SIEMENS

Data sheet

3RA2345-8XB30-1NB3



reversing contactor assembly, AC-3e/AC-3, 80 A, 37 kW / 400 V, 3-pole, 20-33 V AC/DC, 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 	3RT2045-1NB30
 2 of the supplied contactor 	3RT2045-1NB30
 of the supplied RS assembly kit 	3RA2943-2AA1
General technical data	
size of contactor	S3
product extension auxiliary switch	Yes
shock resistance at rectangular impulse	
• at AC	6.7 g / 5 ms, 4.0 g / 10 ms
• at DC	6.7 g / 5 ms, 4g / 10 ms
shock resistance with sine pulse	
• at AC	10.6 g / 5 ms, 6.3 g / 10 ms
• at DC	10.6 g / 5 ms, 6.3 g / 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)	03/01/2017
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 	1 000 V
at AC-3e rated value maximum	1 000 V
operational current	
• at AC-3	
— at 400 V rated value	80 A
— at 500 V rated value	80 A
— at 690 V rated value	58 A
• at AC-3e	
— at 400 V rated value	80 A

— at 500 V rated value	80 A
— at 690 V rated value	58 A
operating power	
• at AC-3	
— at 400 V rated value	37 kW
— at 500 V rated value	45 kW
— at 690 V rated value	55 kW
• at AC-3e	
— at 400 V rated value	37 kW
— at 690 V rated value	55 kW
at AC-4 at 400 V rated value	37 kW
operating frequency	
• at AC-3 maximum	1 000 1/h
at AC-3e maximum	1 000 1/h
Control circuit/ Control	1 000 1/11
	ACIDO
type of voltage of the control supply voltage	AC/DC
control supply voltage 1 at AC	20 2014
• at 50 Hz	20 33 V
• at 60 Hz	20 33 V
control supply voltage 1	
• at DC	20 33 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
design of the surge suppressor	with varistor
apparent pick-up power of magnet coil at AC	
● at 50 Hz	163 VA
• at 60 Hz	163 VA
apparent holding power of magnet coil at AC	
• at 50 Hz	3.1 VA
● at 60 Hz	3.1 VA
closing power of magnet coil at DC	76 W
olooning portor or magnet con at bo	
holding power of magnet coil at DC	1.8 W
	1.8 W
holding power of magnet coil at DC	1.8 W
holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts	1.8 W
holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts • per direction of rotation	
holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts • per direction of rotation number of NO contacts for auxiliary contacts	0
holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts • per direction of rotation	
holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts • per direction of rotation number of NO contacts for auxiliary contacts • per direction of rotation • instantaneous contact	0
holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts • per direction of rotation number of NO contacts for auxiliary contacts • per direction of rotation • instantaneous contact UL/CSA ratings	0
holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts • per direction of rotation number of NO contacts for auxiliary contacts • per direction of rotation • instantaneous contact UL/CSA ratings full-load current (FLA) for 3-phase AC motor	0 1 2
holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts • per direction of rotation number of NO contacts for auxiliary contacts • per direction of rotation • instantaneous contact UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value	0 1 2
holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts • per direction of rotation number of NO contacts for auxiliary contacts • per direction of rotation • instantaneous contact UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value	0 1 2
holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts • per direction of rotation number of NO contacts for auxiliary contacts • per direction of rotation • instantaneous contact 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	0 1 2 77 A 62 A
holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts • per direction of rotation number of NO contacts for auxiliary contacts • per direction of rotation • instantaneous contact 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	0 1 2 77 A 62 A 25 hp
holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts • per direction of rotation number of NO contacts for auxiliary contacts • per direction of rotation • instantaneous contact 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	0 1 2 77 A 62 A 25 hp 30 hp
holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts • per direction of rotation number of NO contacts for auxiliary contacts • per direction of rotation • instantaneous contact 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	0 1 2 77 A 62 A 25 hp 30 hp 60 hp
holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts • per direction of rotation number of NO contacts for auxiliary contacts • per direction of rotation • instantaneous contact 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	0 1 2 77 A 62 A 25 hp 30 hp 60 hp
holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts • per direction of rotation number of NO contacts for auxiliary contacts • per direction of rotation • instantaneous contact 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 contact rating of auxiliary contacts according to UL	0 1 2 77 A 62 A 25 hp 30 hp 60 hp
holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts • per direction of rotation number of NO contacts for auxiliary contacts • per direction of rotation • instantaneous contact 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 contact rating of auxiliary contacts according to UL Short-circuit protection	0 1 2 77 A 62 A 25 hp 30 hp 60 hp
holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts • per direction of rotation number of NO contacts for auxiliary contacts • per direction of rotation • instantaneous contact 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 contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link	0 1 2 77 A 62 A 25 hp 30 hp 60 hp
holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts • per direction of rotation number of NO contacts for auxiliary contacts • per direction of rotation • instantaneous contact 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 contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit	0 1 2 77 A 62 A 25 hp 30 hp 60 hp
holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts • per direction of rotation number of NO contacts for auxiliary contacts • per direction of rotation • instantaneous contact 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 contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link	0 1 2 77 A 62 A 25 hp 30 hp 60 hp
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holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts • per direction of rotation number of NO contacts for auxiliary contacts • per direction of rotation • instantaneous contact 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 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	0 1 2 77 A 62 A 25 hp 30 hp 60 hp 60 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 355 A
holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts • per direction of rotation number of NO contacts for auxiliary contacts • per direction of rotation • instantaneous contact 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 460/480 V rated value • 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	0 1 2 77 A 62 A 25 hp 30 hp 60 hp 60 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 355 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A
holding power of magnet coil at DC Auxiliary circuit number of NC contacts for auxiliary contacts • per direction of rotation number of NO contacts for auxiliary contacts • per direction of rotation • instantaneous contact 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 460/480 V rated value • 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	0 1 2 77 A 62 A 25 hp 30 hp 60 hp 60 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 355 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A
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width	150 mm
depth	152 mm
required spacing	
with side-by-side mounting	40
— forwards	10 mm
— backwards	0 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 mm
for grounded parts	40
— forwards	10 mm
— backwards	0 mm
— upwards	10 mm
— at the side	10 mm
— downwards	10 mm
• for live parts	
— forwards	10 mm
— backwards	0 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 mm
onnections/ 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 or stranded	2x (2.5 16 mm²), 2x (10 50 mm²), 1x (10 70 mm²)
finely stranded with core end processing	2x (2.5 35 mm²), 1x (2.5 50 mm²)
finely stranded without core end processing	2x (10 35 mm²), 1x (10 50 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)
afety related data	
proportion of dangerous failures	
 with low demand rate according to SN 31920 	40 %
with high demand rate according to SN 31920	73 %
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
ommunication/ Protocol	<u>_</u>
product function bus communication	Yes
protocol is supported AS-Interface protocol	No
product function control circuit interface with IO link	No
ertificates/ approvals	
General Product Approval	Declaration of Conformity Test Certificates









