



CONTACTOR, AC-3 45 KW/400 V,  
AC 230V 50/60HZ 3-POLE, SIZE S3,  
SCREW CONNECTION

**General technical data:**

<b>product brand name</b>		SIRIUS
<b>Size of the contactor</b>		S3
<b>Protection class IP / on the front</b>		IP20
<b>Degree of pollution</b>		3
<b>Installation altitude / at a height over sea level / maximum</b>	m	2,000
<b>Ambient temperature / during operating</b>	°C	-25 ... +60
<b>Mechanical operating cycles as operating time</b>		
<ul style="list-style-type: none"> <li>• of the contactor / typical</li> <li>• of the contactor with added auxiliary switch block / typical</li> <li>• of the contactor with added electronics-compatible auxiliary switch block / typical</li> </ul>		<p>10,000,000</p> <p>10,000,000</p> <p>5,000,000</p>

**Main circuit:**

<b>Number of NC contacts / for main contacts</b>		0
<b>Number of NO contacts / for main contacts</b>		3
<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> </ul> </li> <li>• at AC-3 / at 400 V / rated value</li> <li>• at AC-4 / at 400 V / rated value</li> </ul>	A	<p>120</p> <p>95</p> <p>80</p>

• with 1 current path / at DC-1	A	100
• at 24 V / rated value	A	9
• at 110 V / rated value		
• with 2 current paths in series / at DC-1	A	100
• at 24 V / rated value	A	100
• at 110 V / rated value		
• with 3 current paths in series / at DC-1	A	100
• at 24 V / rated value	A	100
• at 110 V / rated value		
• with 1 current path / at DC-3 / at DC-5	A	40
• at 24 V / rated value	A	2.5
• at 110 V / rated value		
• with 2 current paths in series / at DC-3 / at DC-5	A	100
• at 24 V / rated value	A	100
• at 110 V / rated value		
• with 3 current paths in series / at DC-3 / at DC-5	A	100
• at 24 V / rated value	A	100
• at 110 V / rated value		
<b>Service power</b>		
• at AC-2 / at 400 V / rated value	kW	45
• at AC-3 / at 400 V / rated value	kW	45
• at AC-4 / at 400 V / rated value	W	45,000

Control circuit:		
<b>Voltage type / of control feed voltage</b>		AC
<b>Operating range factor control supply voltage rated value / of the magnet coil</b>		
• at 50 Hz		
• for AC		0.8 ... 1.1
• at 60 Hz		
• for AC		0.8 ... 1.1
<b>Apparent pull-in power / of the solenoid / for AC</b>	V·A	298
<b>Apparent holding power / of the solenoid / for AC</b>	V·A	27
<b>Inductive power factor / with the pull-in power of the coil</b>		0.7
<b>Inductive power factor / with the pull-in power of the coil</b>		0.29

Auxiliary circuit:		
<b>Contact reliability / of the auxiliary contacts</b>		1 faulty switching per 100 million (17 V, 1 mA)
<b>Number of NC contacts / for auxiliary contacts / instantaneous switching</b>		0
<b>Number of NO contacts / for auxiliary contacts / instantaneous switching</b>		0

**Short-circuit:****Design of the fuse link**

- for short-circuit protection of the auxiliary switch / required
- for short-circuit protection of the main circuit
  - with type of assignment 1 / required
  - at type of coordination 2 / required

fuse gL/gG: 10 A

fuse gL/gG: 250 A

fuse gL/gG: 160 A

**Installation/mounting/dimensions:****Mounting type**

screw and snap-on mounting onto 35 mm and 75 mm standard mounting rail

**series installation**

Yes

**Width**

mm

70

**Height**

mm

146

**Depth**

mm

139

**Distance, to be maintained, to earthed part / sideways**

mm

6

**Connection type:****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
    - without conductor final cutting
- for AWG conductors / for main contacts
- for auxiliary contacts
  - solid
  - finely stranded
    - with conductor end processing
- for AWG conductors / for auxiliary contacts

2x (2.5 ... 16 mm<sup>2</sup>)2x (10 ... 50 mm<sup>2</sup>)2x (2.5 ... 35 mm<sup>2</sup>)2x (10 ... 35 mm<sup>2</sup>)

2x (10 ... 1/0)

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>), max. 2x (0.75 ... 4 mm<sup>2</sup>)2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)

2x (20 ... 16), 2x (18 ... 14), 1x 12

**Certificates/approvals:**

<b>General Product Approval</b>	<b>Functional Safety / Safety of Machinery</b>	<b>Declaration of Conformity</b>
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CCC



CSA



UL

[Type Examination](#)



EG-Konf.

