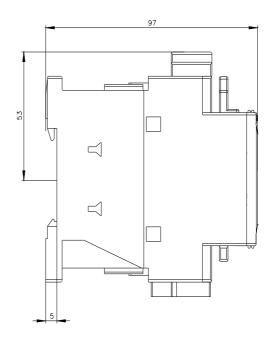
Characteristic: Tripping characteristics, I2t, Let-through current

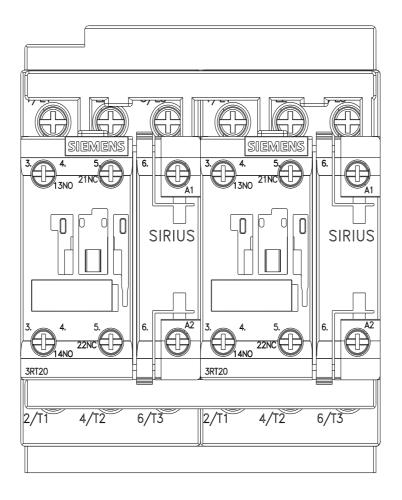
https://support.industry.siemens.com/cs/ww/en/ps/3RA2324-8XB30-1AL2/char

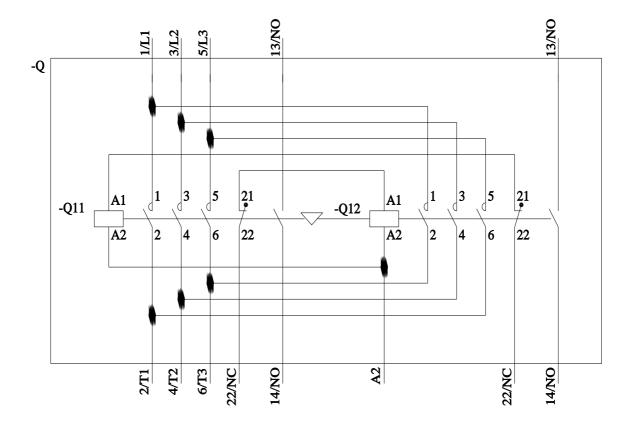
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2324-8XB30-1AL2&objecttype=14&gridview=view1









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