SIEMENS

Product data sheet 3RA2425-8XF32-2AL2



STAR-DELTA COMB. AC3, 15/18.5KW/400V AC230V, 50/60HZ, 3-POLE SZ S0, SPRING-LOADED TERMINAL ELECTR. AND MECH. INTERLOCK 3NO+3NC 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		S0
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		12.5g / 5 ms and 7.8g / 10 ms
Impulse voltage resistance / rated value	kV	6
Active power loss / per conductor / typical	W	0.9
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		3RT2026-2AL20
• 2 / of the contactor included in the scope of supply		3RT2026-2AL20
\bullet 3 / of the contactor included in the scope of supply		3RT2024-2AL20
 of the RS applied assembly kit 		3RA2923-2BB2
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	40
• at 60 °C ambient temperature / rated value	Α	35
• at AC-2 / at 400 V / rated value	Α	32
• at AC-3 / at 400 V / rated value	Α	17
• with 1 current path / at DC-1		
• at 24 V / rated value	Α	35
• at 110 V / rated value	Α	4.5
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	Α	35
• at 110 V / rated value	Α	35
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	Α	35
• at 110 V / rated value	Α	35
• with 1 current path / at DC-3 / at DC-5		
• at 24 V / rated value	Α	20

• at 110 V / rated value	Α	2.5
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	Α	35
• at 110 V / rated value	Α	15
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	Α	35
• at 110 V / rated value	Α	35
Service power		
• at AC-2 / at 400 V / rated value	kW	15
• at AC-3		
• at 400 V / rated value	kW	18.5
• at 500 V / rated value	kW	15
• at 690 V / rated value	kW	19
• at AC-4 / at 400 V / rated value	kW	3.5
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
• at AC-4 / according to IEC 60947-6-2 / maximum	1/h	300

Control circuit:		
Design of activation		conventional
Type of voltage / of the controlled supply voltage		AC
Control supply voltage frequency		
• 1 / rated value	Hz	50
• 2 / rated value	Hz	60
Control supply voltage / 1		
• at 50 Hz / for AC / rated value	V	230
• at 60 Hz / for AC / rated value	V	230
Operating range factor control supply voltage rated value / of the solenoid		
• at 50 Hz / for AC		0.8 1.1
• at 60 Hz / for AC		0.8 1.1
Apparent pull-in power / of the solenoid / for AC	V-A	65
Apparent holding power / of the solenoid / for AC	V-A	8.5
Inductive power factor		
with the pull-in power of the coil		0.82
with the pull-in power of the coil		0.25

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	Α	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	Α	2
• at 110 V	Α	1
• at 220 V	Α	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: 63 A
• at type of coordination 2 / required	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25 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	114	
Depth	mm	171	

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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 (1 10 mm2)
• stranded	2x (1 10 mm²)
• finely stranded	
 with conductor end processing 	2x (1 6 mm2)
 without conductor final cutting 	2x (1 6 mm2)
• for AWG conductors / for main contacts	1x (18 8)
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 	2 x (0.5 1.5 mm2)
• for AWG conductors / for auxiliary contacts	2x (20 14)

Certificates/approvals:	
Verification of suitability	CE/UL/CSA/CCC

General Product Approval

Test Certificates

ROSTEST

Manufacturer

Shipping Approval













Shipping Approval

other



other

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Contact rating designation / for auxiliary contacts / according to

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		
according to IEC 61508	а	20
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

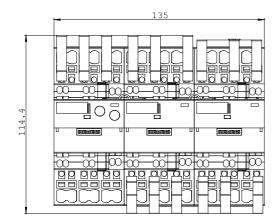
http://www.siemens.com/cax

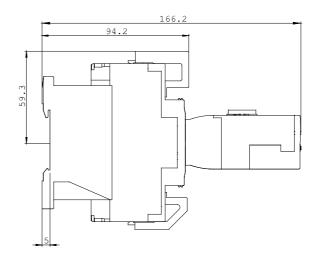
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

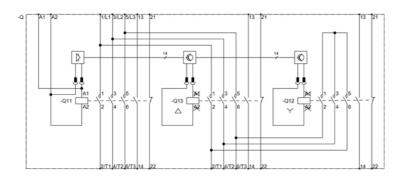
http://support.automation.siemens.com/WW/view/en/3RA2425-8XF32-2AL2/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2425-8XF32-2AL2







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