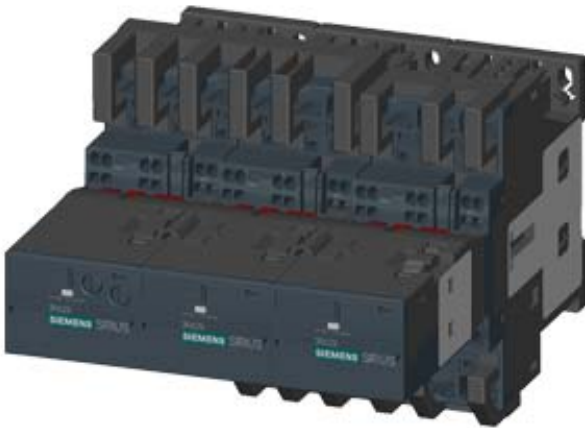


STAR-DELTA COMB. AC3,
15/18.5KW/400V AC230V, 50/60HZ,
3-POLE SZ S0,
SPRING-LOADED TERMINAL ELECTR. AND MECH.
INTERLOCK 3NO+3NC INTEGR.



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
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

<ul style="list-style-type: none"> • at 110 V / rated value 	A	15
<ul style="list-style-type: none"> • with 3 current paths in series / at DC-3 / at DC-5 		
<ul style="list-style-type: none"> • at 24 V / rated value 	A	35
<ul style="list-style-type: none"> • at 110 V / rated value 	A	35
Service power		
<ul style="list-style-type: none"> • at AC-2 / at 400 V / rated value 	kW	15
<ul style="list-style-type: none"> • at AC-3 		
<ul style="list-style-type: none"> • at 400 V / rated value 	kW	18.5
<ul style="list-style-type: none"> • at 500 V / rated value 	kW	19
<ul style="list-style-type: none"> • at 690 V / rated value 	kW	19
<ul style="list-style-type: none"> • at AC-4 / at 400 V / rated value 	kW	3.5
Off-load operating frequency	1/h	1,500
Frequency of operation		
<ul style="list-style-type: none"> • with AC-1 / maximum 	1/h	1,000
<ul style="list-style-type: none"> • with AC-2 / maximum 	1/h	1,000
<ul style="list-style-type: none"> • with AC-3 / maximum 	1/h	1,000
<ul style="list-style-type: none"> • with AC-4 / maximum 	1/h	300

Control circuit:

Design of activation		conventional
Voltage type / of control feed voltage		AC
Control supply voltage frequency		
<ul style="list-style-type: none"> • 1 / rated value 	Hz	50
<ul style="list-style-type: none"> • 2 / rated value 	Hz	60
Control supply voltage / 1		
<ul style="list-style-type: none"> • for AC / at 50 Hz / rated value 	V	230
<ul style="list-style-type: none"> • for AC / at 60 Hz / rated value 	V	230
Operating range factor control supply voltage rated value / of the magnet coil		
<ul style="list-style-type: none"> • at 50 Hz / for AC 		0.8 ... 1.1
<ul style="list-style-type: none"> • 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		
<ul style="list-style-type: none"> • with the pull-in power of the coil 		0.82
<ul style="list-style-type: none"> • 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		

<ul style="list-style-type: none"> instantaneous switching lagging switching 		3	
		0	
Number of NO contacts / for auxiliary contacts			
<ul style="list-style-type: none"> instantaneous switching leading switching 		3	
		0	
Operating current / of the auxiliary contacts			
<ul style="list-style-type: none"> at AC-12 / maximum 	A	10	
<ul style="list-style-type: none"> at AC-15 			
<ul style="list-style-type: none"> at 230 V 	A	6	
<ul style="list-style-type: none"> at 400 V 	A	3	
<ul style="list-style-type: none"> at DC-12 			
<ul style="list-style-type: none"> at 48 V 	A	6	
<ul style="list-style-type: none"> at 60 V 	A	6	
<ul style="list-style-type: none"> at 110 V 	A	3	
<ul style="list-style-type: none"> at 220 V 	A	1	
<ul style="list-style-type: none"> at DC-13 			
<ul style="list-style-type: none"> at 24 V 	A	10	
<ul style="list-style-type: none"> at 48 V 	A	2	
<ul style="list-style-type: none"> at 60 V 	A	2	
<ul style="list-style-type: none"> at 110 V 	A	1	
<ul style="list-style-type: none"> 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
- at type of coordination 2 / required
- for short-circuit protection of the auxiliary switch / required

