SIEMENS

Data sheet

3RA2318-8XB30-1BB4

reversing contactor assembly, AC-3e/AC-3, 16 A, 7.5 kW / 400 V, 3-pole, 24 V DC, 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 	<u>3RT2018-1BB42</u>
 2 of the supplied contactor 	<u>3RT2018-1BB42</u>
 of the supplied RH assembly kit 	<u>3RA2913-2AA1</u>
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
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	16 A
— at 500 V rated value	12.4 A
— at 690 V rated value	8.9 A
• at AC-3e	
— at 400 V rated value	16 A

	10.4.4
— at 500 V rated value	12.4 A
— at 690 V rated value	8.9 A
operating power • at AC-3	
• 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	7.5 KVV
— at 400 V rated value — at 690 V rated value	7.5 kW
	7.5 kW
at AC-4 at 400 V rated value	5.5 kW
operating frequency	750.4/h
 at AC-3 maximum at AC-3e maximum 	750 1/h 750 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	DC
control supply voltage 1	24.)/
at DC rated value	24 V 4 W
_closing power of magnet coil at DC holding power of magnet coil at DC	4 W
	+ vv
Auxiliary circuit	< 1 arrar per 100 million aparating avalage
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	14 A
at 600 V rated value	11 A
yielded mechanical performance [hp] for 3-phase AC motor	
at 200/208 V rated value	2 hn
• at 220/200 V rated value	3 hp
 at 460/480 V rated value 	5 hp
• at 575/600 V rated value	10 hp
contact rating of auxiliary contacts according to UL	A600 / Q600
Short-circuit protection	A0007 Q000
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: 50 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
fastening method height	
	screw and snap-on mounting onto 35 mm DIN rail
height	screw and snap-on mounting onto 35 mm DIN rail 68 mm
height	screw and snap-on mounting onto 35 mm DIN rail 68 mm 90 mm
height width depth	screw and snap-on mounting onto 35 mm DIN rail 68 mm 90 mm
height width depth required spacing	screw and snap-on mounting onto 35 mm DIN rail 68 mm 90 mm
height width depth required spacing • with side-by-side mounting	screw and snap-on mounting onto 35 mm DIN rail 68 mm 90 mm 73 mm
height width depth required spacing • with side-by-side mounting — forwards	screw and snap-on mounting onto 35 mm DIN rail 68 mm 90 mm 73 mm 6 mm
height width depth required spacing • with side-by-side mounting — forwards — backwards	screw and snap-on mounting onto 35 mm DIN rail 68 mm 90 mm 73 mm 6 mm 0 mm
height width depth required spacing • with side-by-side mounting — forwards — backwards — upwards	screw and snap-on mounting onto 35 mm DIN rail 68 mm 90 mm 73 mm 6 mm 0 mm 6 mm
height width depth required spacing • with side-by-side mounting — forwards — backwards — upwards — downwards	screw and snap-on mounting onto 35 mm DIN rail 68 mm 90 mm 73 mm 6 mm 0 mm 6 mm 6 mm 6 mm
height width depth required spacing • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side	screw and snap-on mounting onto 35 mm DIN rail 68 mm 90 mm 73 mm 6 mm 0 mm 6 mm 6 mm 6 mm
height width depth required spacing • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side • for grounded parts	screw and snap-on mounting onto 35 mm DIN rail 68 mm 90 mm 73 mm 6 mm 6 mm 6 mm 6 mm 6 mm
height width depth required spacing • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side • for grounded parts — forwards	screw and snap-on mounting onto 35 mm DIN rail 68 mm 90 mm 73 mm 6 mm 6 mm 6 mm 6 mm 6 mm
height width depth required spacing • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side • for grounded parts — backwards — backwards	screw and snap-on mounting onto 35 mm DIN rail 68 mm 90 mm 73 mm 6 mm 6 mm 6 mm 6 mm 6 mm 6 mm 6 mm
height width depth required spacing • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side • for grounded parts — backwards — upwards — upwards	screw and snap-on mounting onto 35 mm DIN rail 68 mm 90 mm 73 mm 6 mm 6 mm 6 mm 6 mm 6 mm 6 mm 6 mm
height width depth required spacing • with side-by-side mounting — forwards — backwards — upwards — at the side • for grounded parts — forwards — upwards — at the side — forwards — at the side — forwards — at the side — forwards — upwards — upwards — upwards — at the side	screw and snap-on mounting onto 35 mm DIN rail 68 mm 90 mm 73 mm 6 mm 0 mm 6 mm 6 mm 6 mm 6 mm 6 mm 6
height width depth required spacing • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side • for grounded parts — forwards — backwards — at the side — backwards — upwards — backwards — upwards — downwards	screw and snap-on mounting onto 35 mm DIN rail 68 mm 90 mm 73 mm 6 mm 0 mm 6 mm 6 mm 6 mm 6 mm 6 mm 6