**Test Certificates**

[Special Test Certificate](#)

**Shipping Approval**



ABS



GL



LRS



RINA



RMRS

**other**

[Confirmation](#)

[other](#)

[Environmental Confirmations](#)

**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:**

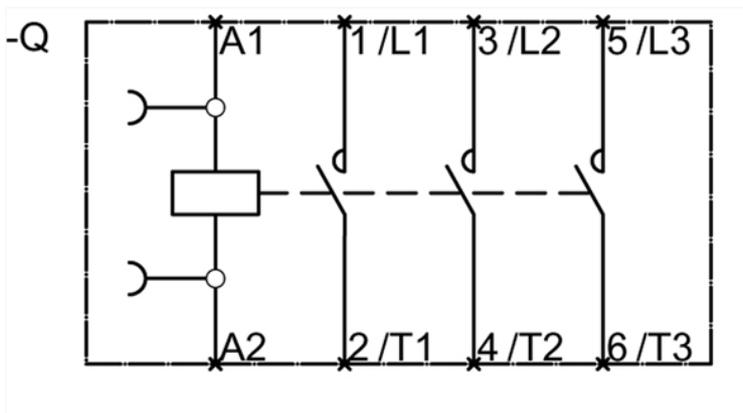
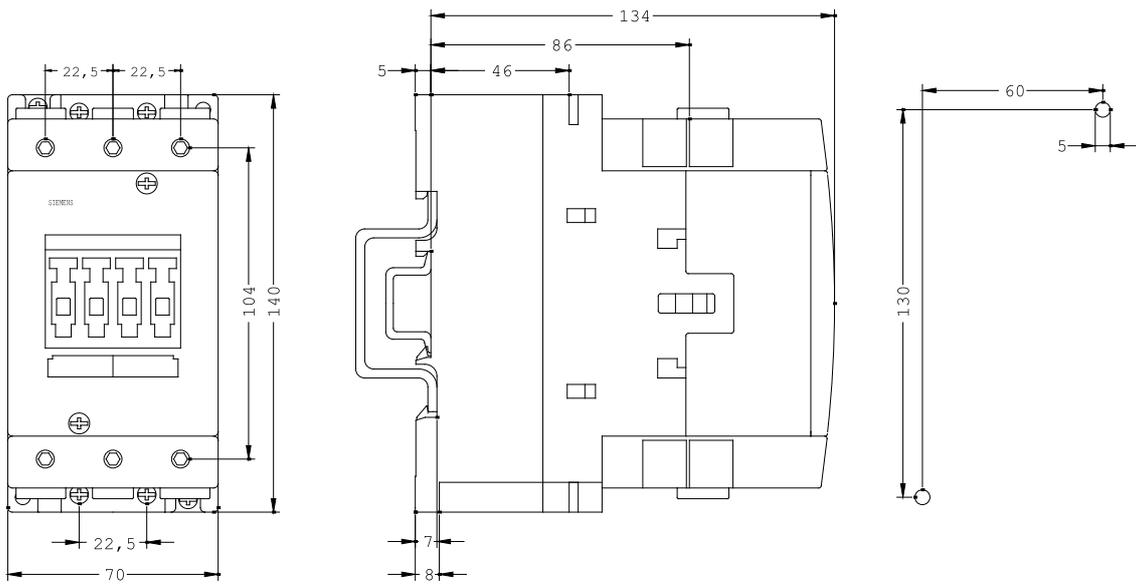
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WWW/view/en/3RT1046-1AL20/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RT1046-1AL20](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1046-1AL20)



last change:

Aug 4, 2014