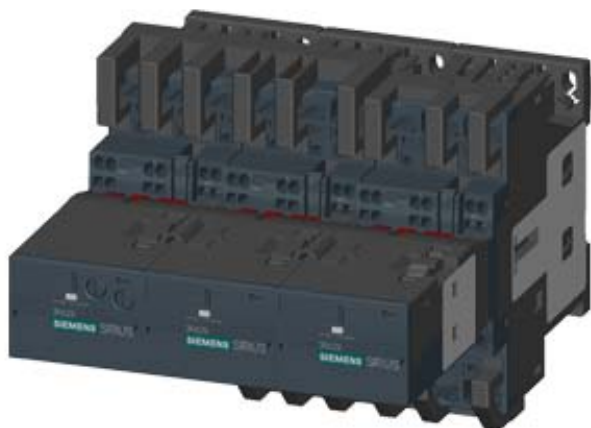


STAR-DELTA COMB. AC3,  
15/18.5KW/400V AC24V, 50/60HZ, 3-POLE,  
SZ S0,  
SPRING-LOADED TERMINAL ELECTR. AND MECH.  
INTERLOCK 3NO+3NC INTEGR.



**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>		S0
<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>		12.5g / 5 ms and 7.8g / 10 ms
<b>Impulse voltage resistance / rated value</b>	kV	6
<b>Active power loss / per conductor / typical</b>	W	0.9
<b>Manufacturer article number</b>		
• of the function module for for wye-delta circuits included in the scope of supply		<a href="#">3RA2816-0EW20</a>
• 1 / of the contactor included in the scope of supply		<a href="#">3RT2026-2AC20</a>



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

#### Control circuit:

<b>Design of activation</b>		conventional
<b>Voltage type / of control feed voltage</b>		AC
<b>Control supply voltage frequency</b>		
<ul style="list-style-type: none"> <li>• 1 / rated value</li> </ul>	Hz	50
<ul style="list-style-type: none"> <li>• 2 / rated value</li> </ul>	Hz	60
<b>Control supply voltage / 1</b>		
<ul style="list-style-type: none"> <li>• for AC / at 50 Hz / rated value</li> </ul>	V	24
<ul style="list-style-type: none"> <li>• for AC / at 60 Hz / rated value</li> </ul>	V	24
<b>Operating range factor control supply voltage rated value / of the magnet coil</b>		
<ul style="list-style-type: none"> <li>• at 50 Hz / for AC</li> </ul>		0.8 ... 1.1
<ul style="list-style-type: none"> <li>• at 60 Hz / for AC</li> </ul>		0.8 ... 1.1
<b>Apparent pull-in power / of the solenoid / for AC</b>	V·A	65
<b>Apparent holding power / of the solenoid / for AC</b>	V·A	8.5
<b>Inductive power factor</b>		
<ul style="list-style-type: none"> <li>• with the pull-in power of the coil</li> </ul>		0.82
<ul style="list-style-type: none"> <li>• with the pull-in power of the coil</li> </ul>		0.25

#### 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: 63 A

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

fuse gL/gG: 10 A

#### Installation/mounting/dimensions:

<b>mounting position</b>		+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
<b>Mounting type</b>		screw and snap-on mounting onto 35 mm standard mounting rail
<b>Width</b>	mm	135
<b>Height</b>	mm	114
<b>Depth</b>	mm	171
<b>Distance, to be maintained, to the ranks assembly</b>		
• forwards	mm	6

• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sideways	mm	6
<b>Distance, to be maintained, to earthed part</b>		
• forwards	mm	6
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sideways	mm	6
<b>Distance, to be maintained, conductive elements</b>		
• forwards	mm	6
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sideways	mm	6

#### Connections:

<b>Design of the electrical connection</b>		
• for main current circuit		spring-loaded terminals
• for auxiliary and control current circuit		spring-loaded terminals
<b>Type of the connectable conductor cross-section</b>		
• for main contacts		
• finely stranded		
• with conductor end processing		2x (1 ... 6 mm <sup>2</sup> )
• without conductor final cutting		2x (1 ... 6 mm <sup>2</sup> )
• for AWG conductors / for main contacts		1x (18 ... 8)
• for auxiliary contacts		
• finely stranded		
• with conductor end processing		2x (0.5 ... 1.5 mm <sup>2</sup> )
• without conductor final cutting		2x (0.5 ... 1.5 mm <sup>2</sup> )
• for AWG conductors / for auxiliary contacts		2x (20 ... 14)

#### Certificates/approvals:

<b>Verification of suitability</b>	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

[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**

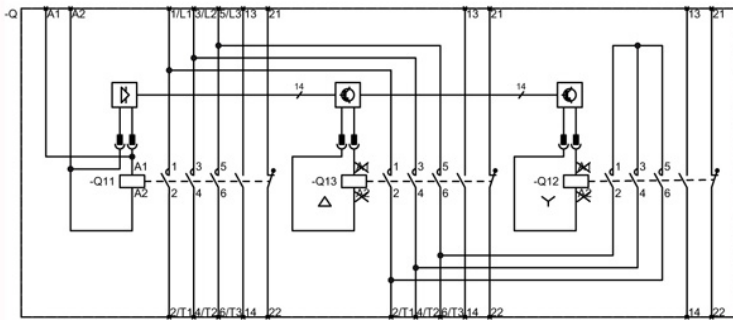
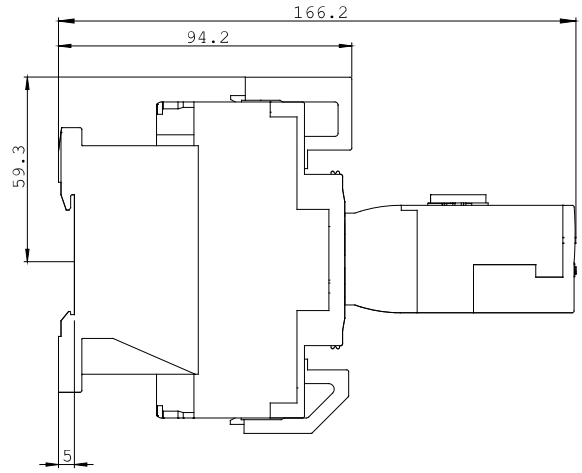
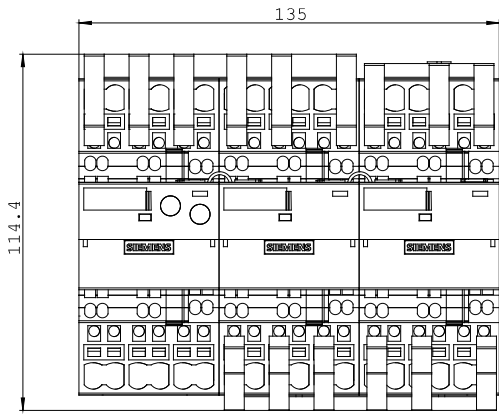
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RA2425-8XF32-2AC2/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RA2425-8XF32-2AC2](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2425-8XF32-2AC2)



last change:

Aug 4, 2014