

STAR-DELTA COMB. WITH I/O-LINK AC3,  
5,5KW/400V DC24V, 3-POLE SZ S00,  
SCREW TERMINAL ELECTR. AND MECH. INTERLOCK  
3NO INTEGR.



**General technical data:**

<b>product brand name</b>		SIRIUS
<b>Product designation</b>		star-delta (wye-delta) contactor assembly 3RA24
<b>Product function</b>		wye-delta motor start-up
<b>Size of the contactor</b>		S00
<b>Protection class IP / on the front</b>		IP20
<b>Degree of pollution</b>		3
<b>Insulation voltage / with degree of pollution 3 / rated value</b>	V	690
<b>Installation altitude / at a height over sea level / maximum</b>	m	2,000
<b>Ambient temperature</b>		
• during transport	°C	-55 ... +80
• during storage	°C	-55 ... +80
• during operating	°C	-25 ... +60
<b>Resistance against shock</b>		9.8g / 5 ms and 5.9g / 10 ms
<b>Impulse voltage resistance / rated value</b>	kV	6
<b>Active power loss / per conductor / typical</b>	W	0.4
<b>Manufacturer article number</b>		
• of the function module for communication included in the scope of supply		<a href="#">3RA2711-1CA00</a>
• 1 / of the contactor included in the scope of supply		<a href="#">3RT2015-1BB41-0CC0</a>

<ul style="list-style-type: none"> <li>• 2 / of the contactor included in the scope of supply</li> <li>• 3 / of the contactor included in the scope of supply</li> <li>• of the RS applied assembly kit</li> </ul>	<a href="#">3RT2015-1BB41</a> <a href="#">3RT2015-1BB41</a> <a href="#">3RA2913-2BB1</a>
<b>Mechanical operating cycles as operating time</b> <ul style="list-style-type: none"> <li>• of the main contacts / typical</li> <li>• of the auxiliary contacts / typical</li> <li>• of the contactor / typical</li> <li>• of the contactor with added auxiliary switch block / typical</li> </ul>	10,000,000 10,000,000 10,000,000 10,000,000

#### Communication:

<b>Product function</b> <ul style="list-style-type: none"> <li>• bus-communication</li> <li>• control circuit interface with IO link</li> </ul>	Yes Yes
<b>Protocol / is supported / AS interface protocol</b>	No

#### Main circuit:

<b>Number of poles / for main current circuit</b>		3
<b>Number of NC contacts / for main contacts</b>		0
<b>Number of NO contacts / for main contacts</b>		3
<b>Operating voltage / at AC-3 / rated value / maximum</b>	V	690
<b>Operating current</b> <ul style="list-style-type: none"> <li>• at AC-1 / at 400 V <ul style="list-style-type: none"> <li>• at 40 °C ambient temperature / rated value</li> <li>• at 60 °C ambient temperature / rated value</li> </ul> </li> <li>• at AC-2 / at 400 V / rated value</li> <li>• at AC-3 / at 400 V / rated value</li> </ul>	A A A A	18 16 12 12
<b>Service power</b> <ul style="list-style-type: none"> <li>• at AC-2 / at 400 V / rated value</li> <li>• at AC-3 <ul style="list-style-type: none"> <li>• at 400 V / rated value</li> <li>• at 500 V / rated value</li> <li>• at 690 V / rated value</li> </ul> </li> </ul>	kW kW kW kW	5.5 5.5 7.2 9.2
<b>Off-load operating frequency</b>	1/h	1,500
<b>Frequency of operation</b> <ul style="list-style-type: none"> <li>• with AC-1 / maximum</li> <li>• with AC-2 / maximum</li> <li>• with AC-3 / maximum</li> <li>• with AC-4 / maximum</li> </ul>	1/h 1/h 1/h 1/h	1,000 1,000 1,000 300

