Data sheet 3RA2345-8XB30-1AL2



reversing contactor assembly, AC-3e/AC-3, 80 A, 37 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 	3RT2045-1AL20	
 2 of the supplied contactor 	3RT2045-1AL20	
 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	
shock resistance with sine pulse		
• at AC	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	
Weight	4.3 kg	
Ambient conditions		
installation altitude at height above sea level maximum	2 000 m	
ambient temperature		
 during operation 	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 COO \/ rated value	FO 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	
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	200 V
magnet coil at AC	
• at 50 Hz	0.8 1.1
• at 60 Hz	0.85 1.1
apparent pick-up power of magnet coil at AC	
• at 50 Hz	348 VA
• at 60 Hz	296 VA
inductive power factor with closing power of the coil	200 VA
• at 50 Hz	0.62
• at 60 Hz	0.55
	0.55
apparent holding power of magnet coil at AC	05.1/4
• at 50 Hz	25 VA
• at 60 Hz	18 VA
inductive power factor with the holding power of the coil	0.05
• at 50 Hz	0.35
• at 60 Hz	0.41
Auxiliary circuit	
number of NC contacts for auxiliary contacts	
per direction of rotation	0
number of NO contacts for auxiliary contacts	
 per direction of rotation 	1
instantaneous contact	2
• instantaneous contact UL/CSA ratings	2
	2
UL/CSA ratings	77 A
UL/CSA ratings full-load current (FLA) for 3-phase AC motor	
UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value	77 A
UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value	77 A
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	77 A 62 A
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	77 A 62 A 25 hp
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	77 A 62 A 25 hp 30 hp
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	77 A 62 A 25 hp 30 hp 60 hp
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	77 A 62 A 25 hp 30 hp 60 hp
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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	77 A 62 A 25 hp 30 hp 60 hp 60 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 355 A
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 — with type of assignment 2 required	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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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 — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required	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 fuse gG: 10 A +/-180° rotation possible on vertical mounting surface; can be tilted forward and
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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 — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions	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 fuse gG: 10 A +/-180° rotation possible on vertical mounting surface; can be tilted forward and

width	150 mm	
depth	152 mm	
required spacing		
 with side-by-side mounting 		
— forwards	10 mm	
— backwards	0 mm	
— upwards	10 mm	
— downwards	10 mm	
— at the side	10 mm	
 for grounded parts 		
— 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	
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 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)	
Safety related data		
product function suitable for safety function	Yes	
Electrical Safety		
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	
Approvals Certificates		
General Product Approval		Test Certificates

Confirmation









Type Test Certificates/Test Report

Marine / Shipping

other











Confirmation

Transport Information

Environmental Confirmations

Further information

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...)

Industry Mall (Online ordering system)

 $\underline{https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2345-8XB30-1AL2}$

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2345-8XB30-1AL2

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

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

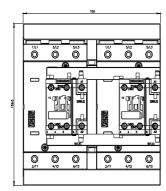
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2345-8XB30-1AL2&lang=en

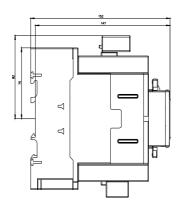
Characteristic: Tripping characteristics, I2t, Let-through current

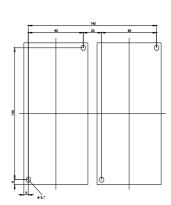
https://support.industry.siemens.com/cs/ww/en/ps/3RA2345-8XB30-1AL2/char

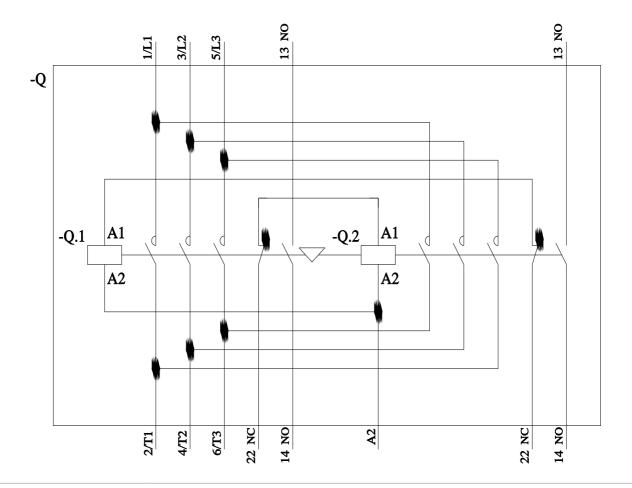
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2345-8XB30-1AL2&objecttype=14&gridview=view1









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