SIEMENS

Data sheet

3RA2417-8XH31-2BB4

STAR-DELTA COMB. WITH ASI AC3, 11KW/400V DC24V, 3-POLE SZ S00, SPRING-LOADED TERMINAL ELECTR. AND MECH. INTERLOCK 3NO INTEGR.



product brand name	SIRIUS
Product designation	star-delta (wye-delta) contactor assembly 3RA24
Manufacturer article number	
 1 of the supplied contactor 	3RT2018-2BB41-0CC0
 2 of the supplied contactor 	3RT2018-2BB41
 3 of the supplied contactor 	3RT2016-2BB41
 of the supplied RS assembly kit 	3RA2913-2BB2
 of the supplied function module for communication 	3RA2712-2CA00

General technical data:		
Insulation voltage		
 with degree of pollution 3 Rated value 	V	690
Degree of pollution		3
Shock resistance		9.8g / 5 ms and 5.9g / 10 ms
Surge voltage resistance Rated value	kV	6
Mechanical service life (switching cycles)		
 of the contactor typical 		10 000 000
 of the contactor with added auxiliary switch 		10 000 000
block typical		
Protection class IP		
• on the front		IP20
Equipment marking		
● acc. to DIN EN 81346-2		Q

Main circuit:		
Number of poles for main current circuit	3	

Number of NC contacts for main contacts		0
Number of NO contacts for main contacts		3
Operating voltage		
• at AC-3 Rated value maximum	V	690
Operating current		
• at AC-1		
— at 400 V at ambient temperature 40 °C Rated value	Α	22
— at 400 V at ambient temperature 60 °C Rated value	А	20
• at AC-2 at 400 V Rated value	Α	25
• at AC-3		
— at 400 V Rated value	Α	25
Operating power		
• at AC-2 at 400 V Rated value	kW	11
Operating power		
• at AC-3		
— at 400 V Rated value	kW	11
— at 500 V Rated value	kW	11
— at 690 V Rated value	kW	11
Operating frequency		
• at AC-3 maximum	1/h	1 000
No-load switching frequency	1/h	1 500
Control circuit/ Control:		
Type of voltage of the control supply voltage		DC
Control supply voltage 1		
for DC Rated value	V	24
Operating range factor control supply voltage rated value of the magnet coil for DC		0.85 1.1
Design of the surge suppressor		with varistor
Closing power of the magnet coil for DC	W	5.9
Holding power of the magnet coil for DC	W	5.9
Auxiliary circuit:		
Number of NC contacts		
• for auxiliary contacts		
— instantaneous contact		0
— lagging switching		0
Number of NO contacts		
• for auxiliary contacts		
 instantaneous contact 		3
— leading contact		0
Product expansion Auxiliary switch		No

Operating current of the auxiliary contacts at AC-12	Α	10
maximum		
Operating current of the auxiliary contacts at AC-15	Δ.	
• at 230 V	A	6
• at 400 V	Α	3
Operating current of the auxiliary contacts at DC-13	_	10
● at 24 V	Α	10
● at 60 V	Α	2
• at 110 V	Α	1
● at 220 V	Α	0.3
Contact reliability of the auxiliary contacts		< 1 error per 100 million operating cycles
JL/CSA ratings:		
Contact rating of the auxiliary contacts acc. to UL		A600 / Q600
Short-circuit:		
Design of the fuse link		
• for short-circuit protection of the main circuit		
 — with type of assignment 1 required 		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
— with type of assignment 2 required		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20 A
• for short-circuit protection of the auxiliary switch		fuse gL/gG: 10 A
• for short-circuit protection of the auxiliary switch required		
required		fuse gL/gG: 10 A +/-180° rotation possible on vertical mounting
required nstallation/ mounting/ dimensions:		fuse gL/gG: 10 A
required nstallation/ mounting/ dimensions:		fuse gL/gG: 10 A +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/-
required nstallation/ mounting/ dimensions: mounting position	mm	fuse gL/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 standard
required nstallation/ mounting/ dimensions: mounting position Mounting type	mm mm	fuse gL/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 standard mounting rail
required nstallation/ mounting/ dimensions: mounting position Mounting type Height Width Depth		fuse gL/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 standard mounting rail 84
required nstallation/ mounting/ dimensions: mounting position Mounting type Height Width Depth	mm	fuse gL/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 standard mounting rail 84 135
required nstallation/ mounting/ dimensions: mounting position Mounting type Height Width	mm	fuse gL/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 standard mounting rail 84 135
required Installation/ mounting/ dimensions: mounting position Mounting type Height Width Depth Required spacing	mm	fuse gL/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 standard mounting rail 84 135
required Installation/ mounting/ dimensions: Immounting position Mounting type Height Width Depth Required spacing • with side-by-side mounting	mm mm	fuse gL/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 standard mounting rail 84 135 145
required nstallation/ mounting/ dimensions: mounting position Mounting type Height Width Depth Required spacing • with side-by-side mounting — forwards	mm mm	fuse gL/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 standard mounting rail 84 135 145
required Installation/ mounting/ dimensions: mounting position Mounting type Height Width Depth Required spacing • with side-by-side mounting — forwards — Backwards	mm mm mm	fuse gL/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 standard mounting rail 84 135 145
required Installation/ mounting/ dimensions: mounting position Mounting type Height Width Depth Required spacing • with side-by-side mounting — forwards — Backwards — upwards	mm mm mm mm	fuse gL/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 standard mounting rail 84 135 145
required Installation/ mounting/ dimensions: mounting position Mounting type Height Width Depth Required spacing • with side-by-side mounting — forwards — Backwards — upwards — downwards	mm mm mm mm mm	fuse gL/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 standard mounting rail 84 135 145
required nstallation/ mounting/ dimensions: mounting position Mounting type Height Width Depth Required spacing • with side-by-side mounting — forwards — Backwards — upwards — downwards — at the side • for grounded parts	mm mm mm mm mm	fuse gL/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 standard mounting rail 84 135 145
required Installation/ mounting/ dimensions: mounting position Mounting type Height Width Depth Required spacing • with side-by-side mounting — forwards — Backwards — upwards — downwards — at the side	mm mm mm mm mm mm	fuse gL/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 standard mounting rail 84 135 145

