



CONTACTOR, AC-3 45 KW/400 V, AC 208 V,  
50/60 HZ, 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> <li>• at 60 °C ambient temperature / rated value</li> </ul> </li> <li>• at AC-3 / at 400 V / rated value</li> </ul>	<p>A</p> <p>A</p> <p>A</p>	<p>120</p> <p>100</p> <p>95</p>

• at AC-4 / at 400 V / rated value	A	80
• with 1 current path / at DC-1		
• at 24 V / rated value	A	100
• at 110 V / rated value	A	9
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	A	100
• at 110 V / rated value	A	100
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	A	100
• at 110 V / rated value	A	100
• with 1 current path / at DC-3 / at DC-5		
• at 24 V / rated value	A	40
• at 110 V / rated value	A	2.5
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	A	100
• at 110 V / rated value	A	100
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	A	100
• at 110 V / rated value	A	100
<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
<b>Active power loss / per conductor / typical</b>	W	10.8

<b>Control circuit:</b>		
<b>Type of voltage / of the controlled supply voltage</b>		AC
<b>Control supply voltage / 1</b>		
• at 50 Hz / for AC		
• rated value	V	208
• at 60 Hz / for AC		
• rated value	V	208
<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

Inductive power factor / with the pull-in power of the coil		0.7
Inductive power factor / with the pull-in power of the coil		0.29

#### Auxiliary circuit:

Contact reliability / of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)
Number of NC contacts / for auxiliary contacts / instantaneous switching		0
Number of NO contacts / for auxiliary contacts / instantaneous 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 60 V	A	6
• at 110 V	A	3
• at 220 V	A	1
• at DC-13		
• at 24 V	A	10
• 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 auxiliary switch / required		fuse gL/gG: 10 A
• for short-circuit protection of the main circuit		
• with type of assignment 1 / required		fuse gL/gG: 250 A
• at type of coordination 2 / required		fuse gL/gG: 160 A

#### Installation/mounting/dimensions:

Type of mounting		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		
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<ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary and control current circuit</li> </ul>	<p>screw-type terminals</p> <p>screw-type terminals</p>
<b>Type of the connectable conductor cross-section</b> <ul style="list-style-type: none"> <li>• for main contacts <ul style="list-style-type: none"> <li>• solid</li> </ul> </li> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>• finely stranded <ul style="list-style-type: none"> <li>• with conductor end processing</li> </ul> </li> </ul> </li> <li>• for AWG conductors / for auxiliary contacts</li> </ul>	<p>2x (2.5 ... 16 mm<sup>2</sup>)</p> <p>2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)</p> <p>2x (20 ... 16), 2x (18 ... 14), 1x 12</p>

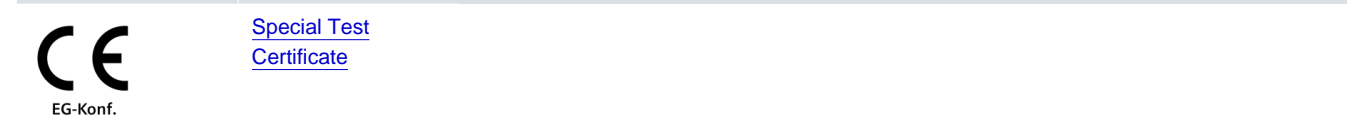
**Certificates/approvals:**

**General Product Approval** **Functional Safety / Safety of Machinery**



[Type Examination](#)

**Declaration of Conformity**      **Test Certificates**



**Shipping Approval**



**other**

[Confirmation](#)      [other](#)      [Environmental Confirmations](#)

**Further information:**

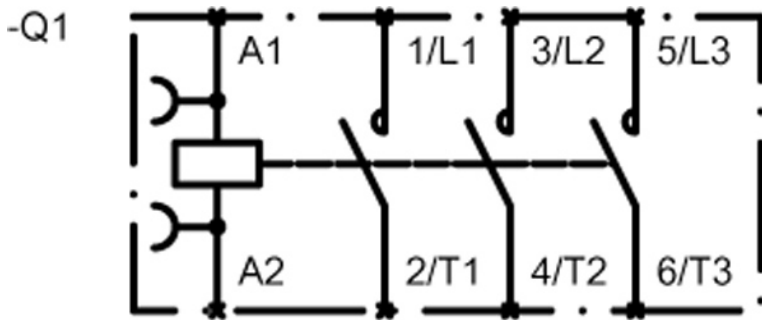
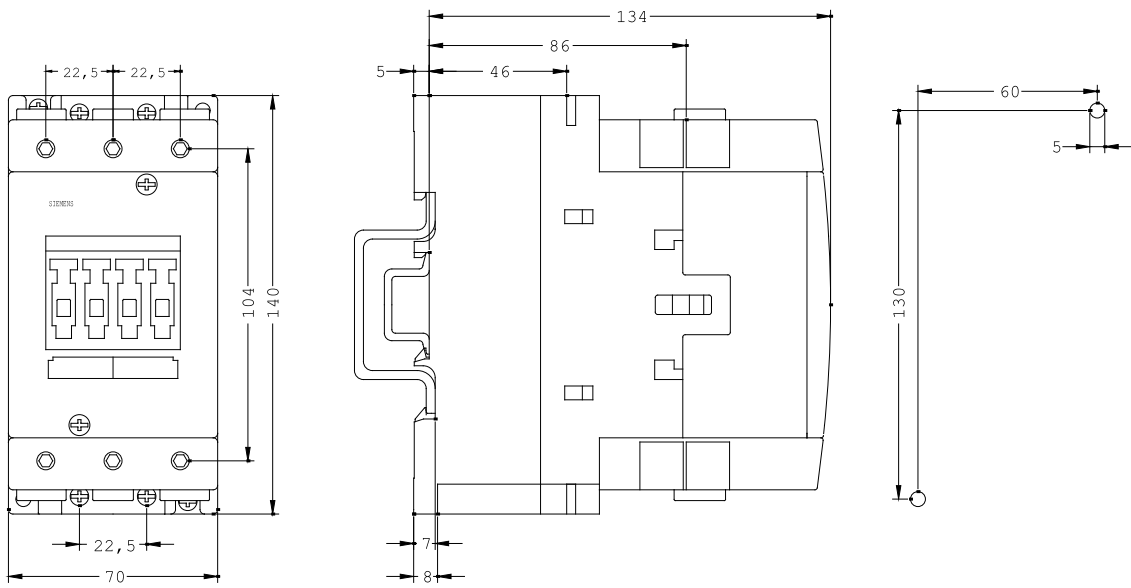
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<http://www.siemens.com/industrial-controls/catalogs>

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<http://www.siemens.com/industrial-controls/mall>

**Cax online generator:**  
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<http://support.automation.siemens.com/WW/view/en/3RT1046-1AM20/all>

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**  
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RT1046-1AM20](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1046-1AM20)



last change:

Jul 13, 2012