SIEMENS

Product data sheet 3RA2417-8XF31-2BB4

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



General technical data:			
Product brand name		SIRIUS	
product designation		star-delta (wye-delta) contactor assembly 3RA24	
Product function		wye-delta motor start-up	
Size of the contactor		S00	
Protection class IP / on the front		IP20	
Degree of pollution		3	
Insulation voltage / with degree of pollution 3 / rated value	V	690	
Installation altitude / at a height over sea level / maximum	m	2,000	
Ambient temperature			
during transport	°C	-55 80	
during storage	°C	-55 80	
during operating	°C	-25 60	
Resistance against shock		9.8g / 5 ms and 5.9g / 10 ms	
Impulse voltage resistance / rated value	kV	6	
Active power loss / per conductor / typical	W	1.2	
Item designation			
 according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 		К	
• according to DIN EN 61346-2		Q	

Manufacturer article number		
 of the function module for for wye-delta circuits included in the scope of supply 		3RA2816-0EW20
• 1 / of the contactor included in the scope of supply		3RT2018-2BB41
• 2 / of the contactor included in the scope of supply		3RT2018-2BB41
• 3 / of the contactor included in the scope of supply		3RT2016-2BB41
• of the RS applied assembly kit		3RA2913-2BB2
Mechanical operating cycles as operating time		
of the main contacts / typical		10,000,000
of the auxiliary contacts / typical		10,000,000
of the contactor / typical		10,000,000
• of the contactor with added auxiliary switch block / typical		10,000,000
Communication:		
Product function		
• bus-communication		No
control circuit interface with IO link		No
Protocol / will be supported / AS interface protocol		No
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 40 °C ambient temperature / rated value	Α	18
• at 60 °C ambient temperature / rated value	Α	16
• at AC-2 / at 400 V / rated value	Α	25
• at AC-3 / at 400 V / rated value	Α	25
Service power		
• at AC-2 / at 400 V / rated value	kW	11
• at AC-3		
• at 400 V / rated value	kW	11
• at 500 V / rated value	kW	11
• at 690 V / rated value	kW	11
Off-load operating frequency	1/h	15
Frequency of operation		
at AC-1 / according to IEC 60947-6-2 / maximum	1/h	1,000
at AC-2 / according to IEC 60947-6-2 / maximum	1/h	1,000
• at AC-3 / according to IEC 60947-6-2 / maximum	1/h	1,000

1/h 300

Control circuit:			
Design of activation		conventional	
Type of voltage / of the controlled supply voltage		DC	
Control supply voltage frequency			
• 1 / rated value	Hz	50	
• 2 / rated value	Hz	60	
Control supply voltage / 1			
• for DC / rated value	V	24	
Operating range factor control supply voltage rated value / of the solenoid			
• for DC		0.85 1.1	
Pull-in power / of the solenoid / for DC	W	5.9	
Holding power / of the solenoid / for DC	W	5.9	
Resistive loss / of the magnet coil / for DC			
• typical	W	4	

Auxiliary circuit:			
Product extension / auxiliary switch		No	
Contact reliability / of the auxiliary contacts		< 1 error per 100 million operating cycles	
Number of NC contacts / for auxiliary contacts			
instantaneous switching		3	
lagging switching		0	
Number of NO contacts / for auxiliary contacts			
• instantaneous switching		3	
leading switching		0	
Operating current / of the auxiliary contacts			
• at AC-12 / maximum	А	10	
• at AC-15			
• at 230 V	Α	6	
• at 400 V	Α	3	
• at DC-12			
• at 48 V	Α	6	
• at 60 V	Α	6	
• at 110 V	Α	3	
• at 220 V	Α	1	
• at DC-13			
• at 24 V	Α	10	
• at 48 V	Α	2	
• at 60 V	А	2	

• at 110 V A 1
• at 220 V A 0.3

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
at type of coordination 2 / required	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20 A
• for short-circuit protection of the auxiliary switch / required	fuse gL/gG: 10 A

Installation/mounting/dimensions:		
Built in orientation		any
Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail
Width	mm	135
Height	mm	84
Depth	mm	145
Distance, to be maintained, to the ranks assembly		
• forwards	mm	6
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sidewards	mm	6
Distance, to be maintained, to earthed part		
• forwards	mm	6
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sidewards	mm	6
Distance, to be maintained, conductive elements		
• forwards	mm	6
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sidewards	mm	6

Connections:			
Design of the electrical connection			
for main current circuit	spring-loaded terminals		
• for auxiliary and control current circuit	spring-loaded terminals		

Type of the connectable conductor cross-section	
• for main contacts	
• solid	2x (0.5 4 mm²)
• stranded	2x (0.5 4 mm²)
• finely stranded	
 with conductor end processing 	2x (0.5 2.5 mm²)
 without conductor final cutting 	2x (0.5 2.5 mm²)
• for AWG conductors / for main contacts	1x (20 12)
for auxiliary contacts	
• solid	2x (0.5 2.5 mm²)
• finely stranded	
 with conductor end processing 	2x (0.5 1.5 mm²)
without conductor final cutting	2x (0.5 1.5 mm²)
• for AWG conductors / for auxiliary contacts	2x (20 14)

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Certificates/approv	vals:				
Verification of suitab	ility			CE / UL / CSA / CCC	
General Product Approval	Test Certificates				
ROSTEST	Manufacturer				
Shipping Approval					
ABS	ŮÅ DNV	GL GL	Lloyd's Register LRS	PRS	RINA
Shipping Approval	other				

RMRS
KIVIKS

other

UL/CSA ratings			
Contact rating designation / for auxiliary contacts / according to UL		A600 / Q600	
Safety:			
B10 value / with high demand rate			
• according to SN 31920		1,000,000	
Failure rate (FIT value) / with low demand rate			
• according to SN 31920	FIT	100	
Proportion of dangerous failures			
• with low demand rate / according to SN 31920	%	40	
• with high demand rate / according to SN 31920	%	75	
T1 value / for proof test interval or service life			

Protection against electrical shock

finger-safe

Further information:

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

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

Industry Mall (Online ordering system)

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

CAx-Online-Generator

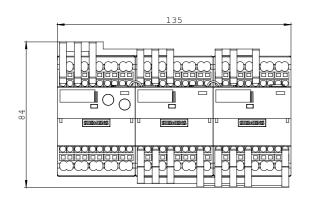
http://www.siemens.com/cax

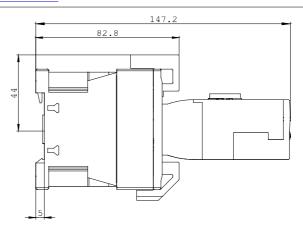
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

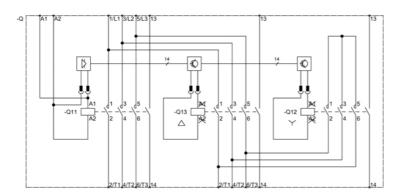
http://support.automation.siemens.com/WW/view/en/3RA2417-8XF31-2BB4/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2417-8XF31-2BB4







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