— at the side	mm	6
— downwards	mm	6
• for live parts		
— forwards	mm	6
— Backwards	mm	0
— upwards	mm	6
— downwards	mm	6
— at the side	mm	6

Connections/ Terminals:	
Type of electrical connection	
• for main current circuit	spring-loaded terminals
 for auxiliary and control current circuit 	spring-loaded terminals
Type of connectable conductor cross-section	
• for main contacts	
— single or multi-stranded	2x (0,5 4 mm²)
 finely stranded with core end processing 	2x (0.5 2.5 mm²)
 finely stranded without core end processing 	2x (0.5 2.5 mm²)
 for AWG conductors for main contacts 	1x (20 12)
 for auxiliary contacts 	
 single or multi-stranded 	2x (0,5 2,5 mm²)
 finely stranded with core end processing 	2x (0.5 1.5 mm²)
 finely stranded without core end processing 	2x (0.5 1.5 mm²)
 for AWG conductors for auxiliary contacts 	2x (20 14)

Safety related data:		
B10 value with high demand rate acc. to SN 31920		1 000 000
Proportion of dangerous failures		
 with low demand rate acc. to SN 31920 	%	40
 with high demand rate acc. to SN 31920 	%	75
Failure rate [FIT] with low demand rate acc. to SN 31920	FIT	100
T1 value for proof test interval or service life acc. to IEC 61508	у	20
Protection against electrical shock		finger-safe

Mechanical data:		
Size of contactor	S00	

Communication/ Protocol:	
Product function Bus communication	Yes
Protocol is supported	
AS-interface protocol	Yes

Product function Control circuit interface with IO link		No
Ambient conditions:		
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
during operation	°C	-25 + 60
during storage	°C	-55 + 80

Certificates/ approvals:

General	Declaration of	Test	Shipping Approval
Product	Conformity	Certificates	
Approval			





Special Test Certificate







other

Shipping Approval













Environmental Confirmations

other

other

Further information

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

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

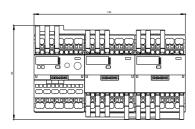
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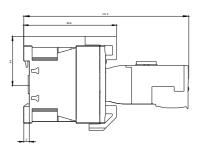
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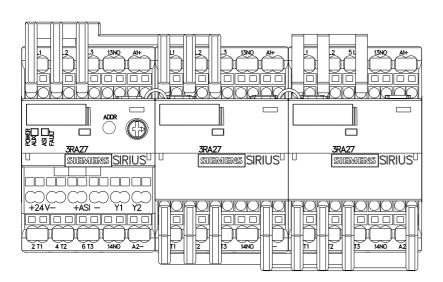
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RA24178XH312BB4/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA24178XH312BB4&lang=en

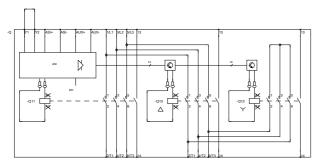






SITERONBRASIECK-KOMB.

DREWRICHTUNG 1 (RECHTSLAUF)



SITAR CEMIASCOMB.

BOTAGIGBR (DIGHESCHOWSE)

last modified: 11.03.2015