Marine / Shipping













other Dangerous Good

<u>Confirmation</u> <u>Transport Information</u>

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=3RA2345-8XB30-1NB3

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2345-8XB30-1NB3

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2345-8XB30-1NB3

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

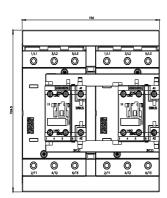
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2345-8XB30-1NB3&lang=en

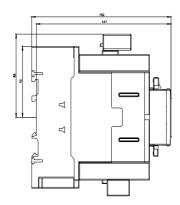
Characteristic: Tripping characteristics, I2t, Let-through current

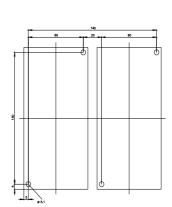
https://support.industry.siemens.com/cs/ww/en/ps/3RA2345-8XB30-1NB3/char

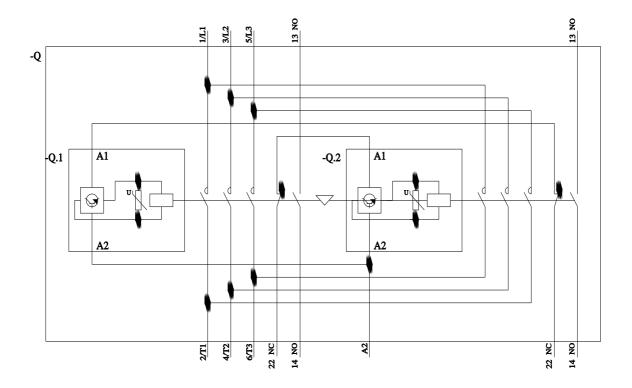
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2345-8XB30-1NB3&objecttype=14&gridview=view1









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