

STAR-DELTA COMB. AC3, 11KW/400V DC24V,
3-POLE SZ S00,
SCREW 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 - during storage - during operating	°C	-55 ... +80 -55 ... +80 -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
Manufacturer article number - of the function module for for wye-delta circuits included in the scope of supply 1 / of the contactor included in the scope of supply		3RA2816-0EW20 3RT2018-1BB41

• 2 / of the contactor included in the scope of supply • 3 / of the contactor included in the scope of supply • of the RS applied assembly kit		3RT2018-1BB41 3RT2016-1BB41 3RA2913-2BB1
Mechanical operating cycles as operating time • of the main contacts / typical • of the auxiliary contacts / typical • of the contactor / typical • of the contactor with added auxiliary switch block / typical		10,000,000 10,000,000 10,000,000 10,000,000
Communication:		
Product function • bus-communication • control circuit interface with IO link		No No
Protocol / is 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 • at 60 °C ambient temperature / rated value • at AC-2 / at 400 V / rated value • at AC-3 / at 400 V / rated value	A A A A	22 20 25 25
Service power • at AC-2 / at 400 V / rated value • at AC-3 • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value	kW kW kW kW	11 11 11 11
Off-load operating frequency	1/h	1,500
Frequency of operation • with AC-1 / maximum • with AC-2 / maximum • with AC-3 / maximum • with AC-4 / maximum	1/h 1/h 1/h 1/h	1,000 1,000 1,000 300
Control circuit:		
Design of activation		conventional

Voltage type / of control feed 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 magnet coil		
• 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	A	10
• at AC-15		
• at 230 V	A	6
• at 400 V	A	3
• at DC-12		
• at 48 V	A	6
• at 60 V	A	6
• at 110 V	A	3
• at 220 V	A	1
• at DC-13		
• at 24 V	A	10
• at 48 V	A	2
• at 60 V	A	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:		
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	68
Depth	mm	145
Distance, to be maintained, to the ranks assembly		
• 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		screw-type terminals
• for auxiliary and control current circuit		screw-type terminals
Type of the connectable conductor cross-section		
• for main contacts		

- finely stranded
 - with conductor end processing
- for AWG conductors / for main contacts
- for auxiliary contacts
 - finely stranded
 - with conductor end processing
 - for AWG conductors / for auxiliary contacts

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)
 2x (20 ... 16), 2x (18 ... 14)

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)
 2x (20 ... 16), 2x (18 ... 14)

Certificates/approvals:

Verification of suitability

CE / UL / CSA / CCC

General Product Approval



EG-Konf.

Test Certificates

[Special Test Certificate](#)

Shipping Approval



ABS



BUREAU
VERITAS



DNV



GL



LRS



PRS

Shipping Approval

other



RINA



RMRS

[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

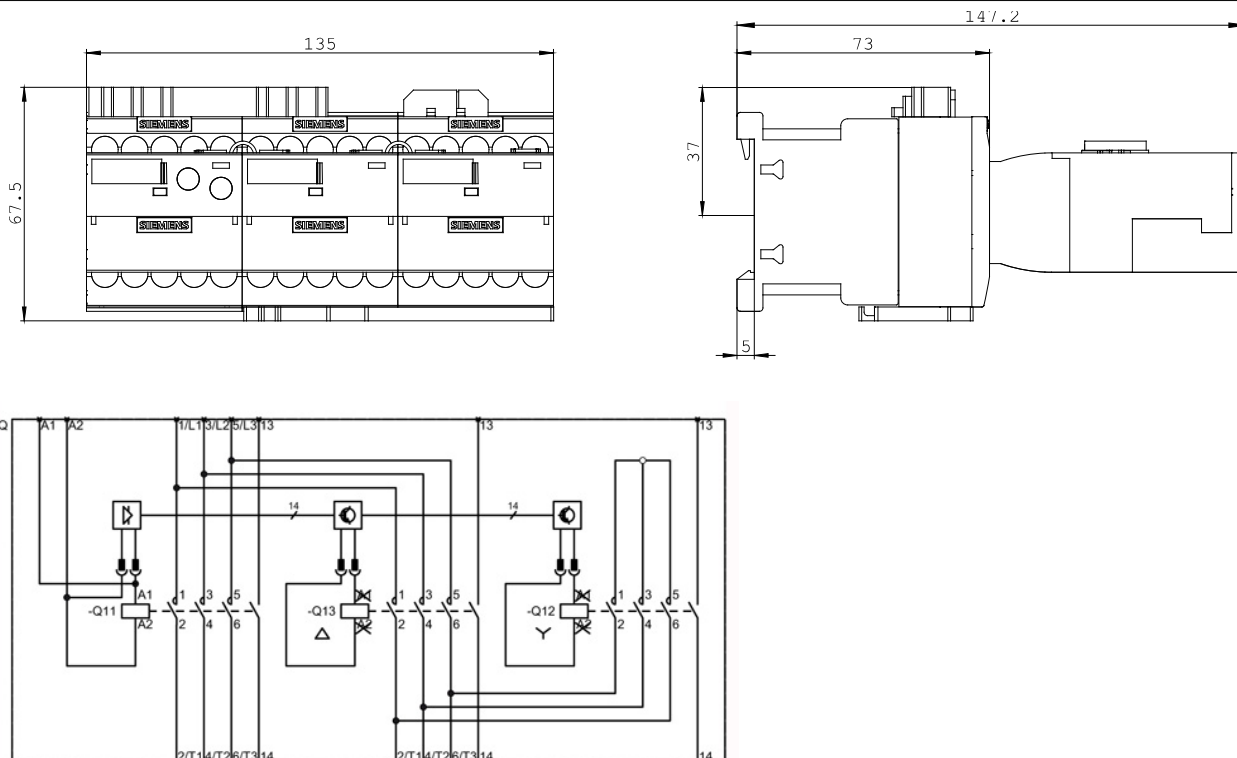
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RA2417-8XF31-1BB4/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2417-8XF31-1BB4



last change:

Aug 4, 2014