SIEMENS

Data sheet

3RA2316-8XB30-2FB4



reversing contactor assembly, AC-3e/AC-3, 9 A, 4 kW / 400 V, 3-pole, 24 V DC, with integrated diode, 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 	<u>3RT2016-2FB42</u>	
 2 of the supplied contactor 	<u>3RT2016-2FB42</u>	
 of the supplied RH assembly kit 	<u>3RA2913-2AA2</u>	
General technical data		
size of contactor	S00	
product extension auxiliary switch	Yes	
shock resistance at rectangular impulse		
• at AC	6,7g / 5 ms, 4,2g / 10 ms	
• at DC	6,7g / 5 ms, 4,2g / 10 ms	
shock resistance with sine pulse		
• at AC	10,5g / 5 ms, 6,6g / 10 ms	
• at DC	10,5g / 5 ms, 6,6g / 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	9 A	
— at 500 V rated value	7.7 A	
— at 690 V rated value	6.7 A	
• at AC-3e		
— at 400 V rated value	9 A	

	774
— at 500 V rated value	7.7 A
— at 690 V rated value	6.7 A
operating power	
• at AC-3	
— at 400 V rated value	4 kW
— at 500 V rated value	4 kW
— at 690 V rated value	5.5 kW
• at AC-3e	
— at 400 V rated value	4 kW
— at 690 V rated value	5.5 kW
 at AC-4 at 400 V rated value 	4 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	DC
control supply voltage 1	
at DC rated value	24 V
design of the surge suppressor	diode
closing power of magnet coil at DC	4 W
holding power of magnet coil at DC	4 W
Auxiliary circuit	
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	7.6 A
at 600 V rated value	9A
	5A
yielded mechanical performance [hp] for 3-phase AC motor	2 hz
at 200/208 V rated value	2 hp
at 220/230 V rated value	3 hp
• at 460/480 V rated value	5 hp
• at 575/600 V rated value	7.5 hp
at 575/600 V rated value contact rating of auxiliary contacts according to UL	
at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection	7.5 hp
at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link	7.5 hp
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t 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	7.5 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 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	7.5 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 20 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	7.5 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 20 A
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t 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 width depth	7.5 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 20 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 84 mm 90 mm
e 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 width depth required spacing	7.5 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 20 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 84 mm 90 mm
e 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 • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • fastening method height width depth required spacing • with side-by-side mounting	7.5 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 20 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 84 mm 90 mm 83 mm
e 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 width depth required spacing with side-by-side mounting forwards 	7.5 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 20 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 84 mm 90 mm 83 mm
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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 height width depth required spacing with side-by-side mounting forwards backwards upwards upwards 	7.5 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 20 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 84 mm 90 mm 83 mm 6 mm 6 mm
 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 width depth required spacing with side-by-side mounting forwards backwards upwards downwards at the side 	7.5 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 20 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 84 mm 90 mm 83 mm 6 mm 0 mm 6 mm
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— 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	$\Omega_{\rm M}$ (0.5 4 mm ²)
 solid solid or stranded 	$2x (0.5 \dots 4 \text{ mm}^2)$
	$2x (0.5 \dots 4 \text{ mm}^2)$
 finely stranded with core end processing finely stranded without core end processing 	2x (0.5 2.5 mm²) 2x (0.5 2.5 mm²)
type of connectable conductor cross-sections	ZX (0.5 2.5 mm)
for auxiliary contacts	
- solid or stranded	2x (0.5 2.5 mm²)
 — finely stranded with core end processing 	2x (0.5 2.5 mm ²) 2x (0.5 1.5 mm ²)
 finely stranded with core end processing finely stranded without core end processing 	2x (0.5 1.5 mm ²)
 for AWG cables for auxiliary contacts 	2x (0.5 1.5 mm) 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	20 a
61508	
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 Marine / Shipp	ping
Type Test Certific- Special Test Certific-	
ates/Test Report ate	
Marine / Shipping	other Dangerous Good
PRS RINA RINA	Confirmation Transport Information
Further information	
Siemens has decided to exit the Russian market (see here). <u>https://press.siemens.com/global/en/pressrelease/siemens-wind-d</u> Siemens is working on the renewal of the current EAC certific	

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=3RA2316-8XB30-2FB4

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2316-8XB30-2FB4

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2316-8XB30

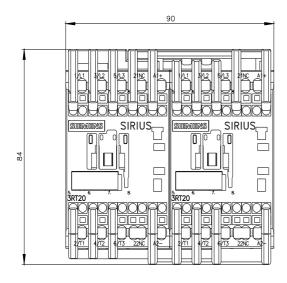
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

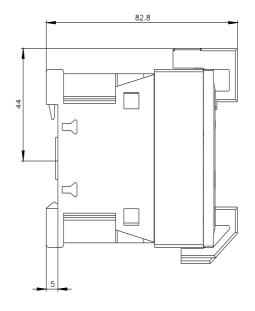
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2316-8XB30-2FB4&lang=en

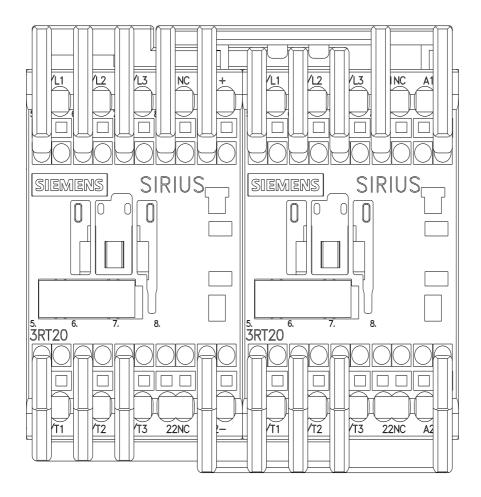
Characteristic: Tripping characteristics, I²t, Let-through current

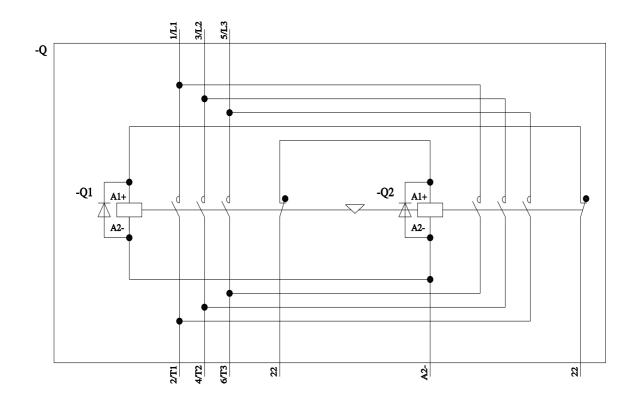
https://support.industry.siemens.com/cs/ww/en/ps/3RA2316-8XB30-2FB4/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2316-8XB30-2FB4&objecttype=14&gridview=view1









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