	•
— 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 (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
 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	
 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
Confirmation UL CSA Marine / Shipp	ERE US CE EG-Konf.
Type Test Certific- ates/Test Report Special Test Certific- ate ABS	BUREAU VERITAS
Marine / Shipping	other Railway Dangerous Good
PRS RINA RINA	Confirmation Vibration and Shock Transport Information
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=3RA2318-8XB30-1BB4

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2318-8XB30-1BB4

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RA2318-8XB30-1BB4

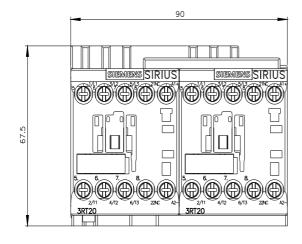
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

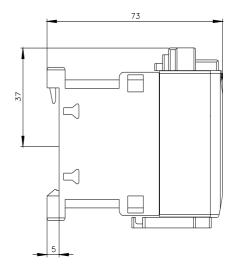
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2318-8XB30-1BB4&lang=en

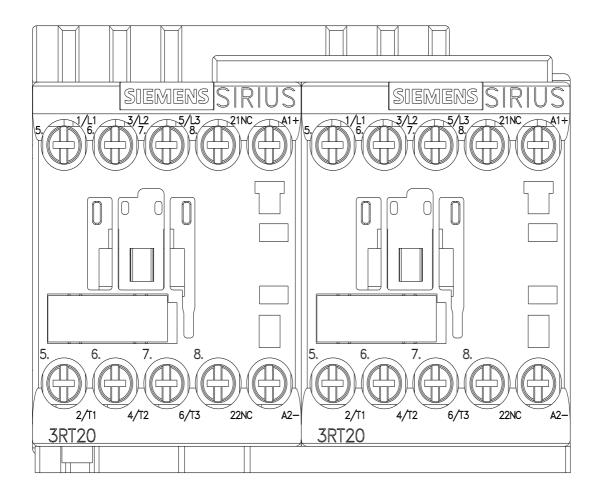
Characteristic: Tripping characteristics, I²t, Let-through current

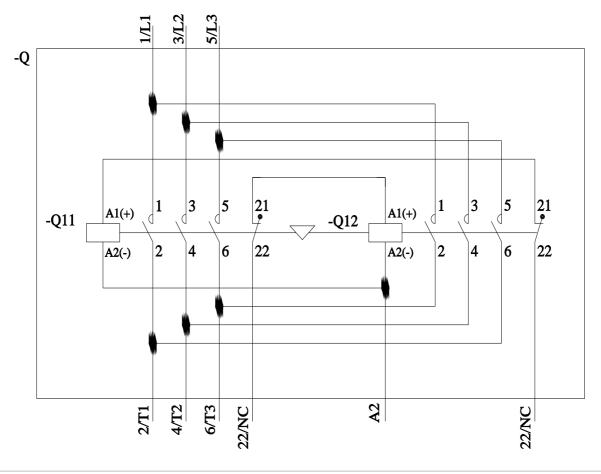
https://support.industry.siemens.com/cs/ww/en/ps/3RA2318-8XB30-1BB4/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2318-8XB30-1BB4&objecttype=14&gridview=view1









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