

STAR-DELTA COMB. AC3, 7.5KW/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	°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	0.7
Item designation		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		K
• 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 • 1 / of the contactor included in the scope of supply • 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		3RA2816-0EW20 3RT2017-1BB41 3RT2017-1BB41 3RT2015-1BB41 3RA2913-2BB1
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
Operational current		
• at AC-1 / at 400 V		
• at 40 °C ambient temperature / rated value	A	18
• at 60 °C ambient temperature / rated value	A	16
• at AC-2 / at 400 V / rated value	A	17
• at AC-3 / at 400 V / rated value	A	17
Service power		
• at AC-2 / at 400 V / rated value	kW	7.5
• 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
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

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
- at 220 V

A	1
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: 35 A
gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20 A
fuse gL/gG: 10 A

Installation/mounting/dimensions:

mounting position

any

Type of mounting

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
- backwards
- upwards
- downwards
- sideways

mm 6
mm 0
mm 6
mm 6
mm 6

Distance, to be maintained, to earthed part

- forwards
- backwards
- upwards
- downwards
- sideways

mm 6
mm 0
mm 6
mm 6
mm 6

Distance, to be maintained, conductive elements

- forwards
- backwards
- upwards
- downwards
- sideways

mm 6
mm 0
mm 6
mm 6
mm 6

Connections:

Design of the electrical connection

- for main current circuit
- for auxiliary and control current circuit

screw-type terminals
screw-type terminals

Type of the connectable conductor cross-section		
- for main contacts - solid - stranded - finely stranded - with conductor end processing - for AWG conductors / for main contacts - for auxiliary contacts - solid - finely stranded - with conductor end processing - for AWG conductors / for auxiliary contacts		2 x (0.5 ... 1.5 mm ²), 2 x (0.75 ... 2.5 mm ²), 2 x (0.5 ... 4 mm ²) 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²), 2x (0.5 ... 4 mm ²) 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) 2x (20 ... 16), 2x (18 ... 14) 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) 2x (20 ... 16), 2x (18 ... 14)

Certificates/approvals:

Verification of suitability

CE / UL / CSA / CCC

General Product Approval



Declaration of Conformity



Test Certificates

[Special Test Certificate](#)

Shipping Approval



Shipping Approval

other



[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		
• 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

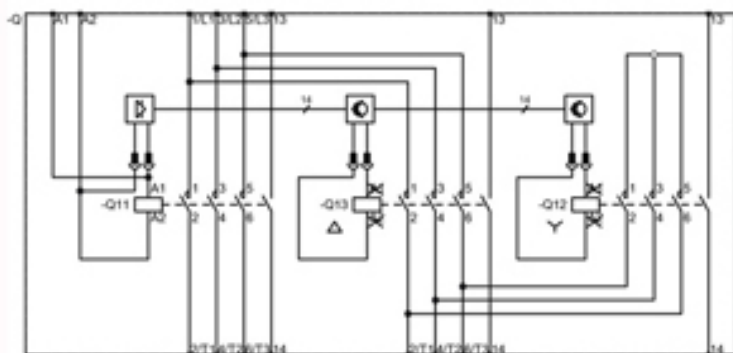
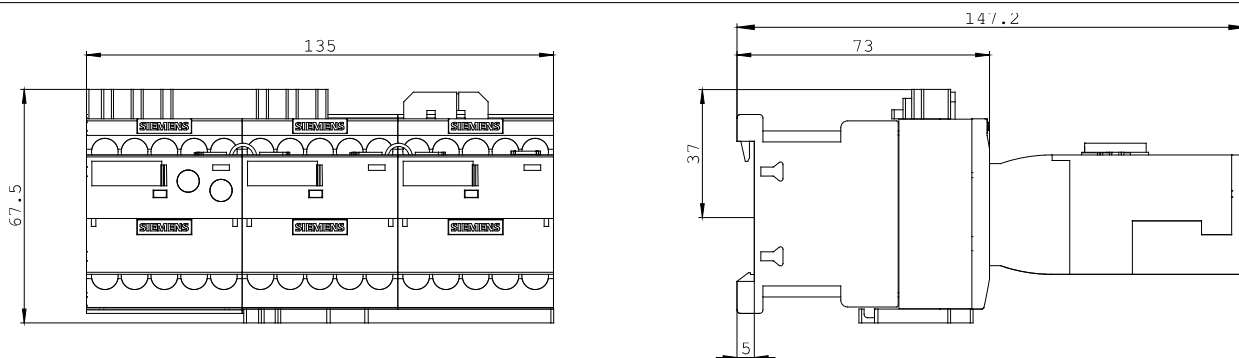
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RA2416-8XF31-1BB4/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2416-8XF31-1BB4



last change:

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