#### Control circuit:

<b>Design of activation</b>	conventional
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<b>Design of the surge suppressor</b>		with varistor
<b>Voltage type / of control feed voltage</b>		DC
<b>Control supply voltage frequency</b>		
• 1 / rated value	Hz	50
• 2 / rated value	Hz	60
<b>Control supply voltage / 1</b>		
• for DC / rated value	V	24
<b>Operating range factor control supply voltage rated value / of the magnet coil</b>		
• for DC		0.85 ... 1.1
<b>Pull-in power / of the solenoid / for DC</b>	W	5.9
<b>Holding power / of the solenoid / for DC</b>	W	5.9
<b>Resistive loss / of the magnet coil / for DC</b>		
• typical	W	4

#### Auxiliary circuit:

<b>Product extension / auxiliary switch</b>		No
<b>Contact reliability / of the auxiliary contacts</b>		< 1 error per 100 million operating cycles
<b>Number of NC contacts / for auxiliary contacts</b>		
• instantaneous switching		3
• lagging switching		0
<b>Number of NO contacts / for auxiliary contacts</b>		
• instantaneous switching		3
• leading switching		0
<b>Operating current / of the auxiliary contacts</b>		
• 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
  - 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**

+/-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
- 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
  - 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 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)

2x (20 ... 16), 2x (18 ... 14)

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)

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



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

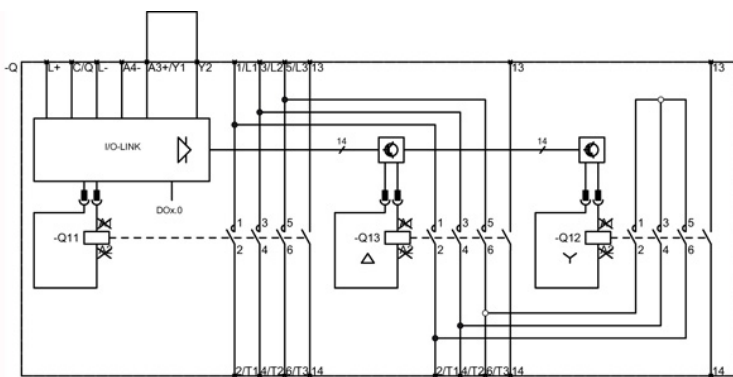
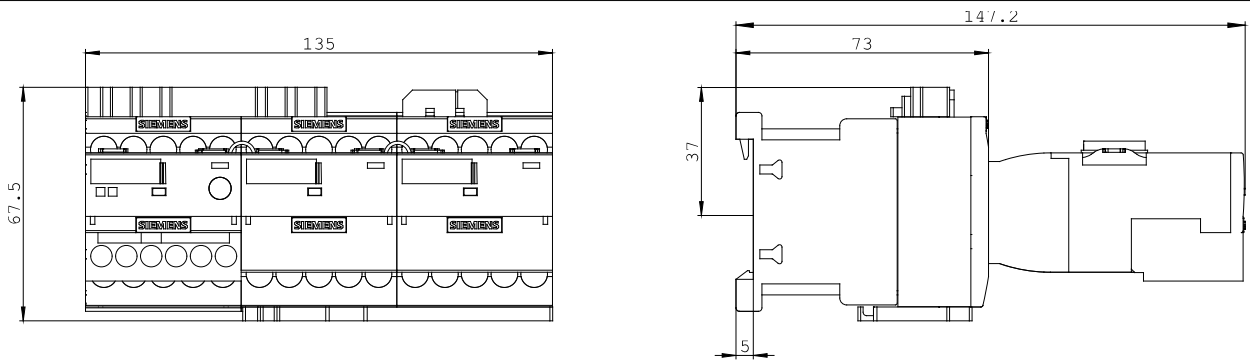
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RA2415-8XE31-1BB4/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RA2415-8XE31-1BB4](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2415-8XE31-1BB4)



last change:

Aug 4, 2014