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 63 A

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25 A

fuse gL/gG: 10 A

Installation/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 mounting rail
Width	mm	135
Height	mm	114
Depth	mm	171
Distance, to be maintained, to the ranks assembly		
<ul style="list-style-type: none"> forwards 	mm	6

• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sideways	mm	6
Distance, to be maintained, to earthed part		
• forwards	mm	6
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sideways	mm	6
Distance, to be maintained, conductive elements		
• forwards	mm	6
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sideways	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		
• finely stranded		
• with conductor end processing		2x (1 ... 6 mm ²)
• without conductor final cutting		2x (1 ... 6 mm ²)
• for AWG conductors / for main contacts		1x (18 ... 8)
• for auxiliary contacts		
• finely stranded		
• with conductor end processing		2x (0.5 ... 1.5 mm ²)
• without conductor final cutting		2x (0.5 ... 1.5 mm ²)
• for AWG conductors / for auxiliary contacts		2x (20 ... 14)

Certificates/approvals:

Verification of suitability	CE / UL / CSA / CCC
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General Product Approval	Declaration of Conformity	Test Certificates
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[Special Test Certificate](#)

Shipping Approval



Shipping Approval



[other](#)

[Environmental Confirmations](#)

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] / with low demand rate

- according to SN 31920

FIT

100

Proportion of dangerous failures

- with low demand rate / according to SN 31920
- with high demand rate / according to SN 31920

%

40

%

75

T1 value / for proof test interval or service life

- according to IEC 61508

a

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

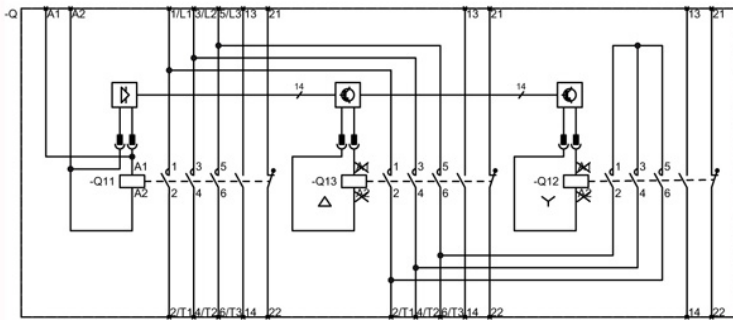
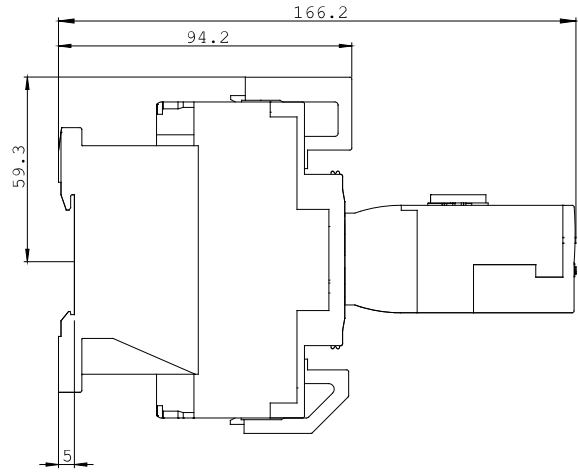
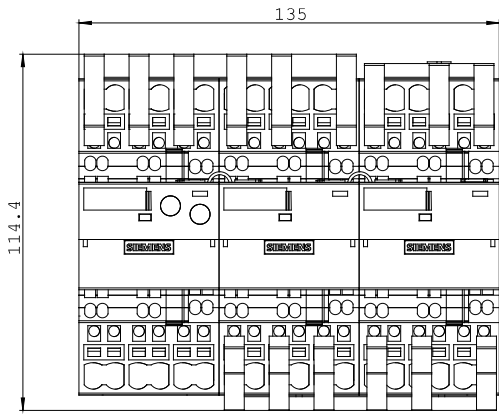
<http://www.siemens.com/cax>

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



last change:

Aug 4, 2014