SIEMENS

Data sheet

3RA2416-8XF31-1AB0

STAR-DELTA COMB. AC3,7,5KW/400V AC24V, 50/60HZ, 3-POLE, SZ S00, SCREW TERMINAL ELECTR. AND MECH. INTERLOCK 3NO INTEGR.



Figure similar

product brand name	SIRIUS
Product designation	star-delta (wye-delta) contactor assembly 3RA24
Manufacturer article number	
• 1 of the supplied contactor	<u>3RT2017-1AP01</u>
 2 of the supplied contactor 	<u>3RT2017-1AP01</u>
• 3 of the supplied contactor	<u>3RT2015-1AP01</u>
 of the supplied RS assembly kit 	3RA2913-2BB1
 of the supplied function module for wye-delta circuits 	<u>3RA2816-0EW20</u>

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	А	22
Rated value		
— at 400 V at ambient temperature 60 °C	А	20
Rated value		
• at AC-2 at 400 V Rated value	А	16
• at AC-3		
— at 400 V Rated value	А	16
Operating power		
• at AC-2 at 400 V Rated value	kW	7.5
Operating power		
● at AC-3		
— at 400 V Rated value	kW	7.5
— at 500 V Rated value	kW	10.3
— at 690 V Rated value	kW	9.2
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		AC
Control supply voltage 1 with AC		
• at 50 Hz Rated value	V	24
Operating range factor control supply voltage rated value of the magnet coil with AC	_	
● at 50 Hz		0.8 1.1
• at 60 Hz		0.85 1.1
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 maximum	A	10
Operating current of the auxiliary contacts at AC-15		
• at 230 V	А	6
● at 400 V	А	3
Operating current of the auxiliary contacts at DC-13		
• at 24 V	А	10
• at 60 V	А	2
• at 110 V	А	1
• at 220 V	А	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
required		
nstallation/ mounting/ dimensions:		
mounting position		+/-180° rotation possible on vertical mounting
		surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
Mounting type		screw and snap-on mounting onto 35 mm standard
Height		mounting rail
	mm	68
Width	mm mm	
Depth		68
Depth Required spacing	mm	68 135
Depth Required spacing • with side-by-side mounting	mm	68 135 145
Depth Required spacing	mm	68 135 145 6
Depth Required spacing • with side-by-side mounting	mm mm	68 135 145 6 0
Depth Required spacing • with side-by-side mounting — forwards	mm mm	68 135 145 6
Depth Required spacing • with side-by-side mounting — forwards — Backwards	mm mm mm	68 135 145 6 0
Depth Required spacing • with side-by-side mounting — forwards — Backwards — upwards	mm mm mm mm	68 135 145 6 0 6
Depth Required spacing • with side-by-side mounting — forwards — Backwards — upwards — downwards	mm mm mm mm mm	68 135 145 6 0 6 6
Depth Required spacing • with side-by-side mounting — forwards — Backwards — upwards — downwards — at the side	mm mm mm mm mm	68 135 145 6 0 6 6
Depth Required spacing • with side-by-side mounting — forwards — Backwards — upwards — downwards — at the side • for grounded parts	mm mm mm mm mm mm	68 135 145 6 0 6 6 6

— 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		screw-type terminals
 for auxiliary and control current circuit 		screw-type terminals
Type of connectable conductor cross-section	_	
• for main contacts		
— single or multi-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)
 for AWG conductors for main contacts 		2x (20 16), 2x (18 14)
 for auxiliary contacts 		
— single or multi-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 conductors for auxiliary contacts		2x (20 16), 2x (18 14)
Apparent pick-up power of the magnet coil with AC	_	
• at 50 Hz	V·A	27
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/ Dustagel		
Communication/ Protocol: Product function Bus communication		No
Protocol is supported		
AS-interface protocol		No
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 Product Approval	Declaration of Conformity	Test Certificates	Shipping App	proval	
EHC	EG-Konf.	Special Test Certificate	ABS	B U R E A U V E R ITAS	
Shipping Appro	oval				other
GL	Lloyd's Register	PRS	RINA	RMRS	Environmental Confirmations

other

urther information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

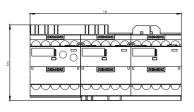
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

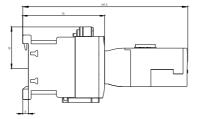
Cax online generator

http://support.automation.siemens.com/WW/CAX order/default.aspx?lang=en&mlfb=3RA24168XF311AB0

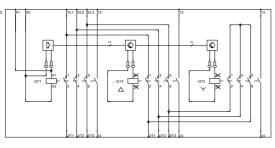
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RA24168XF311AB0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA24168XF311AB0&lang=en





SIEMENS SIRIUS	SIEMENSSIRIUS	SIEMENS SIRIUS
1 MATATA®	NAKAKAKA	NAKAKAKA
AC/0C 24-240V	AC/DC 24-240V	AC/DC 24-240V
	3RA29	3RA29
" SIEMENS SIRIUS		^H SIEMENS SIRIUS ^H
	WWWWWW	
2/T1 4/T2 6/T3 14N0 A2 3RT20	2/T1 4/T2 6/T3 14N0 A2 3RT20	2/T1 4/T2 6/T3 14NO A2 3RT20



SITAR-LIBERA COMB.

STERNORREIECK-KOMB.

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